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F8a

Prepared July 9, 2014 for July 11, 2014 Hearing

To: Commissioners and Interested Persons

From: Nancy Cave, District Manager
Stephanie Rexing, Coastal Planner

Subject: **STAFF REPORT ADDENDUM for F8a**
CDP Application A-2-HMB-12-011 (Gibraltar Capital)

The purpose of this addendum is to modify the staff report for the above-referenced item. Specifically, in the time since the staff report was distributed, Staff and the Applicant have been in communication about the staff recommendation, and have come to agreement on certain changes that would allow for the Applicant to be in agreement with it. Thus, this addendum does two primary things. First, it provides additional refinements to the findings regarding mitigation for cumulative adverse traffic impacts affecting coastal public access, including in response to additional materials submitted by the Applicant for the record. Second, it changes the timing of the lot retirement condition (Special Condition 8 on pages 14 and 15 of the staff report) to be prior to occupancy as opposed to prior to issuance of the coastal development permit (CDP). Although staff generally prefers prior to issuance conditions to best ensure compliance, in this case staff is supportive of the Applicant's timing request, including because the mitigation would be required at the time when the impact of additional residents would begin to accrue. With this change, the Applicant is in agreement with the staff recommendation.

In addition, staff received a letter from one of the original Appellants in this matter, John Lynch, on July 9, 2014 (see District Director's report for Item F8a). In that letter, Mr. Lynch makes a series of observations related to habitat concerns, flooding concerns, and other issues that warrant response. Thus, this addendum also provides a new response to comments section.

Finally, in the time since the staff report was distributed the Coastside Land Trust, whom the Applicant names as the preferred recipient of their proposed in-lieu fee for lot retirement, has contacted staff and asked that their name be removed from the staff report findings. Thus, this addendum also addresses the Coastside Land Trust request. Further, the addendum fixes certain minor reference errors.

Thus, the addendum addresses the Applicant's issues, one of the original Appellant's comments, and the Coastside Land Trust request. The changes made here clarify the staff recommendation, but they do not alter the basic framework and parameters of it. With the changes incorporated in

this addendum, the Applicant is in agreement with the staff recommendation and the matter is being moved to the consent calendar. Thus, the staff report is modified as shown below (where applicable, text in underline format indicates text to be added, and text in ~~strikethrough~~ format indicates text to be deleted).

1. Modify the staff report summary on page 3 as follows:

The lot retirement requirement as recommended by the staff provides flexibility to the Applicant by allowing the Applicant to either retire development rights in a pro rata fashion or purchase the lots and donate the lots after purchase to a public or private land management agency, such as a public land trust ~~the Coastside Land Trust~~ or similar organization that supports lot retirements in conjunction with the City or County. This flexibility allows the retirement to occur in a way that provides the Applicant with the ability to purchase lots at the best price the Applicant can negotiate and also assures that the number of the development credits needed to mitigate properly for the public access impacts will be retired. In fact, this Applicant has proposed a minimum of a $27,500.00 fee to be contributed to a public land trust ~~the Coastside Land Trust or similar~~ organization that supports lot retirements in conjunction with the City or County. …

2. Modify the staff report beginning on page 14 as follows:

8. Cumulative Public Access Impact Mitigation. *PRIOR TO OCCUPANCY OF ANY RESIDENTIAL DEVELOPMENT ON ANY LOT WITHIN THE APPROVED SUBDIVISION ~~ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT~~, the Applicant shall submit evidence, for the review and approval of the Executive Director, that the development rights have been permanently extinguished on ten existing legal residential lots (equal to the number of residential lots to be created by the approved project) consistent with **Special Condition 1** such that the subdivision of property authorized herein shall not result in a net increase of existing legal lots for residential development within Mid-Coast Region of San Mateo County, an area that is generally depicted on **Exhibit 6** and that is primarily served by the segment of Highway 1 between its intersection with Highway 92 and Devil's Slide and/or by the segment of Highway 92 west of Highway 280.*

…

b. As an alternative to the method described in subsection a above, the Applicant may instead, prior to occupancy of any residential development on any lot within the approved subdivision ~~issuance of the coastal development permit~~, purchase existing legal lots that satisfy the criteria listed above and, subject to the review and approval of the Executive Director, dedicate such lots in fee to a public or private land management agency approved by the Executive Director for permanent public recreational or natural resource conservation purposes, provided the lots are restricted as described in subsection a above.

3. Modify the staff report on page 17 as follows:

The Applicant also proposes to provide a conservation easement to protect the creek and riparian habitat consistent with the policies of the LCP, which will include the entire westerly parcel adjacent to Highway 1. Lastly, the Applicant proposed to provide a minimum $27,500

traffic mitigation fee to a public land trust organization ~~Coastside Land Trust~~ to support additional lot retirements consistent with the City's traffic and open space preservation goals.

4. Modify the staff report on pages 18 and 19 as follows:

Applicable Policies

Coastal Act Section 30210: *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Coastal Act Section 30211: *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

...

Analysis

Half Moon Bay's LCP contains several policies, including Policies 9-2, 9-4, 10-4, and 10-25, that require new development to be served by adequate facilities to accommodate traffic, especially with regard to assuring that there is adequate traffic capacity to serve public access to beaches and coastal recreation. The LCP policies were crafted in order to carry out the requirements of the Coastal Act, such as section 30250(a), which requires that new development be located in areas with adequate services and where it will not have significant adverse effects, either individually, or cumulatively, on coastal resources. In particular, LUP Policy 9-4 expressly requires that development shall be served with adequate services and that lack of adequate services such as adequate road facilities shall be grounds for denial of a development permit. LCP Policy 10-4 reserves public works and traffic capacity for those uses given priority under the LCP, such as coastal access and recreation. Policy 10-25 designates Level of Service (LOS) C as the desired LOS on Highways 1 and 92 except during weekday and weekend peak-hours when LOS E may be accepted. The LCP also incorporates Coastal Act Policies 30210 and 30211 through LCP Policy 1-1 which states that the City shall adopt Coastal Act Sections 30210 through 30264 as the guiding policies of the LCP. Coastal Act Sections 30210 and 30211 require that maximum access be provided and that development not interfere with the public's access rights.

5. Modify the staff report on page 24 as follows:

This Applicant has proposed a minimum of $27,500.00 fee to be contributed to a land trust ~~the Coastside Land Trust or similar~~ organization that supports lot retirements in conjunction with the city or county (see Exhibit 10). …

6. Modify the staff report beginning on page 25 as follows:

…Lot retirement not only reduces those intensities, but does it in a certain and permanent way.

In terms of the Applicant's assertions that their project is distinguishable from the other subdivision projects requiring lot retirement referenced above because it creates a small number of developable lots in comparison to those other projects and because it is an infill project that is "not auto-dependent," the issue is not one of infill but of new lots. New lots lead to identifiable impacts, including of a cumulative nature, to an already oversubscribed system, as described above. Again, the project is located adjacent to two of the most impacted intersections in Half Moon Bay, the intersection of Highways 1 and 92 and the intersection of Highway 92 and Main Street, and it will add traffic to these roadways in such a way as to adversely impact public access inconsistent with the LCP and the Coastal Act. Although the walkable nature of the project is laudable, the project is located just adjacent to these two major arterials that serve to transport people from areas in and around the City both to and from jobs elsewhere in the area. As described earlier, these roadways are highly impacted, operating at levels of service that are below acceptable as designated by the LCP. As previously stated, per the Applicant's traffic studies and the County Congestion Management Plan, the intersection of Highway 92 and Main Street, adjacent to the proposed project site, operates at LOS F at AM, PM and Saturday midday peak.[1] *In addition, the City's Traffic and Congestion Mitigation Plan found that the intersection of Highways 1 and 92 will be operating at LOS F under 2030 cumulative growth conditions, regardless of the improvements proposed by the City. Therefore, both existing and future projected conditions near the project site are at a LOS which exceeds the LCP required limits and would also exceed the current LOS standard for this area within the San Mateo County CMP. When the current levels of service are already at impermissible levels, any added trips, no matter the amount (here, for example, 33 more trips at Saturday midday peak), are cumulatively considerable.*

As previously stated, even if the proposed development is walkable and served by public transit, some residents of the proposed subdivision will likely drive to jobs outside of Half Moon Bay across Highways 1 and 92, due to the existing housing/jobs imbalance in the Midcoast area. Further, this project is distinguishable because it permits the subdivision of two commercially zoned lots into 12 residential lots, which will divert infrastructure from uses that would have been priority under the LCP and Coastal Act (potentially commercial visitor-serving) to lower priority residential uses.

According to LCP Policy 9-4, because this area is served by roadway segments and intersections that are already below the acceptable LOS, the LCP would require denial of the project, but an alternative to that denial is to require the retirement of development rights on lots in proportion to the number of new lots created. As structured, recommended Special Condition 8 allows the Applicant to accomplish lot retirement by extinguishment of development rights on an equal number of lots or by purchase and dedication to a public or private land management agency. This flexibility allows the Applicant to accomplish Special Condition 8 in the way they propose without a fixed dollar amount as is associated with the

[1] *City/County Association of Governments of San Mateo County, Final San Mateo County Congestion Management Program, 2011.*

Applicant's initial proposal (see Exhibit 10).

Courts have supported lot retirement as a method to reduce development impacts created by subdivisions. For example, the Superior Court of San Mateo County, in reviewing the conditions imposed by CDP A-1-HMB-99-022-A-1 (Ailanto), found that the lot retirement condition imposed in that project served the "governmental purpose of limiting additional impacts on the traffic due to residential development, which in turn impact the public's access to the coast."[2] The court in the Ailanto decision went on to state that "requiring elimination of the development potential of the same number of lots as the number of additional legal lots proposed to be developed under the permit will minimize...the project's cumulative impact on regional traffic which will further coastal access for the public."[3] The court in Ailanto concluded, "it seems reasonable to require the elimination of that [cumulative] impact as nearly as possible by retirement of the development rights to a like number of developable lots."[4]

Further, lot retirement assures that the spirit of the Special Condition 8, to retire development rights in pro rata proportion to the amount of lots created, is met. This is a more certain way to accomplish this retirement of development rights than estimating a set fee. A 1:1 ratio of retired lots to new developable lots ensures that the mitigation is roughly proportional. Additionally, lot retirement ensures in a more immediate way that the mitigation is carried out. Further, a set fee would be best deposited into an existing lot retirement program controlled by the City of Half Moon Bay (or possibly San Mateo County more broadly), but such a program has yet to be developed. The way that Special Condition 8 is currently structured guarantees a 1:1 retirement, even without the existence of a formal lot retirement program.

The Commission therefore finds that the lot retirement requirement contained in Special Condition 8 provides flexibility to the Applicant to either retire development rights in a pro rata fashion or purchase the lots and donate the lots after purchase to a public or private land management agency ~~such as the Coastside Land Trust or similar organization~~ that supports lot retirements in conjunction with the City or County. This flexibility allows the retirement to occur in a way that provides the Applicant with the ability to purchase lots at the best price the Applicant can negotiate and also assures that the number of the development credits needed to mitigate properly for the public access impacts will be retired. In fact, this Applicant has proposed a minimum of $27,500.00 fee to be contributed to a land trust ~~the Coastside Land Trust~~ or similar organization that supports lot retirements in conjunction with the city or county. Further, the Applicant submitted a listing of property sales (see Exhibit 11) that suggests that the number of lots here recommended for retirement could be purchased close to the amount of the fee here proposed by the Applicant. While the Commission cannot guarantee that 10 legal lots will be available for sale at any given time at the amount offered by the Applicant, the Applicant's listing evidences the feasibility of the recommended retirement

[2] *Ailanto Properties, Inc. v. California Coastal Commission (2002) Tentative Statement of Decision of San Mateo County Superior Court., p. 20.*

[3] *Ailianto Properties, supra, at p. 23.*

[4] *Id., at p. 25.*

condition.

The Commission finds that without the proposed lot retirement, the regional cumulative traffic impacts of the proposed development would significantly interfere with the public's ability to access the coast, in conflict with both Coastal Act Policies 30210, 30250(a) and 30252, all of which are incorporated as policies of the certified Half Moon Bay LUP, as well as the City-specific policies of the LCP cited above. Therefore, the Commission imposes Special Condition 8, requiring the Applicant to extinguish the development rights on existing legal lots in the City in order to offset the significant adverse cumulative impacts resulting from the proposed creation of new lots. With this condition, the Commission finds the modified development proposal is consistent with the Half Moon Bay LCP and avoids significant adverse effects to traffic on Highways 1 and 92.

7. Modify the staff report on page 9 as follows:

b. Record Final Parcel Map. *The Permittee shall record a final map with the San Mateo County ~~City of Half Moon Bay~~ Recorder's Office consistent with the map reviewed and approved by the Executive Director as directed by part (a) of this special condition. The recorded document shall include legal descriptions and site plans of all resultant parcels.*

8. Modify the staff report on page 4 as follows:

The motion to effect this recommendation is found on page ~~5~~ 6 below.

9. Add John Lynch's letter dated received July 9, 2014 as staff report exhibit 12 (see District Director's report for Item F8a on July 11, 2014) and modify the staff report on page 35 as follows:

H. RESPONSE TO JOHN LYNCH'S LETTER

On July 9, 2014, one of the original Appellants in this matter, John Lynch submitted a comment letter (see Exhibit 12). Mr. Lynch states that while the project is certainly improved via the project changes and the Commission's conditions in the time since it was appealed, he has remaining concerns about the consistency of the project with the Half Moon Bay LCP. Specifically, Mr. Lynch is concerned that the Applicant's biological assessment is inadequate with regard to characterizing upland habitat used by San Francisco garter snake and California red-legged frog, with regard to the assessment of wetlands in the project area and with regard to U.S. Fish and Wildlife's (USFWS) consultation on the project. Further, Mr. Lynch's letter requests the inclusion of special conditions that would require minimum finished floor elevations to be above the maximum flood elevations found in the Applicant's updated hazards report. Each of these contentions are addressed in the previous findings, but this response to comments section is added to provide additional clarity on Mr. Lynch's points.

Regarding Mr. Lynch's contentions relating to the adequacy of the assessment of the biological resources on site, the Applicant's biological resource assessment found that it was unlikely that any animals (including San Francisco garter snake and California red-legged frog) would venture out past the 50-foot buffer that extends from the limit of the riparian vegetation (a total

distance of 150 feet from the bank edge). As detailed earlier, Commission staff ecologist Dr. John Dixon reviewed the biological report and felt it adequately assessed on-site biological resources and concluded that the 50-foot buffer (extending from the limit of the riparian vegetation) would be sufficient to address species concerns at this location. Additionally, Dr. Dixon believes that the inclusion of low-level fencing to demarcate the buffer will improve the functioning of the buffer, including in order to assure the buffer is protected from infiltration to protect the sensitive habitats and species. The Commission finds the biological assessment adequate, and Mr. Lynch's related issues to be adequately addressed.

Mr. Lynch also expressed concerns that the Applicant's biological assessment found no wetlands onsite because the report differentiated between artificial and natural wetlands and because the wetlands investigation was restricted to areas outside the riparian corridor. Again, the report was reviewed by Dr. Dixon for adequacy of the assessment of resources onsite, including wetlands, and Dr. Dixon felt the report adequately addressed the presence of wetlands onsite, including as it used the one and three-parameter definition of wetlands used by the Coastal Commission and the U.S. Army Corps of Engineers, respectively, to assess the presence of wetlands onsite. The wetland delineation for the project is adequate, and the approved project appropriately addresses wetland concerns as directed by the LCP.

Additionally, with regard to the USFWS's involvement with this project, Special Condition 6c, specifically 6c(2) and 6c(4), ensure pre-construction surveys for sensitive species will be conducted and that proper consultation with USFWS and California Department of Fish and Wildlife is implemented consistent with LCP Policy 3-4, if signs of California red-legged frog or San Francisco garter snake are found within the project area. Again, these precautions are appropriate and adequate to protect these species in this case as directed by the LCP.

Another concern expressed in Mr. Lynch's letter is the lack of a special condition requiring finished floor elevations that are out of the worst case scenario flood levels found in the Applicant's most recent flood analysis. While some of the developable areas on the project site may be below such flood elevations, as stated earlier, the flood levels are below the proposed finished floor levels for proposed future residential structures, and thus this issue is appropriately addressed by project design.

Finally, Mr. Lynch's comment letter states that this project "effectively awards the unpermitted and un-remediated removal of riparian vegetation" because he alleges that such vegetation removal occurred on this property at some time in the past (and was memorialized by a Biotic Resource Group report to the City of Half Moon Bay dated April 30, 2001). Mr. Lynch states that in light of that report, the buffer should be from the edge of the "pre-violation" riparian vegetation. While Commission staff was notified of this vegetation removal referred to in Mr. Lynch's letter at the substantial issue determination stage of the project, the applicant's wetland delineation states that this vegetation removal was in an area that was not associated with the riparian corridor and therefore would have no impact on the required buffer. Further, when comparing the pre-vegetation removal delineation from the April 30, 2001 report to the applicant's delineation, it seems as though the riparian corridor has actually expanded on the southern side of the creek, which may render the removal and potential violation moot. Though the matter has been forwarded to the enforcement division of the Commission for investigation, because this area is in the City's enforcement jurisdiction, and they have an

official code violation for this action on file, Commission staff will defer to their jurisdiction before taking formal action. Regardless, the violation took place at least thirteen years ago and at a time when there was a different owner of the property than the current owner and Applicant.

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F8a

Filed:	6/21/2012
Action Deadline:	None
Staff:	S. Rexing - SF
Staff Report:	6/27/2014
Hearing Date:	7/11/2014

STAFF REPORT: CDP APPLICATION

Application Number:	**A-2-HMB-12-011**
Applicant:	**Gibraltar Capital**
Project Location:	320 Church Street in the City of Half Moon Bay, San Mateo County (APNs 056-150-010 and 056-150-120)
Project Description:	Subdivision of two parcels, totaling 5.5 acres, into 12 residential lots and one commercial lot with associated infrastructure improvements, including utilities and construction of a road.
Staff Recommendation:	Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION

The Applicant proposes to convert two existing vacant parcels zoned Commercial-Downtown into a 12-lot residential subdivision, which will include 10 single-family home lots and 2 multi-family home lots (each future building will contain 3 units), a single commercial lot proposed to be developed with community gardens, picnic tables, benches and pedestrian access to the Main Street commercial area of the City of Half Moon Bay, and an urban riparian conservation area bordering Pilarcitos Creek along the northern portion of the lots adjacent to the Creek.

The City of Half Moon Bay City Council approved a project on the subject lots as originally proposed by the Applicant on June 5, 2012, and that decision was appealed to the Commission. On July 13, 2012, the Commission found substantial issue with regard to whether the

development approved by the City was consistent with the sensitive habitat, traffic, and hazards policies contained in the City's certified Local Coastal Program (LCP). In finding substantial issue, the Commission also directed the Applicant to submit additional information including, but not limited to, additional biological resource studies due to the project's location immediately adjacent to Pilarcitos Creek, additional floodplain and tsunami hazard analyses, and further analysis of traffic impacts created by the new subdivision. The Applicant submitted all of the additional requested studies by late fall 2013. After reviewing this additional information, Commission staff coordinated with the Applicant to modify the project to bring it into better conformity with the City of Half Moon Bay Local Coastal Program (LCP), including by redesigning the proposed subdivision so that residential development would only occur outside of the 50-foot sensitive habitat buffer, and removing any access to and from the site from Highway 1.

There is one remaining issue for which Commission staff recommends special conditions that, if implemented, will make the project consistent with the City's LCP. The primary issue before the Commission in its consideration and action on the CDP application *de novo* is the proposed subdivision's cumulative impacts on the public's ability to access the coast. In combination with other projects likely to occur over the next 10 to 20 years in the San Mateo County Mid-Coast area, the proposed subdivision would result in significant adverse cumulative impacts to the already congested Highways 1 and 92, which are the only regional highways connecting the access and recreational resources of Half Moon Bay to the larger Bay area. As such, current and future traffic congestion on Highways 1 and 92 significantly interferes with the public's ability to access the area's substantial public beaches and other visitor serving coastal resources.

The proposed subdivision and its creation of new lots poses adverse cumulative impacts to public access because: (1) of the limited ability to increase the capacity of Highways 1 and 92; (2) existing buildout potential in the City and County will itself result in more congestion and Level of Service (LOS) traffic conditions that are unacceptable under the LCP; (3) there are no alternative access routes to and along the coastline in this area of the coast; and (4) the subdivision is proposed close to the pivotal intersection of Highways 1 and 92 and existing conditions near the project site are at and/or projected to be at a LOS which exceeds LCP limits.

The LCP's Land Use Plan (LUP) contains several policies that require new development to be served by adequate road facilities and that protect such facilities for priority uses such as public access and recreation, including Policies 9-2, 9-4, 10-4, and 10-25. These LUP policies carry out the requirements of Coastal Act Sections 30250(a) and 30252, which the City has adopted as guiding policies to the LCP. In particular, LUP Policy 9-4 expressly requires that development be served with adequate services and that lack of adequate services, such as adequate road facilities, shall be grounds for denial of a coastal development permit. The proposed project will subdivide two parcels into thirteen, adding ten additional developable residential lots and one commercial lot, and creating additional demand on area highways for a non-priority use in excess of the highways' current and/or future capacity. The Applicant's traffic analysis indicates that existing traffic conditions at the intersection of Highway 92 and Main Street during the weekday commute hours and Saturday midday peak hours is currently operating at LOS F which exceeds the LCP standard for Highway 92. Further, the study's 2035 projections indicate worsening traffic conditions over time for the bottleneck surrounding the project area as well,

including a LOS of F for Saturday midday hours for Highway 1 and north Main Street, Highway 1 and Highway 92, Highway 1 and Kelly Ave, and Highway 92 and Main Street.

Without appropriate mitigation, the Commission could refuse to allow a new subdivision based upon the lack of adequate public services (road capacity) under LUP Policy 9-4. As an alternative to denial, staff recommends a special condition requiring the Applicant to mitigate for the cumulative adverse impacts to traffic and coastal access by extinguishing the residential development potential on ten existing residential legal lots (i.e., the same number of residential lots as the new residential lots that would be created by this project) within the Mid-Coast Region of San Mateo County and record offers to dedicate them as open space, conservation easements. Staff's recommended condition specifically addresses the adverse cumulative impact that would result from approval of this subdivision by preventing any increase in the development potential of legal lots for residential development in the San Mateo County Mid-Coast region, and it is consistent with the Commission's and the City's practice in this area as evidenced in past residential subdivision projects (Ailanto CDP in A-1-HMB-99-022-A-1, Beachwood CDP in A-2-HMB-01-011, Carnoustie CDP in A-2-HMB-07-034, etc.). Absent this mitigation, the project would fail to adequately mitigate for traffic impacts and the resultant adverse impacts to public access to the coast and its associated recreational opportunities, inconsistent with the public access and recreation policies of the LCP and Coastal Act.

The lot retirement requirement as recommended by the staff provides flexibility to the Applicant by allowing the Applicant to either retire development rights in a pro rata fashion or purchase the lots and donate the lots after purchase to a public agency, such as the Coastside Land Trust or similar organization that supports lot retirements in conjunction with the City or County. This flexibility allows the retirement to occur in a way that provides the Applicant with the ability to purchase lots at the best price the Applicant can negotiate and also assures that the number of the development credits needed to mitigate properly for the public access impacts will be retired. In fact, this Applicant has proposed a minimum of a $27,500.00 fee to be contributed to the Coastside Land Trust or similar organization that supports lot retirements in conjunction with the City or County. Commission staff does not support payment of a mitigation fee in a specific amount but rather recommends lot retirement. However, staff notes that the Applicant submitted a listing of property sales that suggests that the number of lots here recommended for retirement could be purchased close to the amount of the fee here proposed by the Applicant. While staff cannot guarantee that 10 legal lots will be available for sale at any given time and can be purchased at the amount offered by the Applicant, the Applicant's listing evidences the feasibility of staff's recommended retirement condition.

In addition to lot retirement, staff recommends the addition of several other special conditions in order to find this project consistent with the City's LCP. Notably, staff is recommending a special condition, consistent with the Applicant's revised project description, requiring the Applicant to establish a sensitive habitat open space easement over the rare and endangered species habitat and associated 50-foot buffer on all properties adjacent to Pilarcitos Creek, and to also extinguish all future development rights in this area in order to assure protection of the sensitive habitats in and adjacent to Pilarcitos Creek. Uses within the sensitive habitat and buffer area will be limited to those allowed by the LCP in order to maintain the significant habitat of Pilarcitos Creek.

As conditioned, staff believes that the project can be found consistent with the LCP. Thus staff recommends that the Commission approve the CDP subject to the recommended conditions.

The motion to effect this recommendation is found on page 5 below.

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I. MOTION AND RESOLUTION

Staff recommends that the Commission, after public hearing, **approve** a coastal development permit for the proposed project. To implement this recommendation, staff recommends a **YES** vote on the following motion. Passage of this motion will result in approval of the CDP as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Motion: *I move that the Commission* ***approve*** *Coastal Development Permit A-2-HMB-12-011, and I recommend a yes vote.*

Resolution to Approve a CDP: *The Commission hereby approves coastal development permit A-2-HMB-12-011 and adopts the findings set forth below on the grounds that the development as conditioned will be in conformity with the policies of the Half Moon Bay Local Coastal Program. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.*

II. STANDARD CONDITIONS

This permit is granted subject to the following conditions:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the Permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the Permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Final Project Plans.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall submit two full-size sets of Final Project Plans (Plans) to the Executive Director for review and approval. The Final Project Plans shall be in substantial conformance with the subdivision map submitted to the Coastal Commission's North Central Coast District Office on June 3, 2014 (**Exhibit 2**), except that they shall be revised and supplemented to comply with the following requirements:

   a. **Design.** The Plans shall clearly identify all measures that will be applied to ensure that the project design, including all future structures and all other future project elements (e.g., residences, driveways, roads, fencing, lighting, utilities, signage, landscaping, picnic benches, etc.), do not led to significant adverse impacts on public views from Highway 1, including by ensuring that such development and future building sites are sited and designed so as to limit the appearance of bulk and mass and to blend seamlessly with the surrounding environment.

   b. **Landscaping.** The Plans shall identify all plant materials (size, species, quantity, etc.), all irrigation systems, and all proposed maintenance measures. All plant materials shall be native and non-invasive species selected to be complementary with the mix of native habitats in the project vicinity, prevent the spread of exotic invasive plant species, and

avoid contamination of the local native plant community gene pool. To the extent feasible, landscaping at maturity shall screen or soften the appearance of new development as seen from Highway 1. The Permittee shall continuously maintain all landscaped areas on the project site and continuously maintain all plant material in a litter-free, weed-free, and healthy growing condition. The Permittee shall remove and shall not plant any species listed as problematic or invasive by the California Native Plant Society, the California Invasive Plant Council, or the State of California, and any species listed as a 'noxious weed' by the State of California or the U.S. Federal Government.

c. Water Quality. The Plans shall include design-level, Low Impact Development runoff management structural and non-structural Best Management Practices for the subdivision, including provisions for individual lots, a semi-permeable pavement hammerhead turnaround, and a drainage plan for the subdivision as a whole consistent with the requirements outlined in **Special Condition 7.**

d. Lighting. There shall be no exterior night lighting, other than the minimum lighting necessary for pedestrian and vehicular safety purposes. All lighting shall be downward directed and designed so that it limits the amount of light or glare visible from Pilarcitos Creek, the adjacent riparian vegetation, and the 50-foot sensitive habitat buffer to the maximum extent feasible. Lighting plans shall be submitted with documentation associated with chosen lighting features demonstrating compliance with this condition.

e. Site Maintenance. All site maintenance activities, including those associated with maintaining landscaping, shall be clearly identified, and shall only be allowed consistent with the terms and conditions of this coastal development permit.

f. Property Lines. All existing and proposed property lines, easement boundaries and restricted area boundaries for the subject property, the proposed subdivision, and all adjacent properties shall be clearly and accurately identified and depicted.

g. Utilities Underground. All utilities shall be installed underground.

h. Sensitive Habitat Open Space Area. No development, as defined in Section 30106 of the Coastal Act, shall occur in the area generally described as Pilarcitos Creek, its riparian vegetation, and the 50-foot buffer extending out from the edge of the riparian vegetation, located on the northern portion of the subdivided parcels adjacent to Pilarcitos Creek as depicted in **Exhibit 8**, except for placement of low-level fencing that allows for wildlife movement and that demarcates the extent of the sensitive habitat open space area from the remaining developable portion of the parcels, and the following development if approved by CDP: education and research, fishing, pedestrian and equestrian trails that have no adverse impact on the species or habitat, and fish and wildlife management activities to restore damaged habitat and to protect and encourage the survival of rare and endangered species.

i. Park Area at Project's Western End. The remaining portion of the proposed westernmost parcel fronting Highway 1, outside of the sensitive habitat area as described above and generally depicted on **Exhibit 8** as the Park Area, (hereinafter "Park Area")

will be restricted in development to visitor-serving uses such as picnic tables and benches and the hammerhead turnaround **(see Exhibit 2)**.

All requirements above and all requirements of the approved Final Project Plans shall be enforceable components of this CDP. The Permittee shall undertake development in accordance with this condition and the approved Final Project Plans.

2. **Parcels.**

   a. **Revised Parcel Map.** PRIOR TO ISSUANCE OF THE NOTICE OF INTENT TO ISSUE THE COASTAL DEVELOPMENT PERMIT, the Applicant shall submit for the review and approval of the Executive Director, evidence that a revised parcel map will be recorded in the configuration generally depicted in **Exhibit 9** and consistent with all terms and conditions of the CDP, including but not limited to the requirements of **Special Conditions 1** and **3** in regards to the location of development and the Sensitive Habitat Open Space Area and the Park Area. Such evidence shall include a depiction of the boundaries of all restricted areas pursuant to all Special Conditions.

   b. **Record Final Parcel Map.** The Permittee shall record a final map with the City of Half Moon Bay Recorder consistent with the map reviewed and approved by the Executive Director as directed by part (a) of this special condition. The recorded document shall include legal descriptions and site plans of all resultant parcels.

3. **Sensitive Habitat Open Space Easement.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall execute and record a document in a form and content acceptable to the Executive Director, irrevocably offering to dedicate to a public agency or private association approved by the Executive Director a Sensitive Habitat Open Space Easement for the purpose of habitat and open space conservation. The Sensitive Habitat Open Space Easement shall cover the entire area described in **Special Condition 1(h)** ("hereinafter the Sensitive Habitat Open Space Area") and generally depicted on **Exhibit 8**. The recorded document shall include a legal description of the existing affected parcels, a metes and bounds legal description of the easement area, and a graphic depiction of the easement area showing the boundaries of the existing parcels, prepared by a licensed surveyor. The recorded document shall indicate that:

   a. **Development Prohibited.** No development, as defined in Section 30106 ("Development") of the Coastal Act or Section 18.20.020 (C) ("Development") of the certified City Half Moon Bay LCP, shall occur in the Sensitive Habitat Open Space Area except for the following development for which a coastal development permit authorization has been granted by either the City of Half Moon Bay or by the Coastal Commission if on appeal or through amendment of a Coastal Commission coastal development permit: education and research, fishing, pedestrian and equestrian trails that have no adverse impact on the species or habitat, and fish and wildlife management activities to restore damaged habitat and to protect and encourage the survival of rare and endangered species consistent with City of Half Moon Bay LCP Implementation Chapter 18.38 and placement of low-level fencing that allows for wildlife movement and that demarcates the extent of the sensitive habitat open space area as further described in **Special Condition 1**.

The offer to dedicate Sensitive Habitat Open Space Easement shall be recorded free of prior liens and encumbrances which the Executive Director determines may affect the interest being conveyed. The offer shall run with the land in favor of the People of the State of California, binding all successors and assignees, and shall be irrevocable for a period of 21 years, such period running from the date of recording.

4. **Sensitive Habitat Open Space Area Development Rights Extinguished.** By acceptance of this permit, the Permittee acknowledges and agrees, on behalf of itself and all successors and assigns that other than the exceptions noted in **Special Condition 3** above, any and all development rights that may otherwise exist for the sensitive habitat open space area described in Special Condition 1(h) and generally depicted on **Exhibit 8** shall be considered extinguished in perpetuity. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall execute and record a deed restriction, in a form and content acceptable to the Executive Director incorporating all of the above terms of this condition. The deed restriction shall cover the entire Sensitive Habitat Open Space Area described in **Special Condition 1(h)** and generally depicted on **Exhibit 8**. The recorded document shall include a legal description of the existing affected parcels, a metes and bounds legal description of the restricted area, and a graphic depiction of the restricted area showing the boundaries of the existing parcels, prepared by a licensed surveyor. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to coastal development permit A-2-HMB-12-011.

5. **Park Area Development Rights Extinguished.** By acceptance of this permit, the Permittee acknowledges and agrees, on behalf of itself and all successors and assigns that other than the exceptions noted in **Special Condition 1(i)** above, any and all development rights that may otherwise exist for the Park Area described in **Special Condition 1(i)** shall be considered extinguished in perpetuity. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall execute and record a deed restriction, in a form and content acceptable to the Executive Director incorporating all of the above terms of this condition. The deed restriction shall cover the entire Park Area described in **Special Condition 1(i)** and generally depicted on **Exhibit 8**. The recorded document shall include a legal description of the existing affected parcels, a metes and bounds legal description of the restricted area, and a graphic depiction of the restricted area showing the boundaries of the existing parcels, prepared by a licensed surveyor. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to coastal development permit A-2-HMB-12-011.

6. **Construction Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall submit two sets of a Construction Plan to the Executive Director for review and approval. Minor adjustments to the following construction requirements may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources. The Construction Plan shall, at a minimum, include the following:

a. Construction Areas. The Construction Plan shall identify the specific location of all construction areas, all staging areas, all storage areas, all construction access corridors (to the construction site and staging areas). All such areas within which construction activities and/or staging are to take place shall be minimized to the maximum extent feasible in order to minimize construction encroachment on sensitive habitat areas and to have the least impact on coastal resources, including public access. Construction (including but not limited to construction activities, and materials and/or equipment storage) is prohibited outside of the defined construction, staging, and storage areas.

b. Construction Methods and Timing. The Construction Plan shall specify the construction methods to be used, including all methods to be used to keep the construction areas separated from sensitive habitat and normal community traffic flow (including using unobtrusive fencing (or equivalent measures) to delineate construction areas). All erosion control/water quality best management practices to be implemented during construction and their location shall be noted. All work shall take place during daylight hours.

c. Construction Requirements. The Construction Plan applies to initial construction as well as future maintenance. The Construction Plan shall include the following construction requirements specified by written notes on the Construction Plan.

1. Prior to the commencement of any development authorized under this CDP, the Permittee shall ensure that all on-site workers and contractors understand and agree to observe the standards for work outlined in this CDP and in the detailed project description included as part of the application submittal as revised by these conditions.

2. A United States Fish and Wildlife Service (USFWS)-approved biologist will survey the project site two weeks before the onset of work activities. If any life stage of the California red-legged frog is detected, construction activities shall not be allowed to commence until the USFWS and the Executive Director consult and provide recommendations on any changes necessary to avoid impacting the species.

3. A USFWS-approved biologist shall survey the construction footprint immediately before the onset of activities. Any San Francisco garter snakes shall be allowed to leave the work area of their own accord and shall be monitored as practical by the biologist to ensure they do not reenter the construction footprint.

4. Prior to commencement of ground-disturbing activities, erosion, sediment, and runoff control measures shall be deployed in accordance with the final Storm Water Pollution Prevention Plan approved pursuant to **Special Condition 7**, and all measures shall be properly maintained throughout the duration of construction activities.

5. Prior to the commencement of construction, the limits of the work areas and staging areas shall be delineated in consultation with a qualified biologist, limiting the potential area affected by construction and ensuring that all riparian areas and other

sensitive habitats adjacent to construction areas are avoided during construction. All vehicles and equipment shall be restricted to pre-established work areas and haul routes and to established or designated staging areas.

6. All trash shall be properly contained, removed from the work site, and disposed of on a regular basis to avoid contamination of habitat during construction activities. Any debris inadvertently discharged into coastal waters shall be recovered immediately and disposed of consistent with the requirements of this CDP.

7. Topsoil removed by grading operations shall be stockpiled for reuse and shall be protected from compaction and wind or erosion during stockpiling.

8. Equipment staging, materials storage, and stockpiling areas shall be limited to the locations and sizes specified in the approved construction plans. Construction vehicles shall be restricted to designated haul routes. Construction equipment and materials shall be stored only in designated staging and stockpiling areas as depicted on the approved construction plans.

9. Any fueling and maintenance of construction equipment shall occur within upland areas outside of habitat areas or within designated staging areas. Mechanized heavy equipment and other vehicles used during the construction process shall not be refueled or washed within 100 feet of the creek.

10. Fuels, lubricants, and solvents shall not be allowed to enter coastal waters or riparian areas. Hazardous materials management equipment including oil containment booms and absorbent pads shall be available immediately on-hand at the project site, and a registered first-response, professional hazardous materials clean-up/remediation service shall be locally available on call. Any accidental spill shall be rapidly contained and cleaned up.

d. Material Containment BMPs. Particular care shall be exercised to prevent foreign materials (e.g., construction scraps, wood preservatives, other chemicals, etc.) from entering the stormwater system.

e. Construction Site Documents. The plan shall provide that copies of the signed CDP and the approved Construction Plan be maintained in a conspicuous location at the construction job site at all times, and that such copies are available for public review on request. All persons involved with the construction shall be briefed on the content and meaning of the CDP and the approved Construction Plan, and the public review requirements applicable to them, prior to commencement of construction.

f. Construction Coordinator. The plan shall provide that a construction coordinator be designated to be contacted during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies), and that contact information (i.e., address, phone numbers, etc.) including, at a minimum, a telephone number that will be made available 24 hours a day for the duration of construction, is conspicuously posted at the job site where such contact information is readily visible from public viewing areas, along with indication that the construction coordinator should

be contacted in the case of questions regarding the construction (in case of both regular inquiries and emergencies). The construction coordinator shall record the name, phone number, and nature of all complaints received regarding the construction, and shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry.

g. Notification. The Permittee shall notify planning staff of the Coastal Commission's North Central Coast District Office at least 3 working days in advance of commencement of construction, and immediately upon completion of construction.

All requirements above and all requirements of the approved Construction Plan shall be enforceable components of this CDP. The Permittee shall undertake construction in accordance with this condition and the approved Construction Plan.

7. Final Storm Water Pollution Prevention Plan. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall submit two sets of a final Storm Water Pollution Prevention Plan (SWPPP) to the Executive Director for review and approval. Minor adjustments to the following requirements may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources. The final SWPPP shall include provisions for all of the following:

a. Sedimentation Controlled. Runoff from the project site shall not increase sedimentation in coastal waters post-construction. During construction, runoff from the project site shall not increase sedimentation in coastal waters beyond what is allowable under the final Water Quality Certification approved for the project by the Regional Water Quality Control Board.

b. Pollutants Controlled. Runoff from the project site shall not result in other pollutants entering coastal waters or wetlands during construction or post-construction.

c. BMPs. Best Management Practices (BMPs) shall be used to prevent the entry of polluted stormwater runoff into coastal waters and wetlands during construction and post-construction, including use of relevant BMPs as detailed in the current California Storm Water Quality Best Management Handbooks (http://www.cabmphandbooks.com).

d. Spill Measures. An on-site spill prevention and control response program, consisting of BMPs for the storage of clean-up materials, training, designation of responsible individuals, and reporting protocols to the appropriate public and emergency services agencies in the event of a spill, shall be implemented at the project to capture and clean-up any accidental or other releases of oil, grease, fuels, lubricants, or other hazardous materials, including to avoid them entering coastal waters or wetlands.

e. BMP Schedule. A schedule for installation and maintenance of appropriate construction source-control BMPs to prevent entry of stormwater runoff into the construction site and to prevent excavated materials from entering runoff leaving the construction site.

All requirements above and all requirements of the approved SWPPP shall be enforceable components of this CDP. The Permittee shall undertake development in accordance with this condition and the approved SWPPP.

8. **Cumulative Public Access Impact Mitigation.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall submit evidence, for the review and approval of the Executive Director, that the development rights have been permanently extinguished on ten existing legal residential lots (equal to the number of residential lots to be created by the approved project) consistent with **Special Condition 1** such that the subdivision of property authorized herein shall not result in a net increase of existing legal lots for residential development within Mid-Coast Region of San Mateo County, an area that is generally depicted on **Exhibit 6** and that is primarily served by the segment of Highway 1 between its intersection with Highway 92 and Devil's Slide and/or by the segment of Highway 92 west of Highway 280. The lots shall be extinguished only in the Mid-Coast Region of San Mateo County. Each mitigation lot shall be an existing legal lot or combination of contiguous legal lots in common ownership and shall be zoned to allow development of a detached single-family residence. The legality of each mitigation lot shall be demonstrated by the issuance of a Certificate of Compliance by the City or County consistent with the applicable standards of the certified LCP and other applicable law as well as evidence that the lot was legally created prior or pursuant to the coastal development permit requirements of the Coastal Act and its predecessor statute.

   a. For each development right on a lot extinguished in satisfaction of this permit condition, the Permittee shall ensure that a document is executed and recorded in a form and content acceptable to the Executive Director, that states that any and all development rights that may otherwise exist for the lot shall be considered extinguished in perpetuity, and that irrevocably offers to dedicate to a public agency or private association approved by the Executive Director an open space and scenic easement to preserve the open space and scenic values present on the property that is the source of the development right being extinguished and to prevent the significant adverse cumulative impact to public access to the coast that would result as a consequence of development of the property for residential use. Such easement shall cover the entirety of the subject legal lot and include a legal description of the entire property and a graphic depiction prepared by a licensed surveyor. The recorded document shall also reflect that development in the easement area is restricted as set forth in this permit condition. Each offer shall be recorded free of prior liens and encumbrances that the Executive Director determines may affect the interest being conveyed. The offer shall run with the land in favor of the People of the State of California, binding all successors and assigns, and shall be irrevocable for a period of 21 years, such period running from the date of recording.

   b. As an alternative to the method described in subsection a above, the Applicant may instead, prior to issuance of the coastal development permit, purchase existing legal lots that satisfy the criteria listed above and, subject to the review and approval of the Executive Director, dedicate such lots in fee to a public or private land management agency approved by the Executive Director for permanent public recreational or natural

resource conservation purposes, provided the lots are restricted as described in subsection a above.

9. **Deed Restriction.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall submit to the Executive Director for review and approval documentation demonstrating that the Applicant has executed and recorded against the property governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the special conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the property. The deed restriction shall include a legal description and graphic depiction, prepared by a licensed surveyor, of the property governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the property.

10. **Half Moon Bay Conditions of Approval.** All conditions of approval imposed on the project by the City of Half Moon Bay pursuant to an authority other than the California Coastal Act remain in effect, but do not alter the Applicant's responsibility to satisfy all terms and conditions of approval as specified herein. The Applicant shall be responsible for satisfying all terms and conditions of this CDP in addition to any other requirements imposed by other local conditions, and in cases of conflicts, the terms and conditions of this CDP shall prevail.

11. **Water Supply.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall submit, for the review and approval of the Executive Director, a water supply plan that has been approved by the Coastside County Water District (CCWD), and all other required parties, illustrating that all domestic water supplied to the project will be from the CCWD and including evidence from CCWD indicating that adequate domestic water supplies and fire flows are available for all the project's proposed uses. New pipelines shall avoid the habitat buffer and shall be the minimum size necessary to serve only the approved development.

IV. COASTAL DEVELOPMENT PERMIT DETERMINATION

The standard of review for this CDP application is the City of Half Moon Bay certified LCP. In addition, the Commission must also find that the proposed development is in conformity with the public access and public recreation policies of Chapter 3 of the Coastal Act.

A. PROJECT LOCATION

The proposed project site is located on two vacant parcels (APNs 056-150-010 and 056-150-120) within the City of Half Moon Bay in San Mateo County at 320 Church Street in the Commercial Downtown Zoning District (C-D) (see **Exhibit 1**). The project is located south and east of the intersection of the two main highway arteries running through Half Moon Bay, Highway 92

running east/west and Highway 1 running north/south, respectively. The project site is bounded by Pilarcitos Creek to the north and northeast; Highway 1 to the west; the City Police Station, a vacant lot, and the Shoreline Station retail and office property to the south; and residential development to the east.

The project site, totaling about 5.5 acres landward of Highway 1, begins at the terminus of Church Street and runs west, parallel to Pilarcitos Creek until it meets up with Highway 1. Current access to the site is by way of Church Street. The northern border of the parcels is immediately adjacent to Pilarcitos Creek, a riparian stream that, along with its associated riparian areas, serves as habitat for the San Francisco Garter Snake[1] and the California red-legged frog.[2]

In addition to being habitat for rare and endangered species, the LCP states that Pilarcitos Creek's channel capacity to accommodate heavy flows is questionable between Main Street and Highway 1. The LCP states that channel improvements might be required to eliminate hazards to existing or new structures. Currently, the site is undeveloped.

B. PROJECT DESCRIPTION

The project proposes to convert two existing vacant parcels into a small downtown neighborhood subdivision with 12 lots for 10 clustered single-family homes (will comply with R-1 zoning standards) and 6 multi-family units (will comply with R-3 zoning standards), an urban riparian conservation area, and a single commercial lot for community gardens, picnic tables and benches and pedestrian access to the Main Street commercial area within a two or three block walk.

The project site is 5.5 acres and the project would contain approximately 2.63 acres of a riparian conservation area, 1.947 acres of a riparian buffer and 1.947 acres of clustered home sites. The residential lots will range in size from 13,344 square feet to 17,680 square feet with a commercial lot of 65,568 square feet. The project will also include construction of associated infrastructure and a 26-foot wide, no through-way road called Churchside Court that will provide access to the residential development. The original project as proposed included a road extending from the terminus of Church Street west to link up with and provide access to and from Highway 1. In order to minimize potential adverse traffic impacts to Highway 1, the Applicant has agreed to dead-end Churchside Court at the end of the developed parcels. At the western terminus of the dead-end at Churchside Courta three-point turnaround required by the local Coastside Fire Protection District is proposed.

Two parking spaces per each single family home and per each multi-family unit would be provided per the City of Half Moon Bay's local parking ordinance. Each single family home will have two parking spaces in a driveway and/or a garage and the two multi-family homes will have two parking spaces per unit provided in covered parking or in a garage, with an additional visitor spot for every 5 units. General on-street parking for the public would be allowed on the northern side of Churchside Court.

[1] Endangered under the California Endangered Species Act and Endangered Species Act and fully protected under Section 5050 of the Fish and Game Code.

[2] California Species of Special Concern, threatened under the Endangered Species Act.

The Applicant also proposes to provide a conservation easement to protect the creek and riparian habitat consistent with the policies of the LCP, which will include the entire westerly parcel adjacent to Highway 1. Lastly, the Applicant proposed to provide a minimum $27,500 traffic mitigation fee to Coastside Land Trust to support additional lot retirements consistent with the City's traffic and open space preservation goals.

C. PROJECT HISTORY

On February 2, 2012, Gibraltar Capital submitted an application on behalf of the property owner, Churchside Court LLC, to the City of Half Moon Bay for a coastal development permit (CDP) at 320 Church Street, Half Moon Bay. On April 24, 2012, the Planning Commission recommended the City Council approve the CDP by resolution P-07-12. On June 5, 2012, the Half Moon Bay City Council approved CDP Application Number PDP-005-11 by resolution C-28-12. Notice of the City Council's action on the CDP was received in the Coastal Commission's North Central Coast District Office on June 8, 2012. The Coastal Commission's ten-working day appeal period for this action began on June 8, 2012 and concluded at 5 p.m. on June 21, 2012. Two valid appeals were received during the appeal period.

The Commission heard the appeal of the City Council's decision on July 13, 2012 and found substantial issue with regard to whether the development approved by the City was consistent with the sensitive habitat, traffic, and hazards policies of the City's certified LCP, and took jurisdiction over the CDP. In order to hold the de novo hearing, the Commission requested the following supplemental information to be submitted by the Applicant regarding the project:

- An updated biological report that includes a wetland delineation conducted pursuant to Commission criteria, identifies the existing habitat resources on and adjacent to the site including habitat for sensitive species, recommends appropriate habitat setbacks, and identifies mitigation measures necessary to avoid impacts of the proposed development on biological resources;

- An updated traffic report that identifies the impacts of this project on Highway 1 and Highway 92 traffic, including with respect to weekdays and weekday peak times, but also weekend and summer peak times in relation specifically to recreational traffic on these Highways. For all impacts identified, the report shall identify appropriate mitigation, including off-site lot retirement options available in the vicinity; and

- An updated flood hazard report that evaluates flooding hazards of the site in light of the LCP policy requirements. For all impacts identified, the report shall identify appropriate mitigation, including potential modifications to lots, building envelopes, and infrastructure.

In March 2013, the Applicant provided an updated biological resources assessment (BRA) and wetland delineation performed for the parcels. In July 2013, the Applicant submitted a traffic analysis evaluating traffic impacts to Highway 1 and Highway 92, providing both intersection and segment level of service (LOS) impacts. In October 2013, the Applicant submitted an updated hazard analysis. See **Exhibits 3-5** for all supplemental analyses performed since the substantial issue determination. Since the final submittals, Commission staff and the Applicant have been working together to further modify the project to address impacts to sensitive habitats

and cumulative impacts of the development to coastal access and infrastructure to assure such impacts are adequately mitigated.

D. PUBLIC ACCESS AND TRAFFIC IMPACTS

Applicable Policies

LUP Policy 9-2: *The City shall monitor annually the rate of build-out in categories designated for development. If the rate of build-out exceeds the rate on which the estimates of development potential for Phase I and Phase II in the Plan are based, further permits for development or land divisions shall not be issued outside existing subdivisions until a revised estimate of development potential has been made. At that time the City shall establish a maximum number of development permits to be granted each year in accordance with expected rates of build-out and service capacities. No permit for development shall be issued unless a finding is made that such development will be served upon completion with water, sewer, schools, and road facilities, including such improvements as are provided with the development.*

LUP Policy 9-4: *...Prior to issuance of a development permit, the Planning Commission or City Council shall make the finding that adequate services and resources will be available to serve the proposed development upon its completion... Lack of available services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the Land Use Plan.*

LUP Policy 10-4. *The City shall reserve public works capacity for land uses given priority by the plan, in order to assure that all available public works capacity is not consumed by other development and control the rate of new development permitted in the City to avoid overloading of public works and services.*

LUP 10-25. *The City will support the use of Level of Service C as the desired level of service on Highways 1 and 92, except during the peak two-hour commuting period and the ten-day average peak recreation hour when Level of Service E will be acceptable.*

Analysis

Half Moon Bay's LCP contains several policies, including Policies 9-2, 9-4, 10-4, and 10-25, that require new development to be served by adequate facilities to accommodate traffic, especially with regard to assuring that there is adequate traffic capacity to serve public access to beaches and coastal recreation. The LCP policies were crafted in order to carry out the requirements of the Coastal Act, such as section 30250(a), which requires that new development be located in areas with adequate services and where it will not have significant adverse effects, either individually, or cumulatively, on coastal resources. In particular, LUP Policy 9-4 expressly requires that development shall be served with adequate services and that lack of adequate services such as adequate road facilities shall be grounds for denial of a development permit. LCP Policy 10-4 reserves public works and traffic capacity for those uses given priority under the LCP, such as coastal access and recreation. Policy 10-25 designates Level of Service (LOS) C as the desired LOS on Highways 1 and 92 except during weekday and weekend peak-

hours when LOS E may be accepted.

The area in which the project is proposed is already a heavy traffic area, with both Highway 1 and Highway 92 providing crucial commuter capacity in and out of Half Moon Bay. Existing traffic is at times operating at a LOS that is below the LCP's acceptable levels, and thus already adversely impacts the public's ability to access the coast. Current LOS designations for some of the intersections studied in Half Moon Bay, including as indicated in the traffic analysis for the proposed project, are already at LOS F. For example, the intersection of Highway 92 and Main Street, adjacent to the proposed project site, operates at LOS F at both AM and PM peak, as well as Saturday midday peak. Any new development in Half Moon Bay that increases developable residential lots in the area will add vehicle trips to Highways 1 and 92, impacting the capacity of the roads and highways within the City and impacting the roads and highways throughout the Mid-Coast region.

The proposed development will subdivide 2 existing parcels into 13 parcels, adding 11 additional lots that will support 10 single family homes and 2 multi-family structures containing 3 units each and one commercial lot with visitor serving uses. The traffic analysis submitted for the proposed development (**Exhibit 4**) states that the proposed development would add 20 vehicle trips in the AM peak hour, 32 vehicle trips in the PM peak hour and 33 vehicle trips in the Saturday midday peak hour.[3] Such development will add dozens of trips a day to highways that are already often operating below LCP required capacity. In addition, the LCP requires that the City reserve public works capacity for land uses given priority by the plan. Subdivisions, such as the proposed project, increase the number of developable lots for residential uses and consume public works capacity, specifically roads, for what is a non-priority use under the LCP. Therefore, each project adding newly created developable lots, especially for non-priority development, such as the proposed residential subdivision, cumulatively impacts the whole region's traffic capacity because it creates additional demand on area highways for a non-priority use in excess of their current and/or future capacity.

Cumulative impact analysis is based on an assessment of project impacts combined with other projects causing related impacts (14 CCR § 15355). In accordance with CEQA, cumulative impact analysis must consider reasonably foreseeable future projects or activities. The CEQA guidelines identify two sources of data that can be consulted for the purpose of evaluating the significant cumulative impacts of development (14 CCR § 15130(b)):

> *(1) Either:*
>
> *(A) A list of past, present and probable future projects producing related or cumulative impacts, including those projects outside the control of the agency, or*
>
> *A summary of projections contained in an adopted general or related planning document or in a prior environmental document which has been adopted or certified, which describes or evaluates regional or area wide conditions*

[3] DKS Associates, 320 Church Street Mixed Use Development Supplemental Analysis and Response to Comments, June 13, 2013. The traffic study cited in the City's Mitigated Negative Declaration did not count traffic in the summer or on weekends, and is not useful for the Commission in considering impacts to public access and recreation. The study also failed to use the correct standard of cumulatively considerable (rather than significantly adverse) for evaluating cumulative impacts.

> *contributing to the cumulative impact.*
>
> *"Probable future projects" may be limited to… projects included in an adopted capital improvements program, general plan, regional transportation plan, or other similar plan…*

San Mateo County offers numerous transportation plans as well as the Half Moon Bay and San Mateo County LCPs, which evidence how the proposed residential development will cumulatively adversely impact public access to the coast.

Regional Transportation and Land Use Plans

The 2001 Countywide Transportation Plan (CTP) predicted the impact of potential development on highway congestion throughout San Mateo County. This report projected increases in the traffic volumes from 1990 to 2010 of 197- and 218-percent on Highways 1 and 92 respectively in the Mid-Coast region, and attributed these increases to "the anticipated levels of new development on the Coastside and the continued pattern of Coastsiders out-commuting to jobs in San Francisco and on the Bayside."[4] The report corroborates the findings of all of the previous traffic studies conducted in the region over the past three decades, concluding that Highways 1 and 92 in the Mid-Coast Region are not adequate to serve expected future demands of development.[5]

Completion of the tunnel at Devil's Slide alleviates periodic intense congestion to due landslides that blocked access to the north and forced all traffic from Montara and communities to the south to detour to Highway 92, even for what would have been short trips to Pacifica. However, the tunnel did not increase the capacity of Highway 1 to handle traffic to Half Moon Bay. Similarly, the segment of Highway 92 that runs east of the City to Highway 280 traverses steep rugged terrain and may not be widened in its entirety. In short, the existing congestion, especially during peak recreation times such as Saturday afternoon, is not expected to improve.

Regarding likely future development, the City has over 409 acres of land available for residential, mixed use, or Planned Unit Developments. The vacant and underdeveloped sites in the City have the capacity for 1,326 housing units, including 273 multifamily units.[6] Measure D, certified by the City in 2009, does limit residential growth to one to 1.5 percent growth restriction so the rate of buildout may slow down, but Measure D does not change the ultimate buildout level currently allowed. In addition, new subdivisions increase buildout potential. Regionally, new development in the unicorporated Mid-Coast areas of San Mateo County will also add to cumulative impacts to Highways 1 and 92. According to the County's LCP Mid-Coast Update, the proposed Mid-Coast residential buildout estimate is 6,757 to 7,153 units (households), more than the number of units assumed by the Countywide Transportation Plan.

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[4] San Mateo County, Countywide Transportation Plan (April 2001).

[5] San Mateo County is in the process of developing a comprehensive transportation management plan to address cumulative traffic impacts of residential development on roads and Highways in the Midcoast area, including the City of Half Moon Bay, pursuant to a requirement in their LCP certified under the Midcoast update in 2012. The plan must thoroughly evaluate the feasibility of developing an in-lieu fee traffic mitigation program, the expansion of public transit, including buses and shuttles, and development of a mandatory lot merger program.

[6] City of Half Moon Bay Housing Element

Beyond the projections in the CTP report, the San Mateo County Congestion Management Program (CMP) prepared by the City/County Association of Governments in 2011 establishes LOS standards throughout the County which are then monitored on a biennial basis to consider if the measured intersections and roadway segments are exceeding the designated LOS standard. [7] The LOS standards for Highway 1 and 92 throughout the Mid-Coast region in the CMP are designated LOS E which is consistent with the LCP requirements. However, the intersection LOS standard in the CMP for Main Street and Highway 92 is F, which exceeds the LCP limits.

The City of Half Moon Bay Highway 1 Traffic and Safety Study released in December 2011 provided an evaluation of traffic and transportation issues in conjunction with the proposed Traffic and Congestion Mitigation Plan adopted by the City Council in 2009.[8] This report utilizes the same unacceptable LOS restrictions identified in LUP Policy 10-25, stating in its discussion of significance criteria that any intersection or roadway segment that exceeds LOS E during the weekday commute periods and Saturday midday peak hour would be considered significantly impacted and require mitigation. The report projected a LOS of F for the intersection of Hwy 1 and 92 under 2030 cumulative growth conditions with similar results in 2030 even when accounting for the improvements proposed in the Traffic and Congestion Mitigation Plan adopted by the City.[9] Thus, according to this analysis, segments and intersections throughout the City (including the intersection of Highway 1 and 92) are forecasted to operate below the LCP standard, with or without the City's future proposed traffic and congestion mitigation plan improvements.

Additionally, the DKS study submitted by the Applicant indicates that existing traffic conditions at the intersection of Highway 92 and Main Street during the weekday commute hours and Saturday midday peak hours is currently operating at LOS F which exceeds the LCP standard for Highway 92. Further, this study utilizes a San Mateo County traffic demand model which considers changes in land use and population which in turn anticipates increases in employment and residential populations to project cumulative impacts out to the year 2035. The 2035 projections indicate worsening traffic conditions over time for this intersection and nearby intersections as well. The 2035 projections, with or without the proposed project, indicates a LOS of F for Saturday midday peak hours for intersections throughout the project area including Highway 1 and north Main street, Highway 1 and Highway 92, Highway 1 and Kelly Ave, and Highway 92 and Main Street. Therefore, cumulative traffic impacts in 2035 will result in LOS that exceeds the LCP standard for Saturday, impacting the residents and visitors trying to visit and recreate on the coast during the weekends. Lastly, 2035 projections for roadway segments showed that Highway 1 between Kelly and Filbert street will be at LOS F during the Saturday midday hours (with or without the project), which again, exceeds the LCP limits for Highway 1.

Finally, the July 2013 Initial Study for the Half Moon Bay Circulation Element Update finds that the intersection of Highway 92 and Main Street requires additional improvements to bring the

[7] City/County Association of Governments of San Mateo County, Final San Mateo County Congestion Management Program, 2011.

[8] DKS Associates, City of Half Moon Bay Highway 1 Traffic Safety Study, December 6, 2011.

[9] The City of Half Moon Bay, Traffic Safety and Congestion Mitigation Plan, Adopted 2009.

intersection within the LOS standard of the City.[10] As discussed above, The City of Half Moon Bay Highway 1 Traffic and Safety Study released in December 2011 found that even with the proposed improvements recommended in the City's Traffic and Congestion Mitigation Plan adopted by the City, the LOS for the intersection of Highway 1 and 92 will be at F. Therefore, recent analyses affirms that traffic circulation improvement projects will not alleviate future traffic conditions consistent with the LCP which will in turn affect public access to the coast.

The pivotal intersection of Highway 1 and Highway 92 and the other intersections and segment discussed above are adjacent to the project and residents of the proposed developments will be using these two roadways to head upcoast, downcoast and inland. Therefore, existing conditions near the project site are projected to be at a LOS which exceed the LCP required limits in 2030 and which would also exceed the current LOS standard for this area within the San Mateo County CMP. While traffic from the project was found to generate a less than one percent increase; in the context of extremely dense congestion, an increase equivalent to 33 more trips every Saturday is cumulatively considerable.

Cumulative Impacts Analysis

A minor impact from a project may not arise to the level of creating a direct substantial adverse impact on coastal resources, but may nevertheless impose a cumulatively considerable impact. As a familiar example from CEQA jurisprudence, even small amounts of air pollution aggravate an already polluted air basin.[11] In the case of this proposed development, the addition of 16 new residential units would add dozens of trips a day, which make up a small percentage of the thousands of trips that drivers take every day in the Half Moon Bay area. However, in conjunction with forseeable buildout in the City and the Mid-Coast region, the development would result in adverse cumulative impacts to the Highway capacities that serve the City of Half Moon Bay and the region.

Because there are no alternative access routes to and along the coastline in this area of the coast, traffic congestion on Highways 1 and 92 significantly interferes with the public's ability to access the area's public beaches and other visitor-serving coastal resources. Hampering public access conflicts with the relevant LCPs, Coastal Act Chapter 3 access and recreational policies, and the California Constitution's requirement to maximize access to the coast. The Commission finds that the proposed increase in legal lots in the Mid-Coast Region will result cumulative impacts to public access, and would therefore be inconsistent with the Half Moon Bay LCP.

Without appropriate mitigation, the Commission could refuse to allow a new subdivision based upon the lack of adequate public services (road capacity) under LUP Policy 9-4. As further discussed below as an alternative to denial, the Commission imposes a special condition requiring the Applicant to mitigate for the cumulative adverse impacts to traffic and coastal access, by extinguishing the residential development potential on ten existing residential legal lots within the Mid-Coast Region of San Mateo County and record offers to dedicate them as open space, conservation easements. Absent this mitigation, the project would fail to adequately mitigate for traffic impacts and the resultant adverse impacts to public access to the coast and its

[10] City of Half Moon Bay Circulation Element Update, Initial Study, p. 6

[11] *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 720-721 [rejecting the ratio theory of cumulative impacts].

associated recreational opportunities, inconsistent with the public access and recreation policies of the LCP and Coastal Act.

Mitigation of Significant Adverse Cumulative Impacts

For all of the above reasons, the Commission imposes a special condition requiring the Applicant to mitigate for the cumulative adverse impacts to traffic and coastal access by extinguishing the residential development potential on ten existing residential legal lots within the Mid-Coast Region of San Mateo County and record offers to dedicate them as open space, conservation easements. The Commission's recommended condition specifically addresses the adverse cumulative impact that would result from approval of this subdivision by preventing any increase in the development potential of legal lots for residential development in the Mid-Coast region.

The Commission finds that a clear nexus exists between the nature of the requirements of **Special Condition 8** and the nature of the significant adverse cumulative impacts to regional traffic and coastal access caused by the proposed residential development. As discussed herein, residential development in the Mid-Coast region is the primary cause of the severe traffic congestion on Mid-Coast Highways 1 and 92. Any increase in the potential level of buildout in the region will lead to even greater demands on infrastructure that cannot support buildout of the existing supply of legal lots in the region. Because there are no alternative access routes to and along the coastline in this area of the coast, the extreme traffic congestion on Highways 1 and 92 already significantly interferes with the public's ability to access the area's public beaches and other visitor serving coastal resources in conflict with these policies. Consequently, the Applicant's proposal to create new lots for residential development, adding to the existing supply of legal lots in Half Moon Bay, will result in significant adverse cumulative impacts to regional traffic congestion and the public's ability to access the coast in conflict with the Half Moon Bay LCP. **Special Condition 8** specifically addresses these impacts by preventing any increase in the development potential of legal lots for residential development in the Mid-Coast Region.[12]

The Commission further finds that the mitigation requirements of **Special Condition 8** are also roughly proportional to the significant adverse cumulative traffic and coastal access impacts attributable to the proposed residential development. Any existing legal lot is potentially developable, including infill lots, and the retirement of development rights anywhere in the Mid-Coast region helps mitigate the adverse cumulative impacts of this proposed subdivision. In addition, since development anywhere within the San Mateo Mid-Coast region contributes to traffic on Highways 1 and 92, the retirement of development rights anywhere in this region would offset the adverse impacts associated with creating new, developable lots such as this project proposes. Thus, the proportional retirement of development rights on lots in equal number to the additional lots proposed for creation as a part of this development would serve to offset the significant adverse cumulative impacts to traffic and coastal access.[13] The Applicant

[12] The City of Half Moon Bay currently lacks a "transfer of development rights" program that aids the retirement of substandard or other available lots for purposes of mitigating impacts by new development. However, the settlement agreement stemming from the Ailanto project (A-1-HMB-99-022-A-1) required the City to develop a transfer of development rights program based on $2.835 million in fees and committed the City to amending its LCP to including a lot retirement program Regardless, it is feasible to retire lots without a dedicated program.

[13] In A-1-HMB-99-022-A-1 (Ailanto), the applicant was required to pay a fee to the City which represented a specific payment per lot for the purposes of lot retirement, for each of the 63 new residential parcels to be created through the subdivision. Similarly, in the case of A-2-HMB-01-011(Beachwood) the applicant was required to show

proposes to subdivide two existing legal lots into 12 lots for residential development and one commercial lot. Because prior to the proposed subdivision, the project site consists of two legal lots, the project as conditioned would result in a net increase of 10 legal lots for residential development. Additionally, the Applicant is extinguishing development rights on the commercial lot, leaving 10 new lots that may impact traffic and public access. **Special Condition 8** requires the retirement of the development rights of 10 existing legal lots to offset the net increase of 10 legal lots for residential development. The Commission finds that the 1:1 ratio of lots created to lots in which development rights are retired clearly establishes that the degree of the mitigation is roughly proportional to the degree of the impact.

Applicant's Proposed Mitigation

This Applicant has proposed a minimum of $27,500.00 fee to be contributed to the Coastside Land Trust or similar organization that supports lot retirements in conjunction with the city or county (**see Exhibit 10**). The Applicant believes this fee is sufficient because the Applicant believes that this project is different from other subdivision projects in Half Moon Bay where the Commission has required lot retirement because it "is not auto dependent, not expected to appreciably affect local traffic congestion, and is expected to improve per capita traffic for the region" (**Exhibit 10**). The Applicant's basis for this distinction from other subdivision projects requiring lot retirement is that this project is a "transit-oriented development," in close association with public transit, near the downtown hub and the regional Park & Ride, all of which the Applicant asserts reduces local and regional traffic.

While the infill nature and close association of this development to public transit can alleviate some vehicle trips, Half Moon Bay contributes significantly to traffic volume on Highways 1 and 92 because the City has far more housing units than available jobs. This jobs/housing imbalance constrains road capacity because a large majority of the City's workers must commute north and east of the city, over Highways 1 and 92, to reach their jobs. As stated in Measure D, the City's growth control ordinance, the Coastside region of San Mateo County, including Half Moon Bay, will continue to add more housing than jobs through the year 2020, further increasing the number of commuters that will need to use Highways 1 and 92 to reach their jobs. Examining the commuting issue from a County-wide perspective, per the 2011 Congestion Management Program for San Mateo County, 72% of commuters in San Mateo County use driving alone to travel and 70% of County residents use vehicle travel alone to commute to work.[14] The Association of Bay Area Governments (ABAG) has projected that by 2035 the jobs available in San Mateo County as a whole will grow faster than the number of County residents seeking employment within the County, resulting in worsening traffic congestion associated with more people coming to jobs from outside the County across its main arteries, Highways 1 and 92.

The County has taken steps to alleviate some of the impacts of all the congestion this traffic causes. Recent recommended legislative actions (AB 471) by the County were suggested to reduce roadway congestion by trying to improve the balance between available jobs and housing

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that development rights had been permanently extinguished on legal lots consistent with the number of residential lots created through the project. Additionally, after Half Moon Bay imposed lot retirement for the Carnoustie development, the Commission found no substantial issue on appeal (A-2-HMB-07-034). All these projects retired lots at roughly a 1:1 ratio, one retired lot for each new developed lot

[14] City/County Association of Governments of San Mateo County, Final San Mateo County Congestion Management Program, 2011.

opportunities, in order to reduce the number of long-distance commute trips that have to be made when individual jurisdictions or groups of jurisdictions offer more employment opportunities than affordably priced housing to accommodate the work force. Further, according to the San Mateo CMP, County General Plan or Specific Plan updates that are determined to have CMP traffic impacts must include feasible mitigation for traffic and congestion impacts and the CMP found that revising allowable land use intensities is the most direct way to mitigate traffic impacts to the CMP network.[15] In the appendices to the CMP, the County notes that revising the allowable land use intensities is the most direct way to mitigate traffic impacts to the network of roads. Lot retirement not only reduces those intensities, but does it in certain and permanent way.

The Commission therefore finds that the lot retirement requirement contained in **Special Condition 8** provides flexibility to the Applicant to either retire development rights in a pro rata fashion or purchase the lots and donate the lots after purchase to a public agency such as the Coastside Land Trust or similar organization that supports lot retirements in conjunction with the City or County. This flexibility allows the retirement to occur in a way that provides the Applicant with the ability to purchase lots at the best price the Applicant can negotiate and also assures that the number of the development credits needed to mitigate properly for the public access impacts will be retired. In fact, this Applicant has proposed a minimum of $27,500.00 fee to be contributed to the Coastside Land Trust or similar organization that supports lot retirements in conjunction with the city or county. Further, the Applicant submitted a listing of property sales that suggests that the number of lots here recommended for retirement could be purchased close to the amount of the fee here proposed by the Applicant. While the Commission cannot guarantee that 10 legal lots will be available for sale at any given time at the amount offered by the Applicant, the Applicant's listing evidences the feasibility of the recommended retirement condition.

The Commission finds that without the proposed lot retirement, the regional cumulative traffic impacts of the proposed development would significantly interfere with the public's ability to access the coast, in conflict with both Coastal Act Policies 30210, 30250(a) and 30252, all of which are incorporated as policies of the certified Half Moon Bay LUP, as well as the City-specific policies of the LCP cited above. Therefore, the Commission imposes **Special Condition 8**, requiring the Applicant to extinguish the development rights on existing legal lots in the City in order to offset the significant adverse cumulative impacts resulting from the proposed creation of new lots. With this condition, the Commission finds the modified development proposal is consistent with the Half Moon Bay LCP and avoids significant adverse effects to traffic on Highways 1 and 92.

E. BIOLOGICAL RESOURCES

Applicable Policies

The City's LCP includes strong protections for biological resources, including the preservation and protection of sensitive habitats. The LCP defines sensitive habitats, requires the protection of sensitive habitats, and limits the uses permitted within sensitive habitats as follows:

[15] *Id.*

LUP Policy 3-1 Definition of Sensitive Habitats *(a) Define sensitive habitats as any area in which plant or animal life or their habitats are either rare or especially valuable and as those areas which meet one of the following criteria: (1) habitats containing or supporting "rare and endangered" species; (2) all perennial and intermittent streams and their tributaries,.. Such areas include riparian areas, wetlands, sand dunes, marine habitats, sea cliffs, and habitats supporting rare, endangered, and unique species.*

LUP Policy 3-3 Protection of Sensitive Habitats *(a)Prohibit any land use and/or development which would have significant adverse impacts on sensitive habitat areas. (b) Development in areas adjacent to sensitive habitats shall be sited and designed to prevent impacts that could significantly degrade the environmentally sensitive habitats. All uses shall be compatible with the maintenance of biologic productivity of such areas.*

LUP Policy 3-4 Permitted Uses *(a) Permit only resource-dependent or other uses which will not have a significant adverse impact in sensitive habitats. (b) In all sensitive habitats, require that all permitted uses comply with U.S. Fish and Wildlife Service and State Department of Fish and Game regulations.*

The LCP has policies that define riparian corridors, permit only certain uses to occur in riparian corridors, and require that any development in riparian corridors meet certain performance standards. The LCP also establishes buffer zones for riparian corridors, permits only certain uses in them and creates development standards for any development allowed within riparian buffers.

LUP Policy 3-7 Definition of Riparian Corridors. *(a) Define riparian corridors by the "limit of riparian vegetation" (i.e. a line determined by the association of plant and animal species normally found near streams, lakes, and other bodies of fresh water: red alder, jaumea, pickleweed, big leaf maple, marrowleaf cattail, arroyo willow, broadleaf cattail, horsetail, creek dogwood, black cottonwood, and box elder). Such a corridor must contain at least a 50% cover of some combination of the plants listed.*

LUP Policy 3-9 Permitted Uses in Riparian Corridors. *(a) Within corridors, permit only the following uses: (1) education and research, (2) consumptive uses as provided for in the Fish and Game Code and Title 14 of the California Administrative Code, (3) fish and wildlife management activities, (4) trails and scenic overlooks on public land(s), and (5) necessary water supply projects. (b) When no feasible or practicable alternative exists, permit the following uses: (1) stream-dependent aquaculture provided that non-stream-dependent facilities locate outside of corridor, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, (3) bridges when supports are not in significant conflict with corridor resources, (4) pipelines and storm water runoff facilities, (5) improvement, repair or maintenance of roadways or road crossings, (6) agricultural uses, provided no existing riparian vegetation is removed, and no soil is allowed to enter stream channels.*

LUP Policy 3-10 Performance Standard in Riparian Corridors. *(a) Require development permitted in corridors to: (1) minimize removal of vegetation, (2) minimize land exposure during construction and use temporary vegetation or mulching to protect critical areas, (3) minimize erosion, sedimentation, and runoff by appropriately grading and replanting modified areas, (4) use only adapted native or non-invasive exotic plant species when replanting, (5) provide sufficient passage for native and anadromous fish as specified by the State Department of Fish and Game, (6) minimize adverse effects of waste water discharges and entrainment, (7) prevent depletion of groundwater supplies and substantial interference with surface and subsurface water flows, (8) encourage waste water reclamation, (9) maintain natural vegetation buffer areas that protect riparian habitats, and (10) minimize alteration of natural streams.*

LUP Policy 3-11 Establishment of Buffer Zones. *(a) On both sides of riparian corridors, from the "limit of riparian vegetation," extend buffer zones 50 feet outward for perennial streams and 30 feet outward for intermittent streams.*
(b) Where no riparian vegetation exists along both sides of riparian corridors, extend buffer zones 50 feet from the bank edge for perennial streams and 30 feet from the midpoint of intermittent streams…

LUP Policy 3-12 Permitted Uses in Buffer Zones. *(a) Within buffer zones, permit only the following uses: (1)uses permitted in riparian corridors, (2) structures on existing legal building sites, set back 20 feet from the limit of riparian vegetation only if no feasible alternative exists, and only if no other building site on the parcel exists, (3) crop growing and grazing consistent with Policy 3.9…(5) no new parcels shall be created whose only building site is in the buffer area except for parcels created in compliance with Policies 3.3, 3.4, and 3.5 if consistent with existing development in the area and if building sites are set back 20 feet from the limit of riparian vegetation or if no vegetation 20 feet from the back edge of a perennial and 20 feet from the midpoint of an intermittent stream.*

LUP Policy 3-13 Performance Standards in Buffer Zones. *(a)Require uses permitted in buffer zones to: (1) minimize removal of vegetation, (2) conform to natural topography to minimize erosion potential, (3) make provisions to (i.e. catch basins) to keep runoff and sedimentation from exceeding pre-development levels, (4) replant where appropriate with native and non-invasive exotics, (5) prevent discharge of toxic substances, such as fertilizers and pesticides into the riparian corridor…*

In addition, the LCP considers habitats for rare and endangered species as sensitive habitats and includes specific policies for the protection of these habitats. The LCP requires the designation of habitats for rare and endangered species, specifies the uses allowed within these habitat areas (including with regard to habitats for unique species), outlines permit conditions for development occurring within or near these habitats, and requires the preservation of critical habitats.

LUP Policy 3-21 Designation of Habitats of Rare and Endangered Species. *In the event the habitat of a rare and endangered species is found to exist within the City, revise*

the Habitat Areas and Water Resources Overlay to show the location of such habitat. Any habitat so designated shall be subject to Policies 3-22 through 3-31.

LUP Policy 3-22 Permitted Uses. *(a) Permit only the following uses: (1) education and research; (2) hunting, fishing, pedestrian and equestrian trails that have no adverse impact on the species or its habitat, and (3) fish and wildlife management to restore damaged habitat and to protect and encourage the survival of rare and endangered species.*
(b) If the critical habitat has been identified by the Federal Office of Endangered Species, permit only those uses deemed compatible by the US Fish and Wildlife Service in accordance with the provisions of the Endangered Species Act of 1973, as amended.

LUP Policy 3-23 Permit Conditions. *Require, prior to permit issuance, that a qualified biologist prepare a report which defines the requirements of rare and endangered organisms. At minimum, require the report to discuss: (1) animal food, water, nesting or denning sites and reproduction, predation and migration requirements… (3) a map depicting the locations of plants or animals and their habitats, (4) any development must not impact the functional capacity of the habitat, and (5) recommend mitigation if development is permitted within or adjacent to identified habitats.*

LUP Policy 3-25 San Francisco Garter Snake*. (a)Prevent any development where there is known to be a riparian location for the San Francisco garter snake...(b) Require developers to make sufficiently detailed analyses of any construction which could impair the potential or existing migration routes of the San Francisco garter snake. Such analyses will determine appropriate mitigation measures to be taken to provide for appropriate mitigation corridors.*

LUP Policy 3-33 Permitted Uses. *(a) Permit only the following uses: (1) education and research; (2) hunting, fishing, pedestrian and equestrian trails that have no adverse impact on the species or its habitat, and (3) fish and wildlife management to the degree specified by existing governmental regulations.*

The LCP Zoning Ordinance lists rare and endangered species within the City of Half Moon Bay and requires a minimum buffer of 50 feet to protect the rare and endangered species habitats as follows:

IP Section 18.38.075.H Findings for Development within Riparian Buffer Zones. *The following findings shall be supported by the contents of the required biological report that: 1) there are special circumstances or conditions affecting the property; 2) the project is necessary for the proper design and function of some permitted or existing activity on the property; 3) the project will not be detrimental to the public welfare or injurious to other property downstream or in area in which the project is located; 4) the project will not significantly reduce or adversely impact the sensitive habitat, or there is not feasible alternative which would be less damaging to the environment; the project is in accordance with the purpose of this chapter and with the objectives of the LCP land use plan; and 6) development on the property which has its only building site located in*

the buffer area maintains a twenty-foot buffer from the limit of riparian vegetation, or if no vegetation exists, a twenty-foot buffer from the bank of a perennial stream and a twenty-foot buffer from the midpoint of an intermittent stream.

18.38.085 Habitats for Rare and Endangered Species. *A. Rare and Endangered Species. The potential exists for any of the following Rare and Endangered Species to be found within the San Mateo County Coastal Area and therefore within the City of Half Moon Bay: 1.Animals: the San Francisco Garter Snake, California Least Tern, California Black Rail, California Brown Pelican, San Bruno Elfin Butterfly, San Francisco Tree Lupine Moth, Guadalupe Fur Seal, Sea Otter, California Brackish Water Snail, Globose Dune Beetle…*

C. Permitted Uses within Critical Habitats. Within critical habitat as identified by the Federal Office of Endangered Species, permitted uses are those which are deemed compatible by the US Fish and Wildlife Service in accordance with the provisions of the Endangered Species Act of 1973, as amended.

D. Buffer Zones. The minimum buffer surrounding a habitat of a rare or endangered species shall be 50 feet.

Analysis

Pilarcitos Creek is a perennial stream that runs along the northern border of the subject parcels for the proposed development. The LCP designates such streams as sensitive habitats. The wetland delineation prepared for the proposed development found no areas meeting the one or three-parameter definition of wetlands used by the Coastal Commission or the U.S. Army Corps of Engineers, respectively (**Exhibit 3**). The wetland delineation also found that Pilarcitos Creek supports adjacent riparian vegetation where there is more than 50% cover of arroyo willows, which form a relatively closed canopy. Therefore, the area surrounding Pilarcitos Creek out to the limit of riparian vegetation qualifies as a riparian corridor under the LCP, requiring a 50 foot buffer from the edge of the riparian vegetation. Uses allowed within riparian corridors and their associated buffers include those listed in LCP Policies 3-9 and 3-12.

The biological resources assessment prepared for the proposed project found Pilarcitos Creek and its surrounding riparian vegetation to be suitable habitat for the California red-legged frog[16] and the San Francisco garter snake.[17] The LCP limits the type of uses that can occur in habitats for rare and endangered species to education and research, hunting, fishing, pedestrian and equestrian trails that have no adverse impact on the species or habitat, and fish and wildlife management activities to restore damaged habitat and to protect and encourage the survival of rare and endangered species, as outlined in LCP Policy 3-22. Any habitat for rare and endangered species requires a minimum surrounding buffer of 50 feet according to LCP Section 18.38.085(D). No uses are permitted in buffers for rare and endangered species unless they are uses as listed in LCP Policy 3-22.

[16] California Species of Special Concern, threatened under the Endangered Species Act. Considered a unique species under the LCP.

[17] Endangered under the California Endangered Species Act and Endangered Species Act and fully protected under Section 5050 of the Fish and Game Code. Considered a rare and endangered species under the LCP.

The biological assessment prepared for the project concluded that it was unlikely that any animals using Pilarcitos Creek would venture out past the 50 foot buffer that extends from the limit of the riparian vegetation (this totals 150 feet from the bank edge). Commission staff ecologist Dr. John Dixon agrees with the assessment of on-site biological resources in the biological report and wetland delineation. Dr. Dixon also concludes that the 50 foot buffer from riparian vegetation is sufficient given the urban location and that the inclusion of low-level fencing to demarcate the buffer would improve the functioning of the buffer in order to assure the buffer was protected from infiltration by dogs and people (see **Special Condition 1h**).

The project currently proposes a 50 foot buffer from the edge of the riparian vegetation and the designated rare and endangered habitat along Pilarcitos Creek. Since the submitted wetland delineation found that this area of Pilarcitos Creek is a riparian corridor suitable for rare and endangered species, but found no wetlands, a 50 foot buffer from the edge of the riparian vegetation complies with LCP Policy 3-11 as well as LCP Sections 18.38.085. The project as currently proposed will situate the required Coastside County Fire District turnaround and all proposed building envelopes outside of the 50 foot buffer. In order to assure that this turnaround, and all other proposed development, does not encroach into the riparian buffer **Special Conditions 1-4** are proposed. These special conditions require the Applicant to offer to dedicate a sensitive habitat open space easement from the northern property boundary of all parcels created adjacent to Pilarcitos Creek to the edge of the riparian buffer, as well as extinguish all future development rights within this area other than what is provided for in the special conditions (education and research, fishing, pedestrian and equestrian trails that have no adverse impact on the species or habitat, fish and wildlife management activities to restore damaged habitat and to protect and encourage the survival of rare and endangered species, and placement of low-level fencing that allows for wildlife movement and that demarcates the extent of the sensitive habitat open space area), to assure that all development, now and in the future will avoid the important and LCP-required 50 foot buffer and adjacent sensitive habitat.

In addition, the Commission finds that the construction requirements outlined in **Special Condition 6c,** specifically **6c(2)** and **6c(4)** will ensure pre-construction surveys for sensitive species are conducted and that proper consultation with United States Fish and Wildlife Service and California Department of Fish and Game is implemented consistent with the LCP Policy 3-4, if signs of existing California red-legged frog or San Francisco garter snake are found within the project area. By incorporating these required mitigation and monitoring construction practices through **Special Condition 6**, as well as requiring that the sensitive habitat and 50 foot buffer be maintained and fenced, held in a sensitive habitat open space easement, and all development rights in this area extinguished other than what is allowable pursuant to the LCP per **Special Condition 1-4**, the project as conditioned ensures the sensitive habitats and species of Pilarcitos Creek will be protected from development that could cause adverse impacts and that as conditioned, the project complies with sensitive habitat policies of the LCP.

In addition, **Special Condition 1** will allow the Executive Director to review the final project plans for compliance with the LCP with regard to the project's landscaping, water quality management, and lighting and **Special Condition 2** will allow the Executive Director to review the final parcel map for conformance with the LCP and requirements of this CDP prior to recordation with the City, including with respect to the location and extent of the sensitive

habitat open space easement. Finally, **Special Condition 6** requires submission of a construction plan with best management practices, and **Special Condition 7** requires submission of a storm water pollution prevention plan to minimize any adverse impacts to the adjacent sensitive habitats including Pilarcitos Creek. This will assure that the final project will protect and preserve the rare and endangered habitat and riparian habitat found in Pilarcitos Creek onsite and ensure maximum LCP compliance. The project as conditioned ensures the sensitive habitat, riparian corridor of Pilarcitos Creek, its riparian vegetation and 50 foot buffer will all be protected from impermissible development that could cause adverse impacts to the sensitive habitats. For all of the above reasons the Commission finds that as conditioned the project complies with habitat resource policies of the LCP.

F. HAZARDS

Applicable Policies

LUP Policy 4-6. *All new development located within areas subject to natural hazards from geologic, flood and fire conditions, shall be located so as to minimize risks to life and property.*

LUP Policy 4-7*. All new development shall ensure structural stability while not creating nor contributing to erosion or geologic instability or destruction of the site or surrounding area.*

LUP Policy 4-8. *All development, including construction, excavation and grading, except for flood control projects and agricultural uses shall be prohibited in the 100-year floodplain areas unless off-setting improvements in accordance with the HUD regulations are required. Development within flood plain areas shall not cause further stream channelization, alignment modifications or loss of riparian habitat values consistent with Section 30236 of the Coastal Act. Permitted development shall be consistent with all applicable resource protection policies contained in the Coastal Act and in the City Land Use Plan. … Development in the flood prone areas within the City shall include finished floor elevations two feet above the 100 year flood elevation. The heights of permitted development shall be compatible with the character of the surrounding area and not conflict with scenic and visual qualities.*

LUP Policy 4-9. *Soils reports prepared by a licensed civil engineer with expertise in soils, geology and reports prepared by a certified engineering geologist shall be required prior to acceptance for filing of development applications in the following areas: a) Zone F, subzones 2 and 3; b) all areas having fill material on the property; c) where there are known or suspected geologic, soils, or hydrologic problems in the immediate vicinity; d) In addition, soils and/or geology reports may be required whenever in the judgment of the Chief Building Official, or City Engineer such studies are needed. The geology and soils reports shall identify and evaluate any hazards present including faults under or near the site, and shall provide for mitigating measures to assure a stable foundation. These reports shall contain statements that the proposed project will not destabilize adjacent or nearby land or improvements or create a public hazards or nuisance…*

Analysis

The LCP requires that hazards be identified, avoided, and where unavoidable, mitigated, including threats from flooding, specifically flooding related to Pilarcitos Creek and potential dam failure at Pilarcitos Dam. According to the LCP, the Pilarcitos Creek channel's capacity to accommodate heavy flows between Main Street and Highway 1 is questionable, channel improvements may be required in the future to eliminate hazards to existing or new structures in this area, and potential hazards west of Highway 1 may be more effectively controlled by implementing controls on new development in this area. The LCP also states that a full assessment of potential upstream dam failure has not been completed, and that the zone for potential inundation from dam failure is wider than 200 feet along some portions of Pilarcitos Creek (and ranges in width from 200 to 600 feet). The LCP prohibits new development that causes or contributes to flooding, and requires applicants to demonstrate that the hazard no longer exists or will be eliminated or reduced by improvements consistent with LCP policies. Furthermore, in areas of flooding due to tsunamis or dam failure, the LCP prohibits new development except when the applicant demonstrates that the hazard no longer exists.

The proposed subdivision proposes new development in both the floodplain of Pilarcitos Creek as well as new development being proposed in the zone of potential inundation from dam failure. All of the proposed lots extend from north to south approximately 300 feet, starting from the edge of the stream bank. Pilarcitos Creek is approximately 30 to 45 feet wide, although this area fluctuates depending on weather and seasonal conditions. Thus, the lots are located in the LCP's 200-foot flood evaluation band, as well as in the LCP's 600-foot flood band associated with Pilarcitos Creek.

In order to adequately assess the flooding threats from both flooding of Pilarcitos Creek, as well as flooding from upstream provided the Pilarcitos Dam breaks and the confluence of the two scenarios, the Applicant worked with Commission Staff geologist, Dr. Mark Johnson and senior coastal engineer, Lesley Ewing. The Applicant submitted a flood hazards analysis illustrating that Pilarcitos Creek provides important flood water conveyance capacity despite heavy vegetation cover (see **Exhibit 5**). Projected 100-year Flood elevations from the creek along the project site range from 48.4 feet at the western end to 49.8 feet near the eastern boundary adjacent to Church Street. These flood elevations are well below the ground level and finished floor elevations for the proposed future residential structures and such flood elevations coincide with the 50 foot riparian buffer required for the project.

Dam break flooding would cause a rapid flood conveyance down Pilarcitos Creek to Highway 1. The Highway would then empty the creek of such dam flood inundation and act as a weir to convey flood waters from a dam break away from the creek. The flood elevations resulting from a dam break would be higher than the 100 year base flooding, at around the 58.6 to 58.8 feet range. The coincidence of dam break and 100 year flood would not create flood elevations much higher than that of a dam break itself. Again, Highway 1 will provide flood conveyance capacity and flood levels from the coincidence of 100 year flood levels and a Pilarcitos Dam break would create base flood elevations of 59.4-59.6 feet, levels that are also at or below the ground level and well below the planned finished floor elevations of the future residential structures.

The bridge crossings at Highway 1 and Main Street were analyzed in order to assess their obstruction of flood waters that could result in impacts to the development. Main Street Bridge is being considered for replacement with a clear span bridge which could improve the flood conveyance of the creek. Even if the bridge were to remain in its current location 600 feet upstream from the proposed development, there is ample space for flood flow velocities to adjust in order to prevent flood breakouts in the downtown and project areas. The site is also outside the mapped tsunami hazard risk zones.

Based on the hazards analyses provided by the Applicant, this development will not be impacted by 100 year flooding, a dam break at Pilarcitos Dam, or the concurrence of the two events. Therefore, this project avoids developing in dangerous flood zones. Further, in compliance with the LCP, the development will not cause or contribute to flooding to surrounding areas, and the Applicant has demonstrated that the flood hazards that exist onsite will be avoided by building finished floor elevations for future houses at or above ground levels that are above the base flood elevations that exist onsite.

G. GROWTH LIMITATIONS AND PRIORITY USE

Applicable Policies

> ***LUP Policy 9-4. Residential Growth Limitations.*** *a) The number of dwelling units which the City may authorize each calendar year may not exceed the number of units which would result in a growth of one percent (1%) in the City's population as of January 1 of that year. In determining the number of permissible units, the City shall use the most recent US Census figures for Half Moon Bay to calculate the average number of persons per household. b) The number of dwelling units may be increased by fifty percent (50%) for additional dwelling units in the Downtown Area. c) Subject to subsections b) and c) the City shall allocate permissible dwelling units among applications under the existing allocation system in the Municipal Code, to the extent feasible, and subsequent modifications by the City Council...f) the Downtown Area is the area designated as the Downtown Half Moon Bay Redevelopment Survey Area in the City Resolution No. C-91-98, November 3, 1998.*
>
> ***LUP Policy 10-4****. The City shall reserve public works capacity for land uses given priority by the plan, in order to assure that all available public works capacity is not consumed by other development and control the rate of new development permitted in the City to avoid overloading of public works and services.*

Analysis

LCP policy 9-4 limits the yearly growth in the downtown area to 1.5% of the population based on U.S. Census figures for that year. Further, Policy 10-4 requires that adequate public works infrastructure be reserved for uses designated priority under the plan (see LUP table 10.3 which designates marine-related, equestrian, hotel/motel, restaurant, local recreation, campsites and beaches as priority land uses).

The proposed project would add 10 additional developable lots and 16 dwelling units to the housing stock in Half Moon Bay. Measure D controls the creation of residential dwelling units, specific to the downtown area, at 1.5% of the population per year. The text of Measure D includes findings that explain the reasons why the growth limitation is necessary. These reasons include accelerated population growth and constraints on infrastructure and public services including road capacity, water, schools and open space. The City has experienced constraints on infrastructure and public services for some time, as described below. As new residential units are developed and the population increases, these constraints become increasingly significant. Water supply and sewer capacity in Half Moon Bay is limited. Water is supplied to the City by the Coastside County Water District. Future increases in water supply must come from the Crystal Springs reservoir, but use of this water supply is uncertain because the San Francisco Public Utilities Commission, which owns the reservoir, has the authority to limit the amount of water supplied to Half Moon Bay during times of drought.

Regarding sewer capacity, there are concerns with the adequacy of wastewater treatment capacity in Half Moon Bay due to potential sewage overflows, particularly during wet weather conditions. The City is a member agency of the Sewer Authority Mid-Coastside (SAM), which also includes the Granada Sanitary District and the Montara Water and Sanitary District. Each member agency owns and operates a sewage collection system that feeds into SAM's regional pipeline system and a secondary-treatment wastewater treatment plant in Half Moon Bay. Effluent from the plant is discharged to the Pacific Ocean via an ocean outfall and submerged diffuser extending approximately 40 feet deep and 1,900 feet from the shoreline west of Pilarcitos Creek. Therefore, any proposed new residential growth must be carefully considered given the limited public services available in the City and the growth allocations laid out in Measure D. To ensure that the future development will be served with adequate water service, **Special Condition 11** requires the applicant to submit a water supply plan approved by Coastside County Water District prior to issuance of the permit illustrating that all domestic water supplied to the project will be from the Coastide County Water District, including evidence from Coastside County Water District indicating that adequate domestic water supplies and fire flows are available for all the proposed uses.

For each dwelling unit proposed as a part of this project the Applicant would be required by the City to secure a residential dwelling unit allocation Measure D certificate prior to submitting an application for a coastal development permit for the construction of the dwelling. Therefore, the potential development of 10 additional residential lots and 16 dwelling units will remain within the allowable growth that LCP policy 9-4 contemplates.

The proposed project will allow residential development on two legally created parcels zoned Commercial Downtown (C-D). This residential use is an allowable use in the C-D zone with the provision of a Use Permit requiring findings that the use complies with the Half Moon Bay LCP and the development standards prescribed for the C-D zoning district, that the site is physically suitable for the development, that the use is not likely to cause substantial environmental damage, that adequate infrastructure has been provided to avoid serious public health problems and that the design will not conflict with any public access. The C-D zoning designation is intended to implement the provisions of the Downtown Specific Plan and to provide for visitor-serving commercial uses like restaurants and art galleries, certain public uses and other retail and

commercial uses. According to the Association of Bay Area Governments, commercial visitor-serving use is a very important part of the Half Moon Bay economy that is experiencing a boom, as demonstrated by the 500-plus units of proposed hotel development already approved, under construction or in various stages of the approval process.[18] Half Moon Bay supports 540 of the 900 rooms in lodge establishments in the Coastside region (excluding Pacifica) that are well distributed across the price scale, with three fifths of the rooms in the economy and midscale range and two fifths in the upscale and luxury range.[19] Today, Half Moon Bay enjoys a vibrant visitor-serving economy that generates a substantial revenue stream from Transit Occupancy Taxes. Granting a permit for residential use in this infill area will not adversely impact the ability of the City to continue to provide visitor-serving, commercial services to visitors to this coastal town. In addition, the proposed Park Area will include visitor-serving uses such as picnic tables and benches that will serve visitors to the Shoreline Retail adjacent to the project and anyone visiting the open space buffer along Pilarcitos Creek.

Because of the foregoing, the conversion of the existing 2 lots into 10 single-family, 2 multi-family and the additional commercial lot for visitor serving uses will comply with the growth allocation system established in Half Moon Bay as well as with the underlying zoning of the parcels. Therefore, the project is in compliance with the LCP and IP provisions regulating growth and permissible use.

H. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

Half Moon Bay, acting as lead agency, adopted a Mitigated Negative Declaration under CEQA for the proposed project. The City generally found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the project revisions or mitigation measures agreed to by the Applicant would reduce any potential impacts to a less than significant level.

The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. The Commission has reviewed the relevant coastal resource issues associated with the proposed project, and has identified appropriate and necessary modifications to address adverse impacts to such coastal resources. All public comments received to date have been addressed in the findings above. All above findings are incorporated herein in their entirety by reference.

[18] http://www.abag.ca.gov/planning/subregional/cspp/cspp5.html

[19] "Economic and Real Estate Conditions and Trends" prepared to inform the Half Moon Bay LCP Update, drafted April 2014.

The Commission finds that only as modified and conditioned by this permit will the proposed project avoid significant adverse effects on the environment within the meaning of CEQA. As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects that approval of the proposed project, as modified, would have on the environment within the meaning of CEQA. As modified, the proposed project will not result in any significant environmental effects for which feasible mitigation measures have not been employed, consistent with CEQA Section 21080.5(d)(2)(A).

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

1. California Coastal Commission, Substantial Issue Determination Staff Report A-2-HMB-12-011, June 29, 2012.
2. City of Half Moon Bay, 320 Church Street Project, Initial Study/Mitigated Negative Declaration, Prepared by PMC, March 2012.

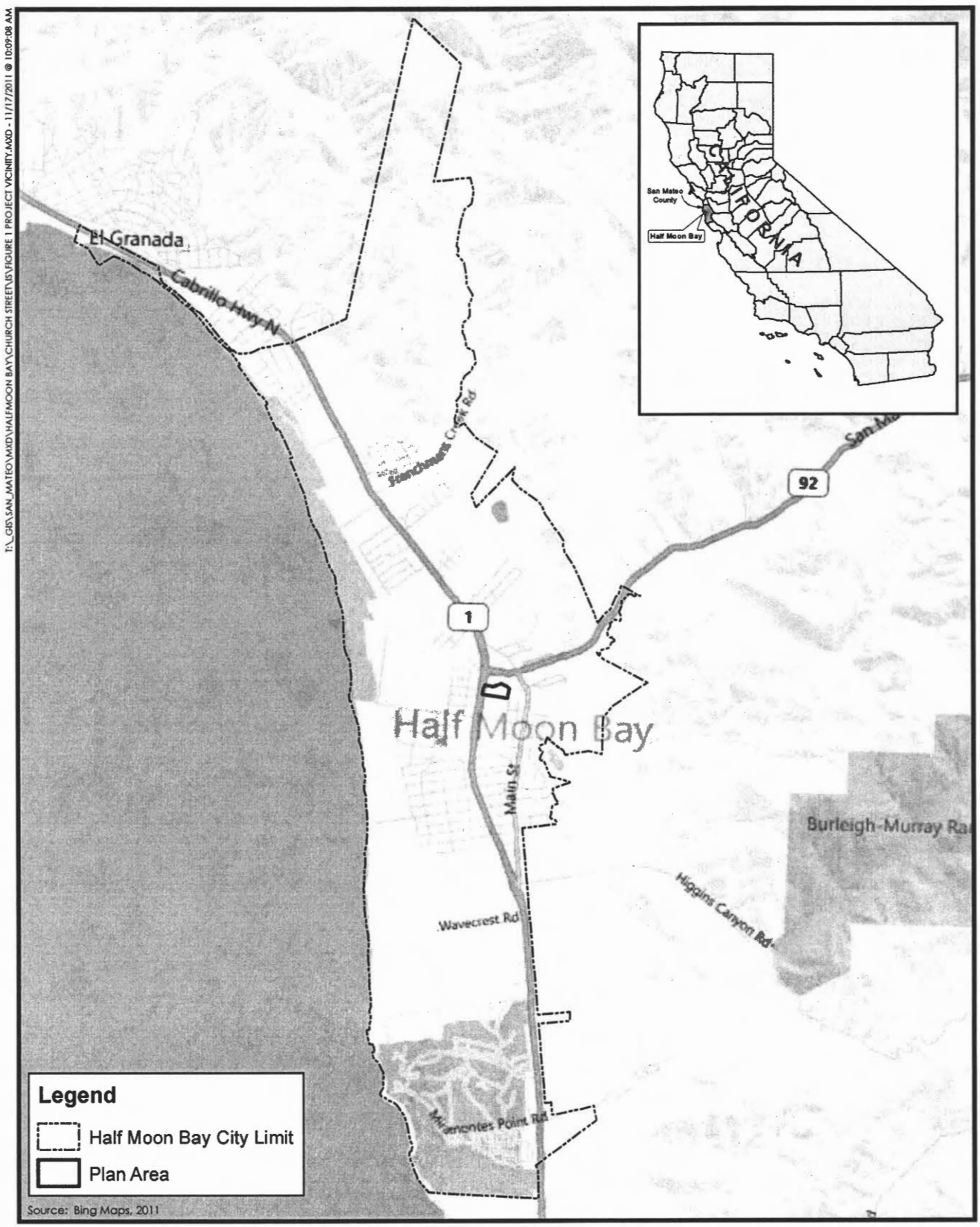

Figure 2.0-1
Project Vicinity

PMC®

A-2-HMB-12-011
Exhibit 1
1 of 3

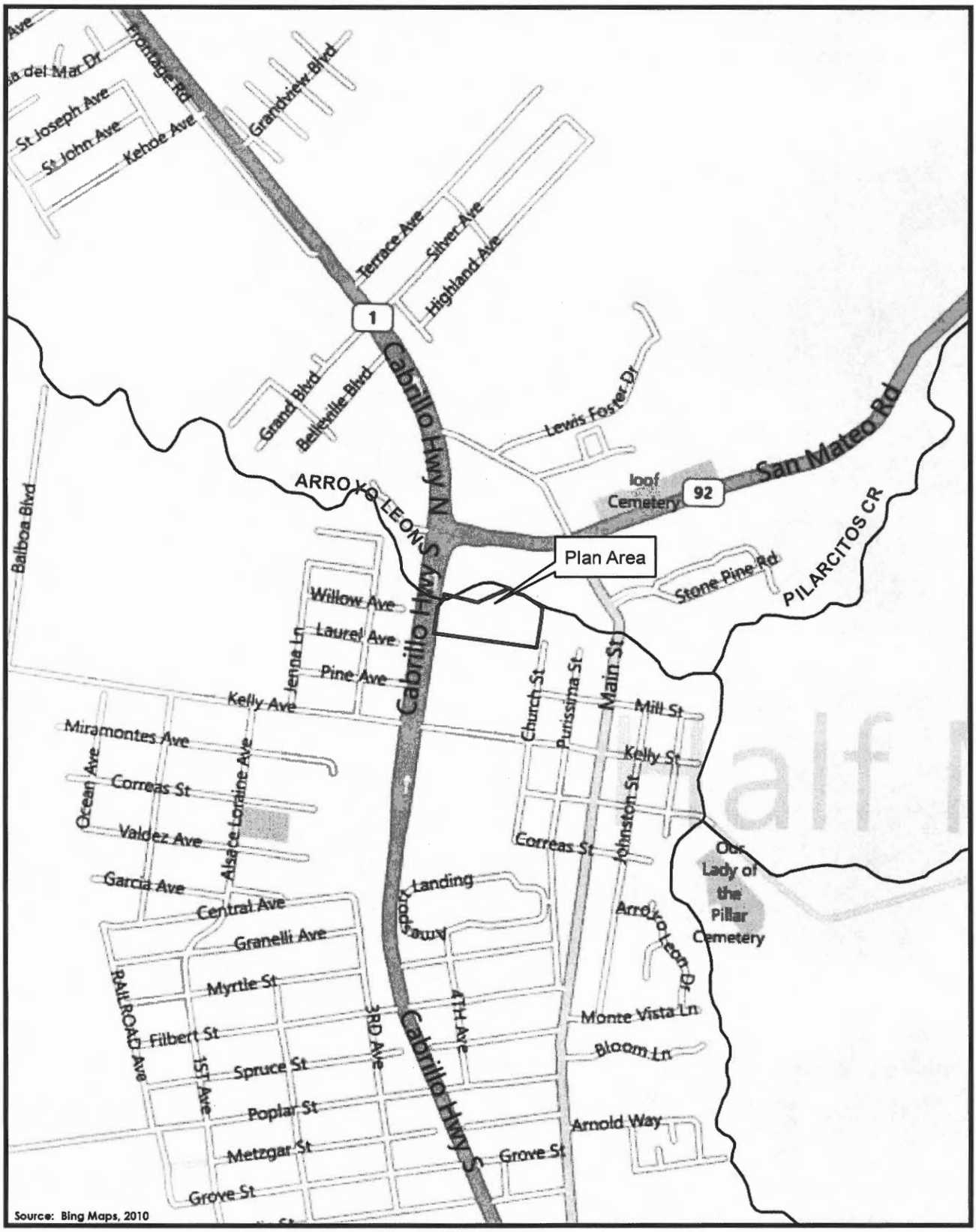

Figure 2.0-2
Project Location Map

PMC®

A-2-HMB-12-011
Exhibit 1
2 of 3

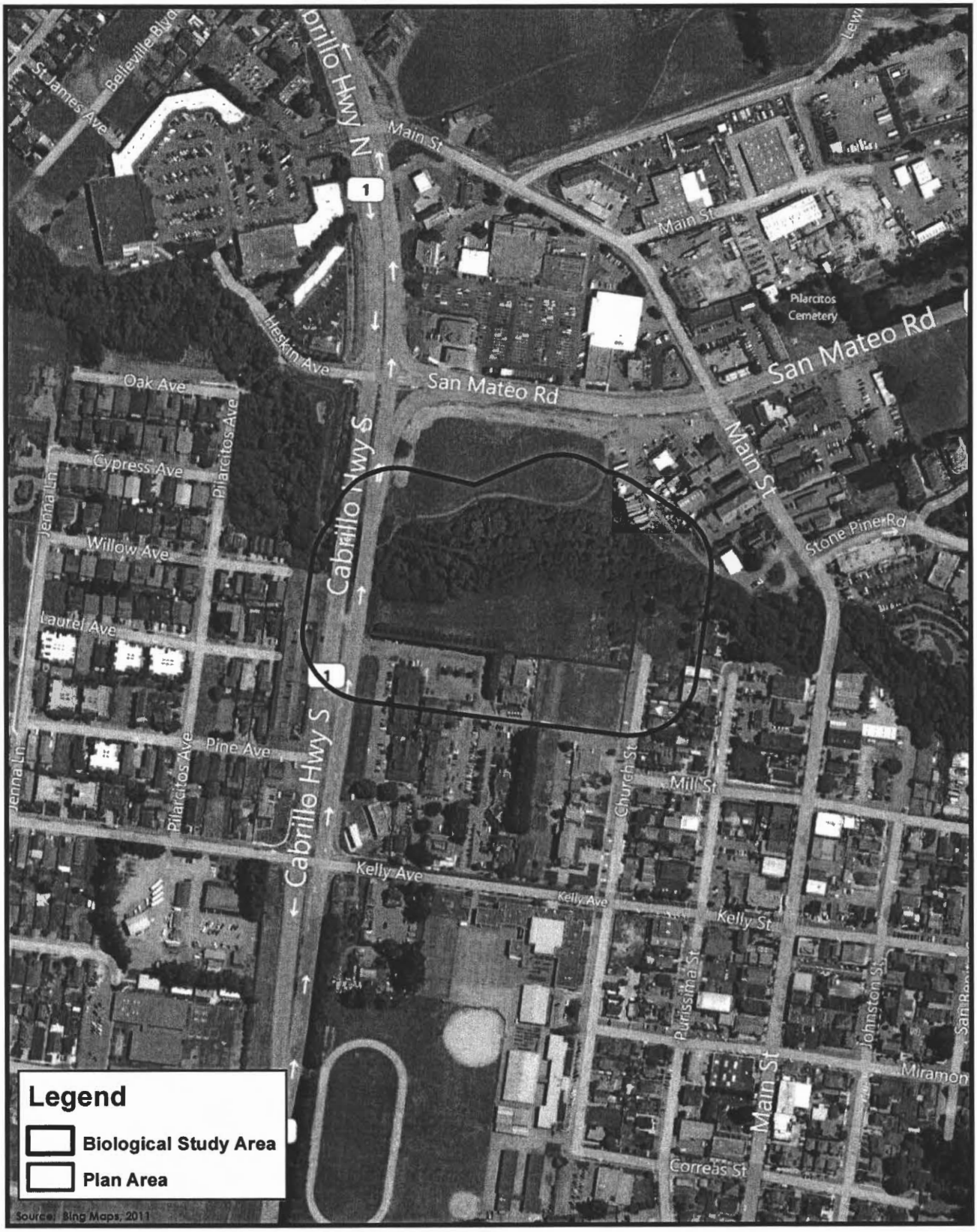

Figure 4.4-1
Biological Study Area

PMC®

A-2-HMB-12-011
Exhibit 1
3 of 3

LEGEND

- PROPOSED PROPERTY BOUNDARY
- PROPOSED EASEMENT LINE
- EXISTING 1' CONTOUR
- PROPOSED 1' CONTOUR

CREEK BANKS, APPROX.

CENTERLINE CREEK, APPROX.

APN 056-150-020

RIPARIAN AREA
AREA = 114,814 SF

TOTAL AREA OF PROPERTIES
AREA = 114,814 SF
= 5.51 ACRES

TOTAL AREA = 65,568 SF

LOT LINE ADJUSTMENT

APN 056-150-010
(REMAINDER CD ZONING)

RIPARIAN BUFFER
AREA = 40,360 SF

HIGHWAY 1

PROPOSED PARK AREA WITH PICNIC BENCHES

DEVELOPABLE AREA = 22,154 SF

50' RIPARIAN BUFFER

55'

FIRE ENGINE TURNAROUND

PARKING LOT

4' CYPRESS
3' CYPRESS
CURB

20.0
PROPOSED ACCESS EASEMENT

20-FOOT EASEMENT

SSMH
RIM ~59'
INV ~54'

BUILDING

NAIL

IP
57.62'

IP
58.62

6' CYPRESS

20 0 20 40
1" = 30'

TOTAL AREA = 16,297 SF
TOTAL AREA = 17,371 SF
TOTAL AREA = 17,860 SF
TOTAL AREA = 16,095 SF
TOTAL AREA = 14,977 SF
TOTAL AREA = 14,047 SF
TOTAL AREA = 13,344 SF
TOTAL AREA = 14,744 SF
TOTAL AREA = 16,847 SF
TOTAL AREA = 16,638 SF

DEVELOPABLE AREA = 4869 SF
DEVELOPABLE AREA = 5406 SF
DEVELOPABLE AREA = 6029 SF
DEVELOPABLE AREA = 5102 SF
DEVELOPABLE AREA = 4644 SF
DEVELOPABLE AREA = 4542 SF
DEVELOPABLE AREA = 4737 SF
DEVELOPABLE AREA = 5991 SF
DEVELOPABLE AREA = 6964 SF
DEVELOPABLE AREA = 6271 SF

LOT 1 R-1
LOT 2 R-1
LOT 3 R-1
LOT 4 R-1
LOT 5 R-1
LOT 6 R-1
LOT 7 R-1
LOT 8 R-1
LOT 9 R-1
LOT 10 R-1
LOT 11 R-3
LOT 12 R-3

HUB
56.43'

TOTAL AREA = 8187 SF
TOTAL AREA = 8128 SF

R=105.46'
R=100'

PROPOSED PRIVATE ROAD

ANCHOR
PP
IP
PP

NAIL
60.01'
SSMH (E)
RIM 60.90'
INV 56.55'

NAIL
61.08'

CHURCH STREET

HYDRANT (E)

60'

REGISTERED PROFESSIONAL ENGINEER
CHARLES M. KISSICK
No. 62264
9-30-13
EXPIRES
CIVIL
STATE OF CALIFORNIA

Sigma Prime Geosciences, Inc.
SIGMA PRIME GEOSCIENCES, INC.
111 VASSAR STREET
HALF MOON BAY, CA 94019
(650) 726-3590
FAX: 726-3593

DATE: 1-28-11	CHECKED BY: AZG	REV. DATE: 3-4-11
DRAWN BY: CMK		REV. DATE: 4-26-11
		REV. DATE: 9-28-11
		REV. DATE: 4-23-12
		REV. DATE: 9-24-12

PROPERTY MAP

CHURCH STREET CONSTRUCTION

SHEET
C — 4

3.2.2 Streams

A stream is a natural watercourse as designated by a solid line or dash and three dots symbol shown on the USGS maps most recently published, or any well-defined channel with distinguishable bed and bank that shows evidence of having contained flowing water as indicated by scour or deposit of rock, sand, gravel, soil, or debris (CCC 1981). Prior to visiting the site, WRA reviewed the most recent USGS map for the Study Area (USGS 1991).

3.2.3 Riparian Corridors

The Half Moon Bay LCP defines riparian corridors as the "limit of vegetation," which is "a line determined by the association of plant and animal species normally found near streams lakes and other bodies of freshwater." Plant species included in this definition are red alder (*Alnus rubra*), big leaf maple (*Acer macrophyllum*), cattail (*Typha* sp.), arroyo willow (*Salix lasiolepis*), horsetail (*Equisetum* sp.), dogwood (*Cornus* sp.), black cottonwood *(Populus trichocarpa*), and box elder (*Acer negundo*). To be considered a riparian corridor, at least 50 percent cover of some combination of the plants listed above must be present. During the November 27, 2012 site visit, WRA made a rapid assessment of the dominant vegetation along Pilarcitos Creek within the Study Area.

3.2.4 Open Coastal Waters

Open coastal waters refer to the open ocean overlying the continental shelf and its associated coastline. Salinities exceed 30 parts per thousand with little or no dilution except opposite mouths of estuaries. The Study Area is located approximately 0.75 mile inland from the Pacific Ocean and does not contain coastal waters.

4.0 STUDY AREA DESCRIPTION

The Study Area occurs in a ruderal agricultural field bordered by Highway 1 to the west, residential and commercial development to the south and east, and the riparian corridor along Pilarcitos Creek to the north. The northern portion of the Study Area contains a segment of Pilarcitos Creek and the adjacent riparian corridor. Based on aerial imagery, it appears that the site is mowed annually and has been disced historically. The Study Area was mowed at the time of the site visit.). The Study Area is located at an elevation of between 50 and 62 feet, approximately 0.75 mile inland from the Pacific Ocean. The site slopes to the north, dropping from a high of approximately 60 feet above sea level at the southeastern corner of the site to a low of approximately 50 feet above sea level at the edge of the riparian corridor along Pilarcitos Creek. The site continues to drop in elevation through the riparian corridor and down to Pilarcitos Creek. The vegetation, soils, and hydrology of the Study Area are described in further detail in the following sections.

Historical conditions at the site were documented in a cultural resources evaluation prepared by Archaeological Resource Service (Evans 2011). Based on this evaluation, it was determined that the Study Area formerly contained structures at both the western and southeastern portions of the site. United States Geological Survey maps from the 1940s reviewed by Evans (2011) show a single structure at the western end of the Study Area; this structure was removed circa 1961, presumably with the construction of Highway 1. Historic maps from the early 1900s reviewed by Evans (2011) show a house and two outbuildings at the southeastern corner of the Study Area. At least one of these structures was shown as present in USGS maps from the

1970s (Evans 2011). Based on Google Earth imagery reviewed by WRA, it appears that, between 2009 and 2010, a cul-de-sac was installed at the end of Church Street, adjacent to the structure at the southeastern corner of the Study Area. It appears that the structure at the southeastern corner of the site was removed sometime between September 2010 and February 2011, following construction of the cul-de-sac. In aerial imagery from May 2011, it appears that this portion of the site received non-native soil material which was graded level.

During the site visit conducted by WRA, evidence of these structures and their historical use was observed as rubble and lumber debris mixed into the soil profile. Large amounts of this debris were observed in the eastern portion of the site where the former residence and outbuildings were located. Smaller amounts of debris were observed in soils at the western end of the site. Similarly, WRA observed a large area of non-native, sandy material spread covering a portion of the southeastern corner of the Study Area, congruent with observations from the aerial imagery. These historic conditions and recent disturbances were incorporated into our assessment of the Study Area.

Aerial imagery used for the assessment of historical conditions at the site are provided as Appendix E.

4.1 Vegetation

The Study Area contains two dominant vegetation types: Arroyo willow thicket (*sensu* Sawyer et al. 2009) along Pilarcitos Creek in the northern half of the Study Area and ruderal grassland along the southern half of the Study Area. Photographs of these vegetation types are provided in Appendix D. The Arroyo willow thicket is dominated by Arroyo willow (*Salix lasiolepis*; FACW) and contains Himalayan blackberry (*Rubus armeniacus* [*R. discolor*]; FACU) and Cape ivy (*Delairea odorata* [*Senecio mikanioides*]; NL) as subdominants. The ruderal grassland was dominated by soft brome (*Bromus hordeaceus*[1]; FACU), Italian rye grass (*Festuca perennis* [*Lolium multiflorum*, *L. perenne*]; FAC), and sourgrass (*Oxalis pes-caprae*; NL), with several large patches of Himalayan blackberry which had been mowed at the time of the site visit. Most species observed at the site were non-native, invasive species common to disturbed areas. Some species observed, such as wild radish (*Raphanus sativa*; NL) and brassica greens (*Brassica* sp.; NL), are common to ruderal agricultural fields, and suggest that the site was once under agricultural production. This is supported by the dense cover of sourgrass at the site—a species which reproduces vegetatively through small bulbs on rhizomes and root tips and is easily spread through tilling and other soil disturbance.

Although the site had been recently mowed at the time of the site visits, we were able to identify most plants to the level necessary to determine wetland indicator status, for most plants this was the species level. However, for some plants such as the passion flower (*Passiflora* sp.; NL) observed along the fence in the southeastern portion of the Study Area, it was sufficient to identify the plant to genus.

Aerial imagery from 2009, prior to the installation of the cul-de-sac at the end of Church Street, shows a patch of shrubs or small trees separated from the adjacent riparian vegetation (Appendix E). This vegetation appears to have been removed in conjunction with the

[1] The phenological state in which this species was observed during the site visit precluded a positive identification, and as such, the identification of this species is tentative.

construction of the cul-de-sac. Based on its isolation from the adjacent riparian vegetation—which forms a dense, contiguous canopy along the riparian corridor—it is assumed that this vegetation was not associated with the riparian corridor.

4.2 Soils

The Soil Survey of the San Mateo Area (USDA 1961) is not complete for the portion of the survey area containing the Study Area. However, soils located in similar topographic positions west of Highway 1 are mapped as *Gullied Land (alluvial soil material)* and *Farallone coarse sandy loam* with varying slopes and degrees of erosion within the riparian corridor and as *Denison loam, sloping* and *Denison clay loam, nearly level* immediately adjacent to and above the riparian corridor. Descriptions of these soil series and map units are provided as Appendix F. Soils mapped within the vicinity of the Study Area are shown in Figure 2. Based on this mapping and our observations at the site, we made the following assessment of soils in the Study Area:

- Soils within the riparian corridor along Pilarcitos Creek were not investigated during the delineation; however, it is assumed that they belong to the *Farallone Series* which is mapped in the riparian corridor in the vicinity of the Study Area.

- Soils mapped adjacent to the riparian corridor west of the site are mapped as *Denison loam, sloping* (Figure 2); this map unit is not on the list of hydric soils in San Mateo County. Soils mapped somewhat further from the riparian corridor are mapped as *Denison clay loam, nearly level*; this map unit is on the list of hydric soils in San Mateo County. Based on the color and texture of the native soils in the Study Area (see soil profile descriptions in Appendix B and Appendix C) and on the slope and topographic position of the site, the native soils in the Study Area best fit the description of the *Denison loam, sloping* map unit (see Appendix F for the Official Soil Series Description and the soil map unit descriptions).

Native soils at the site generally lacked redoximorphic features or other indicators of hydric soil conditions. Native soils at the site were generally black (10YR 2/1), with textures of loam to clay loam. Peds were generally friable and granular. These features were consistent through the soil profile to a depth of greater than 22 inches. No evidence of depleted or gleyed matrices were observed within the upper 22 inches of soil. These soil features, combined with the slope of the site, are consistent with the description for the *Denison loam, sloping* map unit. As noted above, this map unit is not on the list of hydric soils in San Mateo County.

The dark color of these soils can make it difficult to identify redoximorphic features, and allowing the soil to dry (and thereby lighten in color) can help reveal any such features. In addition to observations made at the site using soil at field-moisture, soil samples from upper, middle, and lower positions in sample pits were collected and brought into the laboratory to dry. Observations of these soil samples were made shortly after bringing the samples into the lab and again several days later when the samples had fully dried, and no redoximorphic features were observed. Based on the lack of observed redoximorphic features, including the lack of depleted or gleyed matrices within the approximately top 2 feet of soil, and the fact that the *Denison loam, sloping* map unit is not listed as hydric in San Mateo County, we determined that soils within the ruderal grassland portion of the Study Area are not hydric.

The substrate within the eastern portion of the site adjacent to the cul-de-sac contained rubble and lumber debris. It is assumed that this debris is associated with the most recent use of this portion of the site for a residence and outbuildings. Although soils in this area contained debris, they appeared to match the native soils found elsewhere at the site in terms of color and texture.

An area of imported sand was observed in the southeastern portion of the Study Area. Based on the aerial imagery reviewed (Appendix E), it appears that the sand was placed at the site between September 2010 and May 2011, in conjunction with the construction of the cul-de-sac and following demolition of the residence and outbuildings. The material was deposited over an approximately 30-foot by 60-foot area and ranged from approximately 20 inches deep at the center (Sample Point 6) and two to four inches deep at the edges of the pile (Sample Point 12). The sand contained redoximorphic features consisting of concentrations in the soil matrix ranging from two to five percent. One sample pit (Sample Point 11) dug in this material also contained depletions within the soil matrix at approximately 35 percent, starting at 12 inches below the surface of the sand. Soil beneath the sand matched the adjacent native soils in color and texture and did not contain indicators of hydric soil conditions. The native soil beneath the sand was compacted, likely due to the former use of this area for a residence as well as the heavy machinery used to remove the residence and to deposit and spread the sand. The redoximorphic features observed in the sand may be attributable to either the original source of the sand (i.e., relict features) as well as compaction of the underlying substrate which may have caused water to be retained in the sand.

4.3 Hydrology

Pilarcitos Creek runs through the northern portion of the Study Area. Within the vicinity of the Study Area, Pilarcitos Creek is a perennial stream containing dense riparian vegetation. The hydrology of ruderal grassland portion of the Study Area appears to be primarily driven by direct precipitation and sheet flow from the surrounding developed areas. The eastern portion of the Study Area contains a small rocked stormwater discharge channel which appears to drain high seasonal flows from the stormwater system directly into the riparian corridor along Pilarcitos Creek. It is assumed that this drainage system was installed in conjunction with the construction of the cul-de-sac.

The site visits conducted on November 27 and December 17, 2012 occurred during a period of normal rainfall for this portion of the year. The November 27 site visit occurred on a dry day preceded by a week or more with no significant rainfall. The December 17 site visit occurred on a wet, rainy day. Although Sample Points 6 to 12 were assessed during or immediately following the heavy rainfall that occurred on the morning of December 17, no indicators of wetland hydrology were observed at any of the sample points assessed that day, despite having allowed each soil pit to remain open for 15 to 20 minutes.

Figure 2. Soils in Vicinity of Study Area

N
W E
S

0 150 300 600
Feet

320 Church St. Delineation
Half Moon Bay, California

wra
ENVIRONMENTAL CONSULTANTS

Date: January 2013
Map By: Sundara Pillegowda
Basemap: ESRI World Topo

5.0 RESULTS

5.1 Discussion of Sample Point Data

A total of 12 sample points were assessed during the site visits. Sample Points 1 through 5 were assessed on November 27, 2012 to provide a general overview of the Study Area conditions. Sample Points 6-12 were assessed on December 17, 2012 to better determine the conditions in the area where sand was imported and to include areas beneath and adjacent to the sand as well as other portions of the site requiring further investigation. The location of these sample points is shown in Appendix A. Sample Points 1 through 3, 6, and 9 through 12 occurred in the eastern portion of the field. Sample Points 4, 7, and 8 occurred in the middle of the field. Sample Point 5 occurred at the western end of the field. A discussion of the observations made at each sample point is provided below.

Sample Point 1

This sample point was near the cul-de-sac , formerly the location of a residential structure and several outbuildings. Vegetation at this sample point was dominated by Bermuda grass (*Cynodon dactylon*; FACU), sourgrass, and wild radish—species common to weedy, disturbed sites. The composition of the vegetation at this sample point did not meet the criteria necessary to be considered hydrophytic. Soils at this sample point contained large amounts of rubble and lumber debris, consistent with the historical use of this area for outbuildings and other structures. Soils were black (10YR 2/1) to a depth of greater than 16 inches and did not contain indicators of hydric soil conditions. No indicators of wetland hydrology were observed at this sample point.

Based on the lack of sufficient indicators for hydrophytic vegetation, hydric soils, and wetland hydrology, it was determined that this sample point did not occur in a wetland.

Sample Point 2

This sample point occurred at the base of the slope below the graded area containing Sample Point 1. Vegetation at this sample point was dominated by Himalayan blackberry, sour grass, and what we have tentatively identified as soft brome. These species are common to disturbed, weedy areas. The composition of the vegetation at this sample point did not meet the criteria necessary to be considered hydrophytic. Soils were black (10YR 2/1) to a depth of greater than 16 inches and did not contain indicators of hydric soil conditions. Soils at this sample point contained large amounts of rubble and lumber debris, consistent with the historical use of this area for outbuildings and other structures. No indicators of wetland hydrology were observed at this sample point.

Based on the lack of sufficient indicators for hydrophytic vegetation, hydric soils, and wetland hydrology, it was determined that this sample point did not occur in a wetland.

Sample Point 3

This sample point occurred near the middle of the ruderal grassland portion of the Study Area. Vegetation at this sample point was dominated by sour grass and what we have tentatively identified as soft brome. The composition of the vegetation at this sample point did not meet the criteria necessary to be considered hydrophytic. Soils were black (10YR 2/1) to a depth of greater than 16 inches and did not contain indicators of hydric soil conditions. Soils at this

sample point did not contain evidence of rubble or lumber debris as was found at Sample Points 1 and 2. No indicators of wetland hydrology were observed at this sample point.

Based on the lack of sufficient indicators for hydrophytic vegetation, hydric soils, and wetland hydrology, it was determined that this sample point did not occur in a wetland.

Sample Point 4

This sample point occurred near the western end of the ruderal grassland portion of the Study Area. Vegetation at this sample point was dominated by sour grass, Himalayan blackberry, Italian rye grass, and what we have tentatively identified as soft brome. The composition of the vegetation at this sample point did not meet the criteria necessary to be considered hydrophytic. Soils were black (10YR 2/1) to a depth of greater than 16 inches and did not contain indicators of hydric soil conditions. Soils at this sample point did not contain evidence of fill. No indicators of wetland hydrology were observed at this sample point.

Based on the lack of sufficient indicators for hydrophytic vegetation, hydric soils, and wetland hydrology, it was determined that this sample point did not occur in a wetland.

Sample Point 5

This sample point occurred at the far western end of the ruderal grassland portion of the Study Area. Vegetation at this sample point was dominated by sour grass, wild radish, Italian rye grass, and what we have tentatively identified as soft brome. The composition of the vegetation at this sample point did not meet the criteria necessary to be considered hydrophytic. Soils were black (10YR 2/1) to a depth of greater than 16 inches and did not contain indicators of hydric soil conditions. Soils at this sample point did not contain evidence of fill. No indicators of wetland hydrology were observed at this sample point.

Based on the lack of sufficient indicators for hydrophytic vegetation, hydric soils, and wetland hydrology, it was determined that this sample point did not occur in a wetland.

Sample Point 6

This sample point occurred in the center of the imported sand located in the southeastern corner of the site where the residential structure was recently removed. Vegetation at this sample point was dominated by tall fescue (*Festuca arundinacea*; FACU). The composition of the vegetation at this sample point did not meet the criteria necessary to be considered hydrophytic. Soils at this sample point consisted of approximately 12 inches of imported sand with a matrix of 50 percent 10YR 5/3, 48 percent 10YR 4/6, and two percent of redoximorphic concentrations (2.5YR 4/8), followed by 8 inches of imported sand with a matrix of 70 percent 2.5Y 4/2 and 30 percent of redoximorphic depletions (2.5Y 6/3). Although these layers contained redoximorphic features, they did not satisfy the criteria necessary to be considered hydric; specifically, they did not meet the requirements for *Indicator S5: Sandy Redox* which requires a matrix with 60 percent or more chroma of 2 or less with 2 percent or more distinct or prominent redoximorphic concentrations. Soils below 19 inches were black (10YR 2/1) and did not contain indicators of hydric soil conditions, congruent with the native soils observed in other portions of the site. No indicators of wetland hydrology were observed, despite allowing the soil pit to remain open for 15 to 20 minutes.

Given that the sand was placed on the site circa 2011, it does not represent normal circumstances for the site. In accordance with the Corps Manual for atypical conditions, , we based our hydric soil assessment on the native soil found below the sandy material at data points adjacent to the main concentration of imported sand (Sample Points 9, 10, 11, and 12), . Based on this assessment, the normal soil conditions at this sample point were determined to be non-hydric.

Similarly, it is assumed that vegetation growing on the sandy material does not represent the vegetation that would be present in this area under normal circumstances given the major textural differences between the two soils. The vegetation that would have occurred at this sample point under normal circumstances is likely to have resembled that of Sample Point 3 which occurs on the native soil adjacent to the area containing the sandy material. The vegetation at Sample Point 3 was dominated by sour grass and what we have tentatively identified as soft brome, both of which have a rating of facultative upland or drier.

Based on the lack of sufficient indicators for hydrophytic vegetation, hydric soils, and wetland hydrology, it was determined that this sample point did not occur in a wetland. This determination is supported by the lack of a visible wetland signature in this area prior to the placement of the sandy material, as seen in the aerial images provided in Appendix E.

Sample Point 7

This sample point occurred adjacent to the riparian canopy, downslope from Sample Point 4. Vegetation at this sample point was dominated by sour grass, Italian rye grass, and velvet grass (*Holcus lanatus*; FAC)—each an invasive weed (Cal-IPC 2012) common to disturbed sites. Both Italian rye grass and velvet grass are weedy facultative species common to both wetlands and uplands. Although the composition of the vegetation at this sample point meets the technical criteria necessary to be considered hydrophytic, we believe that the vegetation composition more accurately reflects the disturbed, weedy nature of the site rather than reflecting wetland conditions. This is further supported by the presence of sour grass as a dominant, as this species is presumed to be an upland species based on its omission from the National Wetland Plant List (Lichvar 2012). Soils at this sample point were black (10YR 2/1) to a depth of 12 inches, followed by a layer from 12 to 18+ inches containing 55 percent very dark greyish brown (10YR 3/2) soil with a clay loam texture, 43 percent black (10YR 2/1) soil, also with a clay loam texture, and 2 percent redoximorphic concentrations within the matrix. These soil characteristics did not meet the criteria necessary for assuming hydric conditions. In addition, no indicators of wetland hydrology were observed, despite allowing the soil pit to remain open for 15 to 20 minutes.

Based on the lack of sufficient indicators for hydric soils and wetland hydrology and on the weedy nature of the plants observed, it was determined that the vegetation at this sample point is not indicative of wetland conditions. Given the lack of hydric soils, the lack of wetland hydrology, and the lack of vegetation indicative of wetland conditions, it was determined that this sample point did not occur in a wetland. This determination is supported by the lack of a visible wetland signature in this area as seen in the aerial images provided in Appendix E.

Sample Point 8

This sample point occurred upslope of Sample Point 7. Vegetation at this sample point was dominated by sour grass. The composition of the vegetation at this sample point did not meet the criteria necessary to be considered hydrophytic. Soils were black (10YR 2/1) to a depth of

greater than 20 inches and did not contain indicators of hydric soil conditions. No indicators of wetland hydrology were observed, despite allowing the soil pit to remain open for 15 to 20 minutes.

Based on the lack of sufficient indicators for hydrophytic vegetation, hydric soils, and wetland hydrology, it was determined that this sample point did not occur in a wetland.

Sample Point 9

This sample point occurred on the sandy material located in the southeastern portion of the Study Area. Vegetation at this sample point was dominated by Italian rye grass and tall fescue. The composition of the vegetation at this sample point did not meet the criteria necessary to be considered hydrophytic. Soils at this sample point contained approximately 10 inches of sandy material placed over the native soil. The sandy material contained redoximorphic concentrations at five percent of the matrix and occurring within the top 6 inches of soil, meeting the Sandy Redox (S5) criteria for hydric soils. Soils below the sandy material were black (10YR 2/1) to a depth of greater than 22 inches and did not contain indicators of hydric soil conditions. Soils below the sandy material matched soils from sample points assessed elsewhere in the Study Area which were determined to be non-hydric. No indicators of wetland hydrology were observed, despite allowing the soil pit to remain open for 15 to 20 minutes.

Given that the sand was placed on the site circa 2011, it does not represent normal circumstances for the site. As such, we based our hydric soil assessment on the native soil found below the sandy material. Given a lack of hydric soil indicators in the native soil, we considered the normal soil conditions at this sample point to be non-hydric. Similarly, it is assumed that vegetation growing on the material does not represent the vegetation that would be present in this area under normal circumstances given the major textural differences between the two soils. The vegetation that would have occurred at this sample point under normal circumstances is likely to have resembled that of Sample Point 3 which occurs on the native soil adjacent to the area containing the sandy material. The vegetation at Sample Point 3 was dominated by sour grass and what we have tentatively identified as soft brome, both of which have a rating of facultative upland or drier.

Based on the lack of sufficient indicators for hydrophytic vegetation (under both present and normal circumstances), hydric soils (under normal circumstances), and wetland hydrology (under both present and normal circumstances), it was determined that this sample point did not occur in a wetland. This determination is supported by the lack of a visible wetland signature in this area as seen in the aerial images provided in Appendix E.

Sample Point 10

This sample point occurred adjacent to Sample Point 9, at the edge of the sandy material near the southeastern portion of the site. This sample point also occurred adjacent to Sample Point 3. Vegetation at this sample point was dominated by sour grass, Italian rye grass, and what we have tentatively identified as soft brome. The composition of the vegetation at this sample point did not meet the criteria necessary to be considered hydrophytic. Soils contained approximately 2 inches of the sandy material over the native soil material. The native soil was black (10YR 2/1) to a depth of greater than 20 inches and did not contain indicators of hydric soil conditions. No indicators of wetland hydrology were observed, despite allowing the soil pit to remain open for 15 to 20 minutes.

Given that the sand was placed on the site circa 2011, it does not represent normal circumstances for the site. As such, we based our hydric soil assessment on the native soil found below the sandy material. Given a lack of hydric soil indicators in the native soil, we considered the normal soil conditions at this sample point to be non-hydric. Similarly, it is assumed that vegetation growing on the material does not represent the vegetation that would be present in this area under normal circumstances given the major textural differences between the two soils. The vegetation that would have occurred at this sample point under normal circumstances is likely to have resembled that of Sample Point 3 which occurs on the native soil adjacent to the area containing the sandy material. The vegetation at Sample Point 3 was dominated by sour grass and what we have tentatively identified as soft brome, both of which have a rating of facultative upland or drier.

Based on the lack of sufficient indicators for hydrophytic vegetation (under both present and normal circumstances), hydric soils (under both present and normal circumstances), and wetland hydrology (under both present and normal circumstances), it was determined that this sample point did not occur in a wetland. This determination is supported by the lack of a visible wetland signature in this area as seen in the aerial images provided in Appendix E.

Sample Point 11

This sample point occurred adjacent to Sample Point 6, at the edge of the sandy material near the southeastern portion of the site. This sample point also occurred adjacent to Sample Point 12. Vegetation at this sample point was dominated by tall fescue and Italian rye grass. The composition of the vegetation at this sample point did not meet the criteria necessary to be considered hydrophytic. Soils contained approximately 8 inches of sandy material placed over the native soils. The sandy material contained redoximorphic concentrations at five percent of the matrix starting at 7 inches below the soil surface. The native soils were black (10YR 2/1) to a depth of greater than 20 inches below the soil surface and did not contain indicators of hydric soil conditions. No indicators of wetland hydrology were observed, despite allowing the soil pit to remain open for 15 to 20 minutes.

Given that the sand was placed on the site circa 2011, it does not represent normal circumstances for the site. As such, we based our hydric soil assessment on the native soil found below the sandy material. Given a lack of hydric soil indicators in the native soil, we considered the normal soil conditions at this sample point to be non-hydric. Similarly, it is assumed that vegetation growing on the material does not represent the vegetation that would be present in this area under normal circumstances given the major textural differences between the two soils. The vegetation that would have occurred at this sample point under normal circumstances is likely to have resembled that of Sample Point 3 which occurs on native soil material adjacent to the sandy material. The vegetation at Sample Point 3 was dominated by sour grass and what we have tentatively identified as soft brome, both of which have a rating of facultative upland or drier.

Based on the lack of sufficient indicators for hydrophytic vegetation (under both present and normal circumstances), hydric soils (under normal circumstances), and wetland hydrology (under both present and normal circumstances), it was determined that this sample point did not occur in a wetland. This determination is supported by the lack of a visible wetland signature in this area as seen in the aerial images provided in Appendix E.

Sample Point 12

This sample point occurred adjacent to Sample Point 11. Vegetation at this sample point was dominated by sour grass and Italian rye grass. The composition of the vegetation at this sample point did not meet the criteria necessary to be considered hydrophytic. The sample point contained approximately 4 inches of sandy material over the native soil. The native soil below the sandy material was black (10YR 2/1) to a depth of 14 inches below the soil surface and did not contain indicators of hydric soil conditions. Below 14 inches, the native soil contained a matrix with 60 percent very dark grayish brown (10YR 3/2) soil and 40 percent black (10YR 2/1) soil with no indicators of hydric soil conditions. No indicators of wetland hydrology were observed, despite allowing the soil pit to remain open for 15 to 20 minutes.

Given that the sand was placed on the site circa 2011, it does not represent normal circumstances for the site. As such, we based our hydric soil assessment on the native soil found below the sandy material. Given a lack of hydric soil indicators in the native soil, we considered the normal soil conditions at this sample point to be non-hydric. Although some sandy material was present at this sample point, the composition of vegetation at this sample point resembled that of the surrounding areas containing native soil without the sandy material. As such, the vegetation at this sample point was determined to be relatively similar to what would have occurred at this sample point under normal circumstances.

Based on the lack of sufficient indicators for hydrophytic vegetation (under both present and normal circumstances), hydric soils (under both present and normal circumstances), and wetland hydrology (under both present and normal circumstances), it was determined that this sample point did not occur in a wetland. This determination is supported by the lack of a visible wetland signature in this area as seen in the aerial images provided in Appendix E.

5.2 Riparian Corridor Assessment

Within the Study Area, vegetation along Pilarcitos Creek is dominated by arroyo willow which forms a relatively closed canopy. The greater than 50 percent cover of this species in association with the riparian setting qualifies this area as a riparian corridor subject to jurisdiction by the CCC under the Half Moon Bay LCP. In addition, a minimum 50-foot buffer extending from the edge of the riparian canopy is required by the Half Moon Bay LCP.

5.3 Summary of Jurisdictional Features

Federal and State non-wetland “waters” and streams subject to jurisdiction under the HMB LCP within the Study Area are limited to approximately 862 linear feet of Pilarcitos Creek. No wetlands meeting either the three- or one-parameter definitions used by the Corps/RWQCB or the HMB LCP/CCC, respectively, were observed in the ruderal grassland area. The 3.47-acre riparian corridor is subject to regulation under the Half Moon Bay LCP. The conclusion of this delineation is based on conditions observed at the time of the field survey performed on November 27 and December 17, 2012.

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Appendix A

Jurisdictional Delineation Map

wra
ENVIRONMENTAL CONSULTANTS

320 Church St. Delineation

Half Moon Bay, California

Appendix A. Jurisdictional Features

Legend

- Study Area
- Sample Point

Corps, RWQCB, and CCC Jurisdiction

- Pilarcitos Creek USGS Blue Line (862 linear feet in Study Area)

CCC Jurisdiction

- 50ft. Riparian Buffer
- Riparian: (3.47 acres)*

**Riparian corridor may also fall under the jurisdiction of the Corps and RWQCB as a forested wetland.*

N
W E
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0 50 100 200
Feet
1 inch = 100 feet

Map Date: January 2013
Map By: Sundaran Gillespie
Base Source: ESRI World Topo

A-2-HMB-12-011
Exhibit 3
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Path: L:\Acad 2000 Files\18000\18144-2\GIS\ArcMap\AppA_DelinMap.mxd

MEMORANDUM

TO:	Churchside Court, LLC.
FROM:	Josh Pilachowski, DKS Associates
DATE:	June 13, 2013
SUBJECT:	320 Church Street Mixed Use Development P# 13006-000 Supplemental Analysis and Response to Comments

This memo provides additional analysis and response to comments for the proposed 320 Church Street mixed use development. Specifically, this memo provides an updated traffic evaluation that identifies the expected effect of this project on Highway 1 and Highway 92 traffic, including weekday peaks and weekend and summer peaks and discusses appropriate mitigation. A Transportation Impact Analysis (TIA) Draft Report (TIA Draft Report) was prepared for the project by Hexagon Transportation Consultants on March 7, 2012. The AM and PM peak hour intersection analysis from the Hexagon report will be compared with analysis completed by DKS. Following the intersection analysis, AM, PM, and Saturday midday peak hour roadway segment analysis completed by DKS will be provided. The memo also provides responses to certain comments on the TIA Draft Report and analysis.

Intersection Level of Service

As part of the TIA Draft Report for the proposed project, intersection analysis was completed at seven intersections for the AM and PM peak hours turning movement volumes for this analysis was collected in March and September 2011. Intersection turning movement data for the existing conditions was collected in April and June 2011 and was utilized to analyze intersections for the AM, PM, and Saturday midday peak hours.

A level of service (LOS) evaluation is a qualitative description of an intersection performance based on the average delay per vehicle experienced during peak travel periods. Level of Service can range from "A" representing free-flow conditions, to "F" representing congested conditions with long delays. LOS A through D are considered excellent to satisfactory operating conditions, LOS E undesirable, and LOS F represents unacceptable conditions, at or above capacity. The level of service descriptions considering vehicle delay for signalized and unsignalized intersections is shown in **Table 1**.

Table 1 - Level of Service Definitions

Level of Service	Vehicle Delay (seconds/vehicle)	Description
A	Delay ≤ 10	Free Flow/Insignificant Delays: No approach phase is fully utilized and no vehicle waits longer than one red indication.
B	10 < Delay ≤ 20	Stable Operation/Minimal Delays: An occasional approach phase is fully utilized. Many drivers design to feel somewhat restricted within platoon of vehicles.
C	20 < Delay ≤ 35	Stable Operation/Acceptable Delays: Major approach phases fully utilized. Most drivers feel somewhat restricted.
D	35 < Delay ≤ 55	Approaching Unstable/Tolerable Delays: Drivers may have to wait through more than one red signal indication. Queues may develop but dissipate rapidly, without excessive delays.
E	55 < Delay ≤ 80	Unstable Operation/Significant Delays: Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues from upstream from intersection.
F	Delay > 80	Forced flow/Excessive Delays: Represents jammed conditions. Intersection operates below capacity with low volumes. Queues may block upstream intersections.

Source: 2000 *Highway Capacity Manual,* Transportation Research Board, 2000.

A volume-to-capacity (v/c) ratio compares vehicle demand (volume) to the available roadway supply (capacity). It is a measure of mobility and quality of travel and is often used in the conjunction with LOS to determine the operability of a facility. A v/c of 0.50 indicates that a facility is operating at half of its capacity while a v/c of 1.00 indicates that a facility is operating at maximum capacity.

Table 2 provides a comparison of the AM and PM peak hour intersection LOS from the TIA Draft Report and analysis completed by DKS Associates for four intersections. The table also provides the Saturday midday peak hour intersection LOS. Please note that the revised "Plus Project" analysis considers the removal of the proposed driveway between the project site and SR 1. The removal of the proposed driveway is discussed in greater detail in the following section.

Existing Conditions

As shown in **Table 2**, three of the four study intersections for the Existing Conditions intersection LOS operate at either C or D for the AM and PM peak hour when comparing the results from the TIA Draft Report and the DKS analysis. The intersection of SR 92 and Main Street is shown to operate at LOS C in the TIA Draft Report but is shown to operate at LOS F in the DKS analysis for the AM and PM peak hours. Two intersections, SR 1 and SR 92 and SR 92 at Main Street, respectively operate at LOS E and F during the Saturday midday peak hour.

Table 2 - Exising Conditions Intersection LOS

Intersection	TIA Draft Report				DKS Analysis								
	AM		PM		AM			PM			Sat MD		
	Delay	LOS	Delay	LOS	Delay	v/c[2]	LOS	Delay	v/c	LOS	Delay	v/c	LOS
SR 1 and N. Main St[1]	25.2	C	32.9	C	35.6	0.72	D	30.1	0.71	C	37.8	0.87	D
SR 1 and SR 92[1]	27.3	C	35.4	D	33.9	0.58	C	38.4	0.78	D	56.8	1.00	E
SR 1 and Kelly Ave[1]	38.0	D	36.7	D	29.5	0.79	C	31.7	0.71	C	39.4	0.74	D
SR 92 and Main St[1]	27.8	C	25.8	C	288.3	1.98	F	174.9	1.60	F	181.0	1.69	F

Sources: 320 Church Street TIA Draft Report and DKS Analysis.
Notes: 1. Intersection analyzed in the 320 Church Street TIA Draft Repot and DKS Analysis.
2. v/c ratio is the volume demand to capacity ratio for each respective intersection.

Existing Plus Project Conditions

The project would generate 20 vehicle trips in the AM peak hour, 32 vehicle trips in the PM peak hour and 33 vehicle trips in the Saturday midday peak hour. These trips would be distributed among the study intersections for the Existing Plus Project and Cumulative Plus Project Conditions. As discussed in greater detail below, the traffic generated by the proposed project would increase existing vehicular demand at intersections along SR 1 and SR 92 during the AM, PM, and Saturday midday peak hour by a very small amount (less than 1%) in the context of the amount of traffic these intersections accommodate. These increases in traffic would be minimal and not have a discernible effect on intersection operation, circulation in either Half Moon Bay or for the region.

The proposed project would be located at an infill site in close proximity to downtown Half Moon Bay. The proposed project would also accommodate a gap closure between an existing trail under SR 1 and the downtown area. Given the urban nature of the project and the proposed trail gap closure tied to the proposed project, the proposed project would improve safety, connectivity, and accessibility within Half Moon Bay.

For the Existing Plus Project Conditions shown in **Table 3**, the intersection LOS would continue to be either LOS C or D for three of the four study intersections for the TIA Draft Report and the DKS analysis for the AM and PM peak hours. The intersection of SR 92 and Main Street would operate at LOS C in the TIA Draft Report and LOS F in the DKS analysis for the AM and PM peak hours.

Based on the DKS analysis results, the intersection of SR 92 and Main Street would operate at LOS F for the AM and PM peak hours. During the Saturday midday peak hour, the intersection of SR 1 and SR 92 would operate at LOS E and the intersection of SR 92 and Main Street would operate at LOS F.

Table 3 - Exising Plus Project Conditions Intersection LOS

Intersection	TIA Draft Report				DKS Analysis								
	AM		PM		AM			PM			Sat MD		
	Delay	LOS	Delay	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
SR 1 and N. Main St[1]	25.1	C	32.9	C	35.7	0.72	D	30.2	0.72	C	38.2	0.87	D
SR 1 and SR 92[1]	27.3	C	35.5	D	33.9	0.58	C	38.4	0.78	D	56.9	1.00	E
SR 1 and Kelly Ave[1]	38.4	D	36.8	D	29.7	0.79	C	31.6	0.71	C	39.3	0.74	D
SR 92 and Main St[1]	28.0	C	26.0	C	288.0	1.98	F	176.1	1.61	F	182.1	1.70	F

Sources: 320 Church Street TIA Draft Report and DKS analysis.

Notes: 1. Intersection analyzed in the 320 Church Street TIA Draft Repot and DKS analysis.

2. v/c ratio is the volume demand to capacity ratio for each respective intersection.

The intersection of SR 92 and Main Street would operate at LOS F for the AM, PM and Saturday midday peak hours. For the Existing Conditions the intersection would have a v/c ratio of 1.98 for the AM peak hour, 1.60 for the PM peak hour, and 1.69 for the Saturday midday peak hour. For the Existing Plus Project Conditions, the intersection would have a v/c ratio of 1.98 for the AM peak hour, 1.61 for the PM peak hour, and 1.70 for the Saturday midday peak hour. For this intersection, the AM peak hour would experience a demand of 1,899 vehicles of which 10 are project-related (0.53% of overall vehicular demand), the PM peak hour would experience a demand of 2,633 vehicles of which 22 are project-related (0.84% of overall vehicular demand), and the Saturday midday peak hour would experience a demand of 2,640 vehicles of which 22 are project-related (0.83% of overall vehicular demand). These contributions to intersection demand are very small with the increases in traffic due to project-related traffic less than 1%.

The intersection of SR 1 and SR 92 would operate at LOS F for the Saturday midday peak hour. For the Existing Conditions the intersection would have a v/c ratio of 1.00 for the Saturday midday peak hour. For the Existing Plus Project Conditions, the intersection would have a v/c ratio of 1.70 for the Saturday midday peak hour. For this intersection, the Saturday midday peak hour would experience a demand of 2,958 vehicles of which 9 are project-related (0.30% of overall vehicular demand). This contribution to intersection demand is very small with the increase in traffic due to project-related traffic less than 1%.

The small amount of project-related traffic added to each of the respective intersections would not result in the volume-to-capacity ratio increasing by two percent (0.02) or more. Therefore, the project would not result in a potentially significant impact. Additionally, the proposed project would not have a noticeable effect in traffic operations or intersection delay. Traffic circulation in the local and regional roadway network would be maintained even with the project-related traffic. LOS would not deteriorate in any instance for the study intersections and the project-related traffic would not affect or limit the ability to reach coastal areas.

Cumulative Conditions

Please note that for the Cumulative Condition analysis the TIA Draft Report assumed a future year of 2025 and obtained turning movement volumes from the *Cabrillo Corners Mixed-Use Development Traffic Impact Study.* DKS analysis has assumed a future year of 2035 whose intersection volumes were generated from the San Mateo County Traffic Demand Model. The San Mateo County Traffic Demand model considers changes in land use and population between now and 2035 (the Cumulative Conditions year). The expected increase in traffic volumes between the Existing and Cumulative Conditions are due to anticipated increases in employment and residential populations. These expected increases in employment and residential totals would generate more vehicle trips and a reflected in the increase in AM, PM, and Saturday midday peak hour vehicle traffic. These increases in vehicle traffic are independent of the traffic generated by the proposed project. For the Cumulative Conditions shown in **Table 4**, all of the study intersections would operate at LOS E or F for the respective AM, PM and Saturday midday peak hours.

Table 4 –Cumulative Conditions Intersection LOS

Intersection	TIA Draft Report				DKS Analysis								
	AM		PM		AM			PM			Sat MD		
	Delay	LOS	Delay	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
SR 1 and N. Main St[1]	n/a	n/a	n/a	n/a	101.8	1.10	F	78.1	1.13	E	96.0	1.13	F
SR 1 and SR 92[1]	n/a	n/a	n/a	n/a	95.3	0.74	F	70.1	1.07	E	135.8	1.42	F
SR 1 and Kelly Ave[1]	n/a	n/a	n/a	n/a	57.7	1.01	E	76.1	0.85	E	205.8	1.23	F
SR 92 and Main St[1]	n/a	n/a	n/a	n/a	1077.9	3.85	F	462.8	2.63	F	289.6	1.84	F

Sources: 320 Church Street TIA Draft Report and DKS analysis.

Notes: 1. Intersection analyzed in the 320 Church Street TIA Draft Repot and DKS analysis.

2. v/c ratio is the volume demand to capacity ratio for each respective intersection.

Cumulative Plus Project Conditions

For the Cumulative Plus Project Conditions shown in **Table 5**, the intersection LOS determined by the TIA Draft Report for the AM and PM peak hours would be either LOS C or D. For the same intersections analyzed in the DKS analysis, all of the study intersections would operate at LOS E or F for the AM, PM, and Saturday midday peak hours.

Table 5 –Cumulative Plus Project Conditions Intersection LOS

Intersection	TIA Draft Report				DKS Analysis								
	AM		PM		AM			PM			Sat MD		
	Delay	LOS	Delay	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
SR 1 and N. Main St[1]	25.7	C	40.0	D	102.1	1.11	F	78.5	1.13	E	96.5	1.13	F
SR 1 and SR 92[1]	31.3	C	37.4	D	95.8	0.74	F	70.2	1.08	E	136.0	1.42	F
SR 1 and Kelly Ave[1]	43.1	D	38.2	D	57.3	1.01	E	75.9	0.85	E	205.2	1.24	F
SR 92 and Main St[1]	36.8	D	29.8	C	1074.8	3.86	F	464.1	2.64	F	291.4	1.85	F

Sources: 320 Church Street TIA Draft Report and DKS analysis.

Notes: 1. Intersection analyzed in the 320 Church Street TIA Draft Repot and DKS analysis.

2. v/c ratio is the volume demand to capacity ratio for each respective intersection.

The intersection of SR 1 and N. Main Street would operate at LOS F for the AM peak hour, LOS E for the PM peak hour, and LOS F for the Saturday midday peak hour. For the Cumulative Conditions the intersection would have a v/c ratio of 1.10 for the AM peak hour, 1.13 for the PM peak hour, and 1.13 for the Saturday midday peak hour. For the Cumulative Plus Project Conditions, the intersection would have a v/c ratio of 1.11 for the AM peak hour, 1.13 for the PM peak hour, and 1.13 for the Saturday midday peak hour. For this intersection, the AM peak hour would experience a demand of 3,462 vehicles of which are project-related (0.17% of overall vehicular demand), the PM peak hour would experience a demand of 3,719 vehicles of which 7 are project-related (0.19% of overall vehicular demand), and the Saturday midday peak hour would experience a demand of 3,802 vehicles of which 7 are project-related (0.18% of overall vehicular demand). These contributions to intersection demand are very small with the increases in traffic due to project-related traffic less than 1%.

The intersection of SR 1 and SR 92 would operate at LOS F for the AM peak hour, LOS E for the PM peak hour, and LOS F for the Saturday midday peak hour. For the Cumulative Conditions the intersection would have a v/c ratio of 0.74 for the AM peak hour, 1.07 for the PM peak hour, and 1.42 for the Saturday midday peak hour. For the Cumulative Plus Project Conditions, the intersection would have a v/c ratio of 0.74 for the AM peak hour, 1.08 for the PM peak hour, and 1.42 for the Saturday midday peak hour. For this intersection, the AM peak hour would experience a demand of 3,117 vehicles of which 3 are project-related (0.10% of overall vehicular demand), the PM peak hour would experience a demand of 3,396 vehicles of which 9 are project-related (0.27% of overall vehicular demand), and the Saturday midday peak hour would experience a demand of 4,261 vehicles of which 9 are project-related (0.21% of overall vehicular demand). These contributions to intersection demand are very small with the increases in traffic due to project-related traffic less than 1%.

The intersection of SR 1 and Kelly Avenue would operate at LOS E for the AM peak hour, LOS E for the PM peak hour, and LOS F for the Saturday midday peak hour. For the Cumulative Conditions the intersection would have a v/c ratio of 1.01 for the AM peak hour, 0.85 for the PM peak hour, and 1.23 for the Saturday midday peak hour. For the Cumulative Plus Project Conditions, the intersection would have a v/c ratio of 1.01 for the AM peak hour, 0.85 for the PM peak hour, and 1.24 for the Saturday midday peak hour. For this intersection, the AM peak hour would experience a demand of 3,399 vehicles of which 8 are project-related (0.24% of overall vehicular demand), the PM peak hour would experience a demand of 3,474 vehicles of which 13 are project-related (0.37% of overall vehicular demand), and the Saturday midday peak hour would experience a demand of 4,174 vehicles of which 13 are project-related (0.31% of overall vehicular demand). These contributions to intersection demand are very small with the increases in traffic due to project-related traffic less than 1%.

The intersection of SR 92 and Main Street would operate at LOS F for the AM, PM, and Saturday midday peak hours. For the Cumulative Conditions the intersection would have a v/c ratio of 3.85 for the AM peak hour, 2.63 for the PM peak hour, and 1.84 for the Saturday

midday peak hour. For the Cumulative Plus Project Conditions, the intersection would have a v/c ratio of 3.86 for the AM peak hour, 2.64 for the PM peak hour, and 1.85 for the Saturday midday peak hour. For this intersection, the AM peak hour would experience a demand of 2,307 vehicles of which 10 are project-related (0.43% of overall vehicular demand), the PM peak hour would experience a demand of 3,298 vehicles of which 21 are project-related (0.64% of overall vehicular demand), and the Saturday midday peak hour would experience a demand of 2,995 vehicles of which 22 are project-related (0.73% of overall vehicular demand). These contributions to intersection demand are very small with the increases in traffic due to project-related traffic less than 1%.

As shown in the above tables, the difference in LOS and v/c ratio between the Cumulative Conditions and Cumulative Plus Project Conditions are very small. While the study intersections would operate at LOS E or F for at least one of the study peak hours, the project-related traffic added to each of the respective intersections would not result in the volume-to-capacity ratio increasing by two percent (0.02) or more. Therefore, the project would not result in a potentially significant impact. Additionally, the proposed project would not have a noticeable effect in traffic operations or intersection delay. Traffic circulation in the local and regional roadway network would be maintained even with the project-related traffic, and the project-related traffic would not affect or limit the ability to reach coastal areas.

Roadway Segment Level of Service

Roadway segment analysis was conducted using the Highway Capacity Software (HCS 2000), and the thresholds described in the City/ County Association of Governments (C/CAG) Congestion Management Program. As dictated by the San Mateo County Congestion Management Program, roadway capacity for multilane highways is assumed to be 2,200 vehicles per lane per hour while capacity is 1,400 vehicles per lane per hour for two lane highways.

Two Lane Highway

Additionally, the San Mateo County Congestion Management Program defines a two-lane highway as a two-lane roadway with one lane for use by traffic in each direction. Passing of slower vehicles requires use of the opposing lane. As volumes or geometric constraints increase, the ability to pass decreases and platoons of vehicles are formed. The delay experienced by motorists also increases. The LOS for two-lane highways is based on mobility. The specific LOS criteria from the ***HCM*** are shown in **Table 6**.

For two-lane highways, the selected method is based on the v/c ratio and takes into account the volume in both directions. The total volume is divided by the total capacity of 2,800 vehicles per hour (1,400 vehicles per lane per hour in each direction; two lanes equate to 2,800 vehicles per hour).

Table 6: Level of Service Criteria for Two-Lane Highways

LOS	% Time Delay	Max v/c ratio[1]	Average Travel Speed[2]
A	30	0.00 – 0.04	54
B	45	0.04 – 0.16	51
C	60	0.16 – 0.32	48
D	75	0.32 – 0.57	46
E	>75	0.57 – 1.00	41
F	100	> 1.00	< 41

Sources: San Mateo County Congestion Management Program, 2011

Notes: 1. Ratio of flow rate to an ideal capacity of 2,800 passenger cars per hour in both directions.

2. Average travel speed of all vehicles for highways with design speed 60 mph; for highways with lower design speeds, reduce speed by 4 mph for each 10-mph reduction in design speed below 60 mph; assumes that speed is not restricted to lower values by regulation.

Multilane Highway

According to Appendix A of the City/County Association of Governments (C/CAG) Congestion Management Program, multilane highways generally have posted speed limits between 40 and 55 miles per hour (mph). They usually have four or six lanes, often with physical medians or two-way left-turn lane medians, although they may also be undivided. Unlike freeways, multilane highways are interrupted by intersections or driveways.

The level of service criteria for multilane highways is based on the density of vehicles, expressed in passenger cars per mile per lane. The specific criteria from the ***HCM*** are shown in **Table 7**. The maximum ideal lane capacity for a multilane highway segment is 2,200 vehicles per hour.

Table 7: Level of Service Criteria for Multi-Lane Highways

LOS	Max v/c ratio	Average Travel Speed
A	0.00 – 0.30	50
B	0.30 – 0.50	50
C	0.50 – 0.70	50
D	0.70 – 0.84	49
E	0.84 – 1.00	47
F	> 1.00	< 47

Sources: San Mateo County Congestion Management Program, 2011

Based on previous traffic studies prepared for the City of Half Moon Bay, any study roadway segment that exceeds LOS E during the weekday commute periods and Saturday Midday peak hour as a result of proposed project traffic would be considered significantly impacted. Should the proposed project result in a volume/capacity (v/c ratio) increase of 0.02 or more at an already impacted roadway segment, a significant impact would be found.

Existing Conditions

As shown in **Table 8**, three of the four study roadway segments for the Existing Conditions roadway segment LOS operate at either C or better for the AM, PM, and Saturday midday peak hour. The segment along SR 1 between Kelly Street and Filbert Street is shown to operate at LOS D for the AM peak hour and at LOS E for the Saturday midday and PM peak hours.

Table 8: Existing Roadway Segment LOS

No.	Location	Class	Existing Conditions								
			AM			PM			Sat Midday		
			Volume (veh/hr)	MOE[a]	LOS[b]	Volume (veh/hr)	MOE[a]	LOS[b]	Volume (veh/hr)	MOE[a]	LOS[b]
1	SR 1 from SR 92 to Pine Street	MLH	837	0.19	A	1171	0.27	A	1182	0.27	A
	SR 1 from Pine Street to SR 92	MLH	1012	0.23	A	1018	0.23	A	1104	0.25	A
2	SR 1 from Pine Street to Kelly Street	MLH	807	0.18	A	1155	0.26	A	1179	0.27	A
	SR 1 from Kelly Street to Pine Street	MLH	1030	0.23	A	1016	0.23	A	1025	0.23	A
3	SR 1 between Kelly Street and Filbert Street	TLH	1340	0.48	D	**1724**	**0.62**	**E**	**1631**	**0.58**	**E**
4	Kelly Street between SR 1 and Main Street	TLH	297	0.11	B	500	0.18	C	642	0.23	C

Source: DKS Associates
Notes: a. MOE = Measures of Effectiveness. For two-lane highways and multilane highways MOE is measured in v/c ratios (volume to capacity ratios).
b. LOS = Level of Service is based on 2009 C/CAG of San mateo County Final Congestion Management Plan criteria

Existing Plus Project Conditions

As discussed in the intersection Level of Service section, the project would generate 20 vehicle trips in the AM peak hour, 32 vehicle trips in the PM peak hour and 33 vehicle trips in the Saturday midday peak hour. These trips would be distributed among the study roadway segments for the Existing Plus Project and Cumulative Plus Project Conditions.

For the Existing Plus Project Conditions shown in **Table 9**, the roadway segment LOS would not change for any of the study roadway segments for the AM, PM, and Saturday midday peak hours. In addition, the volumes added to the segment along SR 1 between Kelly Street and Filbert Street will not increase the volume-to-capacity ratio increasing by two percent (0.02) or more, resulting in no significant impact to any roadway segment by the project.

Table 9: Existing Plus Project Roadway Segment LOS

No.	Location	Class	Existing Plus Project Conditions								
			AM			PM			Sat Midday		
			Volume (veh/hr)	MOE[a]	LOS[b]	Volume (veh/hr)	MOE[a]	LOS[b]	Volume (veh/hr)	MOE[a]	LOS[b]
1	SR 1 from SR 92 to Pine Street	MLH	839	0.19	A	1174	0.27	A	1185	0.27	A
	SR 1 from Pine Street to SR 92	MLH	1013	0.23	A	1024	0.23	A	1110	0.25	A
2	SR 1 from Pine Street to Kelly Street	MLH	811	0.18	A	1155	0.26	A	1179	0.27	A
	SR 1 from Kelly Street to Pine Street	MLH	1032	0.23	A	1021	0.23	A	1029	0.23	A
3	SR 1 between Kelly Street and Filbert Street	TLH	1343	0.48	D	**1732**	**0.62**	**E**	**1640**	**0.59**	**E**
4	Kelly Street between SR 1 and Main Street	TLH	305	0.11	B	512	0.18	C	656	0.23	C

Source: DKS Associates

Notes: a. MOE = Measures of Effectiveness. For two-lane highways and multilane highways MOE is measured in v/c ratios (volume to capacity ratios).

b. LOS = Level of Service is based on 2009 C/CAG of San mateo County Final Congestion Management Plan criteria

Cumulative Conditions

DKS analysis has assumed a future year of 2035 whose roadway segment volumes were generated from the San Mateo County Traffic Demand Model. The San Mateo County Traffic Demand model considers changes in land use and population between now and 2035 (the Cumulative Conditions year). The expected increase in traffic volumes between the Existing and Cumulative Conditions are due to anticipated increases in employment and residential populations. These expected increases in employment and residential totals would generate more vehicle trips and a reflected in the increase in AM, PM, and Saturday midday peak hour vehicle traffic. These increases in vehicle traffic are independent of the traffic generated by the proposed project. For the Cumulative Conditions shown in **Table 10**, three of the four study roadway segments operate at either LOS C or better for the AM, PM, and Saturday midday peak hour. The segment along SR 1 between Kelly Street and Filbert Street is shown to operate at LOS E for the AM, and PM peak hours, and LOS F for Saturday midday peak hours.

Table 10: Cumulative Roadway Segment LOS

No.	Location	Class	Cumulative Conditions								
			AM			PM			Sat Midday		
			Volume (veh/hr)	MOE[a]	LOS[b]	Volume (veh/hr)	MOE[a]	LOS[b]	Volume (veh/hr)	MOE[a]	LOS[b]
1	SR 1 from SR 92 to Pine Street	MLH	1533	0.35	B	1432	0.33	B	1693	0.38	B
	SR 1 from Pine Street to SR 92	MLH	1318	0.30	A	1512	0.34	B	1922	0.44	B
2	SR 1 from Pine Street to Kelly Street	MLH	1680	0.38	B	1535	0.35	B	2374	0.54	C
	SR 1 from Kelly Street to Pine Street	MLH	1176	0.27	A	1395	0.32	B	1240	0.28	A
3	SR 1 between Kelly Street and Filbert Street	TLH	**2235**	**0.80**	**E**	**2472**	**0.88**	**E**	**2959**	**1.06**	**F**
4	Kelly Street between SR 1 and Main Street	TLH	273	0.10	B	479	0.17	C	775	0.28	C

Source: DKS Associates

Notes: a. MOE = Measures of Effectiveness. For two-lane highways and multilane highways MOE is measured in v/c ratios (volume to capacity ratios).

b. LOS = Level of Service is based on 2009 C/CAG of San mateo County Final Congestion Management Plan criteria

Cumulative Plus Project Conditions

For the Cumulative Plus Project Conditions shown in **Table 11**, the roadway segment LOS would not change for any of the study roadway segments for the AM, PM, and Saturday midday peak hours. In addition, the volumes added to the segment along SR 1 between Kelly Street and Filbert Street will not increase the volume-to-capacity ratio increasing by two percent (0.02) or more. Therefore, the project would not result in a potentially significant impact. Additionally, the proposed project would not have an appreciable effect on congestion. Traffic circulation in the local and regional roadway network would be maintained with the project, and the project-related traffic would not affect or limit the ability of coastal visitors to reach coastal areas.

Table 11: Cumulative Plus Project Road Segment LOS

No.	Location	Class	Cumulative Plus Project Conditions								
			AM			PM			Sat Midday		
			Volume (veh/hr)	MOE[a]	LOS[b]	Volume (veh/hr)	MOE[a]	LOS[b]	Volume (veh/hr)	MOE[a]	LOS[b]
1	SR 1 from SR 92 to Pine Street	MLH	1535	0.35	B	1435	0.33	B	1696	0.39	B
	SR 1 from Pine Street to SR 92	MLH	1319	0.30	A	1518	0.35	B	1928	0.44	B
2	SR 1 from Pine Street to Kelly Street	MLH	1684	0.38	B	1535	0.35	B	2374	0.54	C
	SR 1 from Kelly Street to Pine Street	MLH	1178	0.27	A	1400	0.32	B	1244	0.28	A
3	SR 1 between Kelly Street and Filbert Street	TLH	**2238**	**0.80**	**E**	**2480**	**0.89**	**E**	**2968**	**1.06**	**F**
4	Kelly Street between SR 1 and Main Street	TLH	281	0.10	B	491	0.18	C	789	0.28	C

Source: DKS Associates

Notes: a. MOE = Measures of Effectiveness. For two-lane highways and multilane highways MOE is measured in v/c ratios (volume to capacity ratios).

b. LOS = Level of Service is based on 2009 C/CAG of San Mateo County Final Congestion Management Plan criteria

Updated Analysis Reflecting the Removal of the Proposed Driveway at SR 1

The analysis completed for the TIA Draft Report included a proposed driveway between the project site and SR 1. However, after receiving input from Caltrans and the City of Half Moon Bay, the project sponsor has decided not to include the driveway as part of the project. More specifically, project-generated traffic would not be able to directly access SR 1 from the project site and would rely on the existing roadway network. This would maintain intersection spacing along SR 1, maintain vehicular circulation patterns near downtown Half Moon Bay and SR 1, and not limit access to the coast.

In the TIA Draft Report, this driveway accommodated approximately 8 vehicles during the AM peak hour and 21 vehicles during the PM peak hour. Analysis reflected in Table 12 and Table 13 considers the removal of the proposed driveway and the effect it would have on three intersections: SR 1 and Kelly Avenue, Church Street and Kelly Avenue, and Church Street and Mill Street.

As shown in **Table 12**, the removal of the proposed driveway would result in the three intersections operating at LOS D or better for the AM, PM, and Saturday midday peak hours for the Updated Existing Plus Project Conditions.

Table 12 – Updated Existing Plus Project Conditions Intersection LOS

Intersection	AM			PM			Sat MD		
	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
SR 1 and Kelly Ave	29.7	0.79	C	31.6	0.71	C	39.3	0.74	D
Church St and Kelly Ave	9.6	-	A	10.3	-	B	10.5	-	B
Church St and Mill St	7.1	-	A	7.4	-	A	7.3	-	A

Sources: DKS Associates, 2013.

As shown in **Table 13**, SR 1 and Kelly Avenue operating at LOS E for the AM and PM peak hours and LOS F for the Saturday midday peak hour under the Updated 2035 Cumulative Plus Project Conditions. However, as discussed earlier in this memo, the project-related traffic added to the intersection of SR 1 and Kelly Avenue would not result in the volume-to-capacity ratio increasing by two percent (0.02) or more and, therefore, the project would not result in a potentially significant impact. For this intersection, the AM peak hour would experience a demand of 3,399 vehicles of which 8 are project-related (0.24% of overall vehicular demand), the PM peak hour would experience a demand of 3,474 vehicles of which 13 are project-related (0.37% of overall vehicular demand), and the Saturday midday peak hour would experience a demand of 4,174 vehicles of which 13 are project-related (0.31% of overall vehicular demand). These contributions to intersection demand are very small with the increases in traffic due to project-related traffic less than 1%.

Additionally, the proposed project would not have a noticeable effect in traffic operations or intersection delay. Traffic circulation in the roadway network would be maintained even with the project-related traffic. LOS would not deteriorate in any instance for the study intersections and would not affect or limit the ability to reach coastal areas.

Table 13 – Updated 2035 Cumulative Plus Project Conditions Intersection LOS

Intersection	AM		PM		Sat MD	
	Delay	LOS	Delay	LOS	Delay	LOS
SR 1 and Kelly Ave	57.3	E	75.9	E	205.2	F
Church St and Kelly Ave	9.8	A	10.7	B	12.3	B
Church St and Mill St	7.1	A	7.4	A	7.3	A

Sources: DKS Associates, 2013.

Response to Comments

Application of Mitigation Fees

The mitigation fees associated with the proposed project may be applied to various transportation improvements within the City of Half Moon Bay. Depending on the total amount of mitigation fees, they may be applied in one or more areas. Improving bicycle and pedestrian safety, closing bicycle and pedestrian gaps in the non-motorized transportation

network, or signalizing intersections may benefit from the project's mitigation fees. These fees may also be applied to revise signal timing at certain intersections, to improve roadway conditions and safety, initiate Half Moon Bay ridesharing and carpooling programs, or other transportation initiatives and improvement.

Since the project would be promoting infill development, multi-modal accessibility, ease of use, and is in close proximity to the downtown core, the project sponsors seek that the application of mitigation fees from this project reflect the character and objectives of the development. After the initial analysis, the project sponsors decided to remove the driveway connecting the project site and SR 1 to potentially improve safety along SR 1, limit the number of access points to and from SR 1, and emphasize the infill nature of the project. Improving multi-modal connectivity between residences and downtown Half Moon Bay, increasing non-motorized transportation use, and improving bicycle and pedestrian safety share the ideals of the project and should be reflected in the improvement measures the mitigation fees would support.

Project Characteristics and Trip Generation

The proposed project would be an infill development, clustered and would potentially lessen the effects of residential sprawl. By selecting an infill site close to schools, the downtown area, multi-use trails, and other amenities of Half Moon Bay, the project site may generate fewer vehicle trips than are assumed to be generated in the transportation analysis. This is due to the vehicle trip generation estimates being calculated from the ITE Trip Generation Manual. The vehicle trip generation rates from the ITE Trip Generation Manual have been developed from a wide array of samples which include variations in geographic locations, location and type of nearby development, size, and housing prices. Since the project is an urban infill site close to a downtown area, adjacent to recreation facilities, and proposes to close a trail gap, the project may generate fewer vehicle trips than is assumed for the transportation analysis.

The initial project description included a driveway from the project site which would connect with SR 1. However, after consultation with Caltrans and the City of Half Moon Bay, the project sponsor has decided to remove the driveway in order to preserve intersection spacing, maintain vehicle circulation along SR 1 in the downtown area of Half Moon Bay, and not affect access to the coast. Additionally, the project would include closing a trail gap between an existing trail under SR 1 and the downtown area. The closure of the trail gap would improve the safety, connectivity, and accessibility of the trail network in Half Moon Bay due to the proposed project and may encourage non-motorized forms of travel within the city.

Lot Requirements Due to Potentially Significant Impacts

The trip generation estimates for the transportation analysis have been developed from the ITE Trip Generation Manual which compiles surveys with varying proximity to urban centers, sizes, density, geographic location, and type of nearby development. The proposed

project is an urban infill development which would take advantage of higher development density, close proximity to Half Moon Bay's downtown core, and nearby recreational facilities. While the project has been analyzed with the assumption that 20 vehicle trips would be generated in the AM peak hour, 32 vehicle trips in the PM peak hour and 33 vehicle trips in the Saturday midday peak hour, the project may generate fewer vehicle trips since it is an urban infill development.

The application of these trips to the traffic network has been evaluated under the City of Half Moon Bay's significance criteria. Within the City of Half Moon Bay, a traffic-related potentially significant impact is identified under two criteria: 1) when project-related traffic drops the intersection LOS from D or better to LOS E or F or 2) if project-related traffic results in the volume-to-capacity ratio for an intersection already operating at LOS E or F to increase by two percent (2%) or more. As shown in the preceding analysis, some intersections would operate at LOS F for the Existing and Cumulative Conditions. The addition of project-related traffic would not result in any intersections dropping from LOS D or better to LOS E or F. Also, project-related traffic would not raise the volume-to-capacity ratio by more than 2% for any of the study intersections already operating at LOS E or F in either the Existing Plus Project or the Cumulative Plus Project Conditions.

While the proposed project would add vehicle traffic to the roadway network and local and regional intersections, the project-associated traffic would not result in any potentially significant intersection or roadway segment impacts for the AM, PM, and Saturday midday peak hours for the Existing Plus Project and 2035 Cumulative Plus Project Conditions. Since no potentially significant intersection or roadway segment impacts have been found for the proposed project and the project is expected to have no appreciable effect on recreational traffic on Highway 1 or Highway 92, no additional mitigation measures, including off-site lot retirements, are needed or appropriate for this infill, pedestrian-oriented project.

Sincerely,

Josh Pilachowski

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September 24, 2013

Mr. Cameron Jeffs
413 Main Street Suite A
Half Moon Bay, California 94019

RE: Summary of Flood Risk Analyses, Church Street Infill Project, City of Half Moon Bay

Dear Mr. Jeffs:

Balance Hydrologics has completed data collection, technical analyses, and hydraulic modeling to characterize flood risks at the Church Street Infill site in the City of Half Moon Bay. The analyses were completed to address questions related to flood risk at the site raised by the California Coastal Commission (CCC) during their review of previously submitted permit application materials. Specific questions were detailed in the letter from the CCC dated June 25, 2013.

This letter report summarizes the work that has been completed and the pertinent findings with respect to flood risk at the site, beginning with a discussion of hydrology and flood source characterization, followed by details of the hydraulic modeling, and finishing with a discussion of potential impacts from the proposed replacement of the Main Street Bridge upstream of the project.

Hydrology and Peak Flow Estimates

Characterization of flood risks at the site for the purposes of these analyses required developing estimates of peak discharge for two distinct potential flood events: the 1-percent chance flood (also known as the 100-year flood) and the flood that would be associated with the much less likely failure of the upstream Pilarcitos Reservoir, owned and operated by the San Francisco Public Utilities Commission (SFPUC). Concerns related to the potential impacts of these two flood events at the project site are understandable, given that a detailed-study Flood Insurance Rate Map for the creek has not been published by the Federal Emergency Management Agency and the dam inundation map for the area is of insufficient resolution to clearly define the limits of the potential inundation zone at the site.

Estimation of the 1-percent chance flood event is greatly facilitated by the long-term stream gage record for Pilarcitos Creek in the immediate vicinity of the project site. The gaging station has been operated by the United States Geologic Survey at Half Moon Bay since January, 1967, providing a record of 46 verified annual peak flow values for statistical analysis using standard flood frequency estimation methodology. For the purposes of this study, the gaging record (USGS Station 11162630) was uploaded into the USGS PeakFQ software. Application of the standard Bulletin 17B methodology within the

program provided an estimate of 3,579 cfs for the 1-percent chance flood event. The output of the PeakFQ analysis is included as Appendix A.

With respect to the peak discharge associated with a failure scenario of the Pilarcitos Dam, requests for the technical details of the dam inundation study completed in the 1970s were made to the California Emergency Management Agency as well as directly to the SFPUC. The pertinent calculations were located by the SFPUC, and the report was made available for the purposes of this study. The report is entitled Design Calculations for Inundation Areas of Pilarcitos Dam (February 1974) and is included herein as Appendix B. The calculations were completed by the San Francisco Water Department (now part of the SFPUC) and identify the peak discharge from a dam failure as 16,000 cfs, well over 4 times the predicted magnitude of the 1-percent flood event. It is also noteworthy, that the calculations do not attenuate the flood peak along the inundation path, but rather use a peak discharge of 16,000 cfs for the entire Pilarcitos Valley down to the limit of the study (essentially at the Pacific Ocean). The hydraulic modeling carried out as part of the current risk evaluation maintains this conservative approach of not using a lower, attenuated peak for the dam failure scenario. Naturally, any tendency for peak flow rates to decrease as a flood wave moved down the roughly nine mile long valley would result in lower flood elevations at the project site.

Hydraulic Modeling

Once appropriate flood discharge values were identified, the next step in the work plan involved building and running a hydraulic model of the creek in the vicinity of the project site. All hydraulic modeling was completed using the U.S. Army Corps of Engineers' HEC-RAS software platform, a standard software package for the analysis of open channel systems. Detailed topographic information of adjacent areas was available from previous studies (MacLeod and Associates, dated May 24, 2000), supplemented by more recent survey information for the site compiled by the project engineer (Sigma Prime) and further supplemented with mapping data compiled as part of the ongoing Main Street Bridge replacement studies.

A preliminary build of the HEC-RAS model was completed based on the above referenced topographic information, so initial model runs could be completed. These runs were used to inform the limits of reconnaissance for a site visit completed on August 28, 2013 to assess specific conditions pertinent to the hydraulic modeling effort. The site visit included the entire modeled creek reach and included photographic documentation of important characteristics of the creek corridor within the model domain (see Figure 1). Specific parameters of note related to the hydraulic modeling include:

- *Model extents*. A total reach length of 2,316 feet was included in the HEC-RAS model (see the model workmap included as Figure 2). The downstream extent was selected so that the Highway 1 bridge could be explicitly included in the model, with the limit located 650 feet (as measured along the channel) downstream of the crossing at a point where the creek flowline elevation is 32.2 feet NGVD.[1] Similarly, the upstream model extent was selected so that impacts of the Main Street bridge could be assessed. The upstream limit is located 160 feet upstream of Main Street at a point where the creek flowline is 43.4 feet.

[1] All elevations noted herein reference the National Geodetic Vertical Datum of 1929 (NGVD 29) as it is consistent with the topographic mapping used to lay out the hydraulic model, which is also the approximate datum for the project specific topographic mapping. This datum is currently being replaced by the newer North American Vertical Datum of 1988 (NAVD 88). The latter datum is being used on updated FEMA mapping. Mean tide level at Half Moon Bay is approximately 0.4 feet NGVD and 3.2 feet NAVD.

- *Cross-sections*. Cross-sections were defined along the reach with an average spacing of 140 feet. All cross-sections were georeferenced to the coordinates used in the MacLeod survey.

- *Channel roughness*. The creek corridor through the modeled reach generally has three distinct zones that must be considered when assessing conveyance capacity for large flow events. The bankfull channel of the creek was observed to have a typical width of 20 feet and is generally free of encroaching vegetation, with a suppressed riffle and pool morphology that reflects the sand bed found throughout the reach. This bankfull channel was assigned a Manning's roughness value of 0.06. Outboard of this channel, a heavily vegetated inner floodplain zone typifies much of the reach. This zone varies in width from 20 feet to more than 80 feet in some locations and is characterized by dense willow growth and understory. Conveyance at moderate flood flow depths in the inner floodplain would be highly restricted due to the thick vegetation. Therefore, the Manning's roughness for this zone was set to a conservative value of 0.30.[2] Outboard of this inner floodplain, much of the reach exhibits an outer floodplain that would be available to convey flood flows in very large events. This outer floodplain zone is generally maintained in some manner (e.g. public park, recreational trail, or mown fields) and can be expected to have much higher conveyance than the inner floodplain zone. A Manning's roughness of 0.04 was used for these outer floodplain areas.

- *Bridge crossings*. The two bridge crossings were explicitly modeled in HEC-RAS using the bridge modeling routines in the software package. The Highway 1 bridge is a double span (for north and south bound lanes) with two pier walls. The Main Street bridge is a concrete arch structure. Bridge geometry and road deck information was included in the models based on the survey information and additional field measurements under the bridges completed during the site visit. The Main Street bridge is currently being studied for replacement (it is the oldest concrete bridge in San Mateo County). Type selection for the replacement structure is not yet complete, but selection criteria have been applied, and it appears all but certain that the replacement structure will be a clear-span concrete structure located in the same location. Model runs used to assess the impact of replacing this structure were therefore based on a clear-span with a span width set by the likely location of the right and left abutments with respect to the existing wingwalls.

- *Boundary conditions*. As mentioned above, the model geometry was selected to include a reach length appropriate for estimating flood risks at the site. The same approach was used in setting boundary conditions for the modeling. The lowermost extent of the modeled reach is 4,800 feet upstream of the mouth of the creek at Half Moon Bay, where the 1-percent chance stillwater elevation is 5.0 feet (FIS Table 9). Coincident occurrence of the 100-year flood and 100-year tide condition would be extremely unlikely and would have an expected annual probability of markedly less than 1 percent. Nonetheless, multiple model runs were completed to assess the sensitivity of predicted flood elevations to different assumed tailwater elevations. These model runs showed that the overall conveyance capacity of the creek corridor (minimum of 56,000 cfs

[2] This overbank roughness value is markedly higher than the highest value used for other streams in the area as summarized in the Flood Insurance Study, San Mateo County, California, prepared by FEMA with an effective date of October 16, 2012 (FIS). Table 6 of the FIS shows a maximum overbank roughness of 0.14. Nonetheless, absent analysis of calibration data from observed high flow events, we feel a value of 0.30 conservatively represents the overgrown character of the inner floodplain zone for Pilarcitos Creek.

downstream of Highway 1) is high enough compared to the estimated flood discharge values that backwater effects are not propagated upstream to any significant degree. In fact, tailwater elevations would have to exceed 30 feet to have any discernible effect on the lowermost part of the model domain. Based on the sensitivity analysis, the downstream boundary condition was set to normal depth using the conservative roughness values and a slope of 0.4 percent taken from the survey.

Hydraulic model runs were completed for several scenarios to address the concerns raised by the CCC. These included runs with the following conditions:

1. Existing conditions and full suite of flood discharge values. Existing conditions include the current configuration of the Main Street bridge crossing. Separate water surface profiles were generated for the 1-percent flood event (100-year flood), the full dam failure peak flow (16,000 cfs) and for an additionally conservative scenario where the peak 100-year discharge is coincident with the peak dam failure flow. The latter scenario is additionally conservative, but was included at the suggestion of the CCC and is illustrative of the way in which local topographic controls limit the maximum expected flood elevations at the site (see discussion below).
2. Future conditions and full suite of flood discharge values. Future conditions in this case include adding the aforementioned new clear-span bridge to replace the existing Main Street crossing.

Modeling Results and Findings

Output summaries from the HEC-RAS model runs are included as Appendix C. Key findings include the following:

- *1-percent flood event*. As mentioned previously, the model runs confirm that the Pilarcitos Creek floodplain has a very high conveyance capacity, despite the heavy vegetation cover on the inner floodplain zone. Predicted base flood elevations along the project site range from 48.4 feet near the western end to 49.8 feet near the eastern parcel boundary adjacent to Church Street (see Table 1 and the floodplain boundary depicted on Figure 2). These elevations are well below those proposed for improvements at the site and are essentially coincident with the creek set-back boundary which is off limit for development.
- *Dam failure inundation*. As expected, modeling of the peak discharge associated with a hypothetical failure of the Pilarcitos Dam resulted in predicted flood elevations that are markedly higher than those for the 1-percent chance flood. However, a fundamental finding of the hydraulic modeling for this event was that peak flood elevations are, to a large degree, set by the local topography. Specifically for the project site, the critical factor is the elevation of the elevated Highway 1 roadway immediately west of the site. The hydraulic model results show that peak flood flow for the dam failure analysis would overflow the highway, which then would act as an in-line weir with a crest length of at least 800 feet. Average elevations of the roadway over this length are just over 56 feet, providing a high level of additional conveyance for flood flows in the corridor. Due to this de facto downstream weir effect, flood elevations associated with the dam failure scenario are predicted to vary little along the project site, ranging from 58.6 feet at the western end of the parcel to 58.8 feet at the eastern end.

Table 1. Predicted flood elevations at the Church Street Infill site, City of Half Moon Bay

RAS Model Station	Location	Predicted Flood Elevation (ft, NGVD) 1-percent Chance Flood	Dam Failure Flood	Combined Flood Event
10+80	Western portion of site	48.4	58.6	59.4
13+60	Central portion of site	48.8	58.7	59.5
16+95	Eastern portion of site	49.8	58.8	59.6

Notes: 1-percent chance flood = 3,580 cfs, dam failure flood = 16,000 cfs, combined flood event = 19,580 cfs. See modeling workmap (Figure 2) for cross-section locations.

- *1-percent flood event plus dam failure inundation*. As discussed previously, an additional flood surface profile was generated for the highly unlikely coincident occurrence of peak dam failure discharge and 1-percent chance flood event. The peak flow values in this case were simply added together, yielding a peak discharge of 19,580 cfs. Although, this combined discharge is fully 22 percent higher than that for the dam failure scenario alone, the local topographic control of the downstream Highway 1 roadway limits the increase in flood elevations at the site. These are predicted to range from a low of 59.4 feet in the western portions of the site to a high of 59.6 feet at the eastern end. Thus, predicted flood elevations for this unlikely combined scenario are less than 1 foot higher than those for the dam failure scenario alone. Projected finished floor elevations are as high or higher than the predicted flood elevations.
- *Impacts of the Main Street bridge replacement*. The HEC-RAS modeling results show conclusively that flood elevations at the project site will almost exclusively be set by conveyance at the Highway 1 crossing, both by the bridge there (for the 1-percent chance event) as well as over the roadway (for dam failure scenarios). This is consistent with the model runs which show that there would be essentially no change in anticipated flood elevations at the project site associated with replacement of the Main Street crossing. A new clear-span structure would have significantly more conveyance capacity than the existing structure, which would tend to better contain extreme flood events within the floodplain. However, with the crossing located over 600 feet upstream from the end of Church Street and the large available floodplain conveyance, there is ample space for flood flow velocities and elevations to adjust downstream of Main Street with the end result that changes at the latter location will not have a significant impact other than reducing the likelihood of flood flow breakouts in the downtown area.

Other Flood Risks

Additional concern had previously been expressed with respect to the potential risk from tsunami inundation at the site. Material compiled as part of this study confirmed that the project site is outside of mapped tsunami risk zones (see the mapping included as Appendix D). In fact, the nearest tsunami evacuation facility is located at the Ted Adcock Community Center located only 450 south of the project site with ground elevations on the order of 58 to 59 feet, lower than the anticipated finished floor elevations for structures at the project site. This is further evidence that flood risk from tsunami events is not expected to affect this portion of downtown Half Moon Bay.

Mitigation Measures

The additional analyses discussed herein show that the project site is exposed to a low level of flood risk. Nonetheless, a number of specific mitigation measures can be implemented to even further reduce risk levels. These include:

- Flood resistant design and construction. The hydraulic modeling results indicate low flood depths and velocities in the developed portion of the site for very large flood events. Nonetheless, flood resistant design and construction techniques (such as those described in American Society of Civil Engineers Standard 24-05) can readily be utilized to markedly reduce flood hazards.
- Emergency preparedness and response. The project can be conditioned to coordinate with the City of Half Moon Bay, the San Mateo County Office of Emergency Services, and the California Emergency Management Agency on preparedness and response measures appropriate to the flood risks in question. Such measures can include additional warning devices and identified evacuation routes to be used in case of a failure at Pilarcitos Dam (flood wave travel time estimated at 2 hours and 15 minutes) or tsunami (travel time of several hours depending on location of triggering event).

Closing

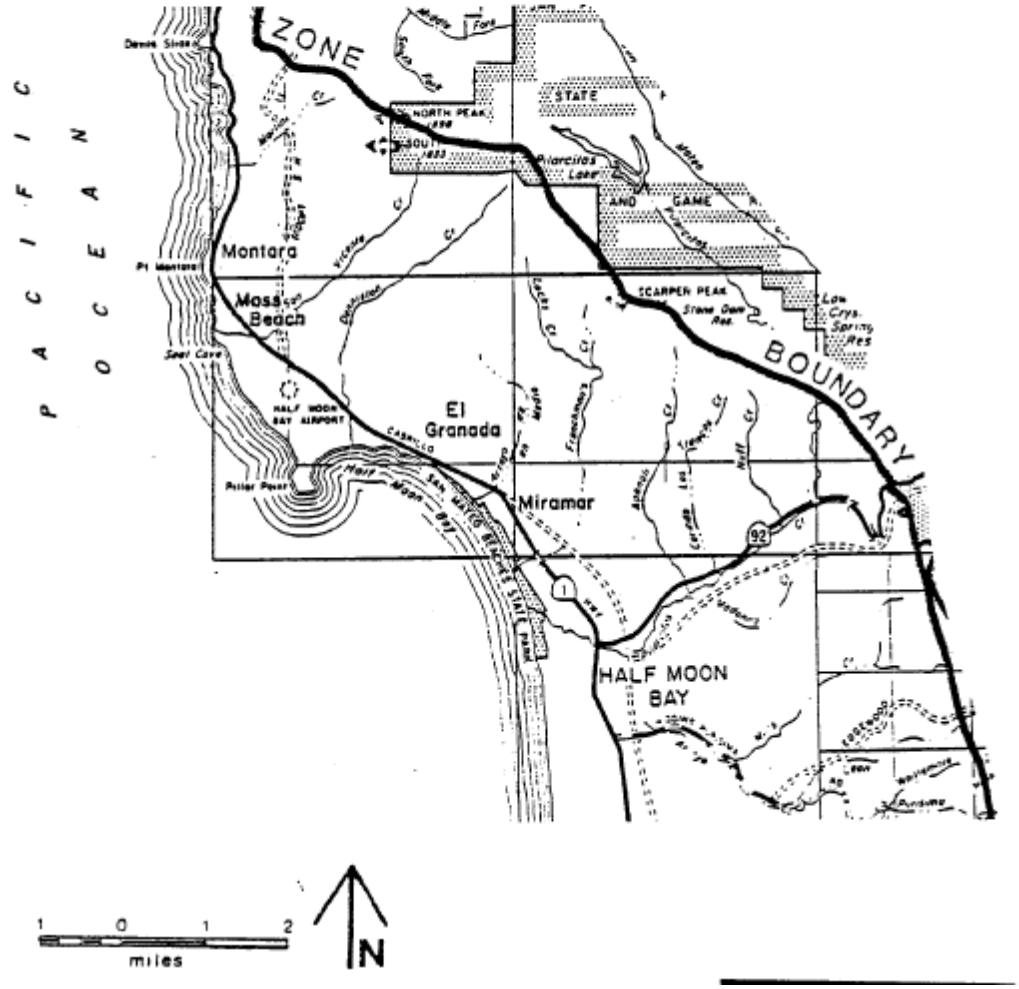
Thank you again for the opportunity to assist with analyses related to flood risks at the Church Street Infill site in the City of Half Moon Bay. Please do not hesitate to contact Balance Hydrologics if you have any questions related to the analyses summarized herein or if you need additional documentation related to the modeling and associated finding.

Sincerely,

BALANCE HYDROLOGICS, Inc.

Edward D. Ballman, P.E., CFM
Principal Engineer

Enclosures: Figures 1 and 2
Appendices A to D



A-2-HMB-12-011
Exhibit 6
Page 1 of 1

DISCLOSURE OF EX PARTE COMMUNICATIONS

Date and time of receipt of communication:
March 10, 2014 at 10:00 am

Location of communication:
Redwood City

Type of communication:
In person

Person(s) in attendance at time of communication:
Dante Hall, Bruce Ambo, Tony Condotti

Person(s) receiving communication:
Carole Groom

Name or description of project:

Item W14a – Appeal No. A-2-HMB-14-0004 (Half Moon Bay Drainage Maintenance)

LCP Amendment No. HMB-MAJ-1-11

Appeal No. A-2-HMB-12-005 (Stoloski)

Appeal No. A-2-HMB-12-011 (320 Church Street)

Tsunami Siren Appeal

Detailed substantive description of the content of communication:

The staff representatives of the City of Half Moon Bay indicated that the drainage maintenance appeal (Appeal No. A-2-HMB-14-0004) should be denied because this is routine work that needs to be done for the safety of residents. They indicated that it involves the clearing of vegetation in drains to reduce fire and flooding risks. As a part of the drainage maintenance appeal, the representatives indicated that the Kehoe Ditch has been identified as dispersal habit for garter snake and red legged frog, despite being a manmade ditch. They indicated that the city met with Fish & Wildlife Service and Army Corps of Engineers to make modifications to ensure a "no substantial issue" finding.

Regarding LCP amendments, the city staff is in agreement with coastal commission staff regarding proposed R-1 development standards; however they are not in agreement regarding the relocation of the architectural and historic code amendments. Because of this disagreement, city staff requested that the amendments could be addressed separately so that the items in agreement can be approved, while additional areas of disagreement could be resolved or further studied, or that staff could recommend denial to return to further study.

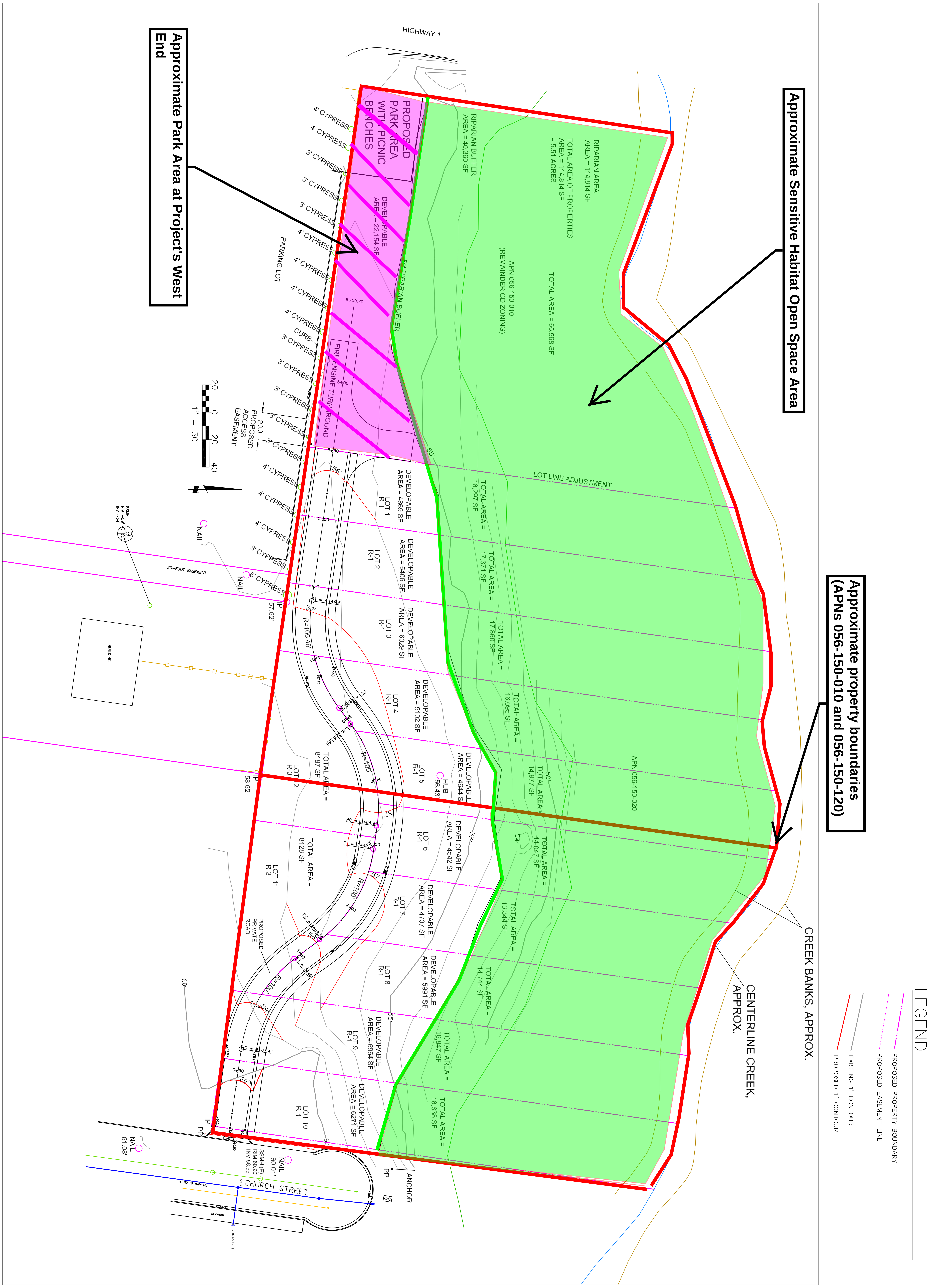
Regarding the Stoloski appeal, representatives indicated that the project should be approved because Dr. Jennings, an expert in sensitive habitat, attested that no red-legged frogs are located in the Pullman ditch.

Representatives indicate that appeal (Appeal No. A-2-HMB-12-011) was based on the safety of development in a tsunami inundation zone and its location in a floodplain, but studies have shown that even if natural disasters occur simultaneously, the property is safe. Furthermore, city staff indicated that coastal commission staff may be in support of traffic mitigation that involves purchasing another parcel elsewhere for retirement from development for each parcel developed. However, the city attorney indicated that this is unconstitutional because it doesn't mitigate traffic impact in a logical way.

City staff indicated that the appeal is based on the siren sound being disruptive to sensitive receptors near the ditch. City staff indicated that the City Council agreed to lower the volume by half; however engineers required it be amended back to full volume. This item went to the Coastal Commission in 2009.

Date: Apr 7 2014

Signature of Commissioner: Carole Groom

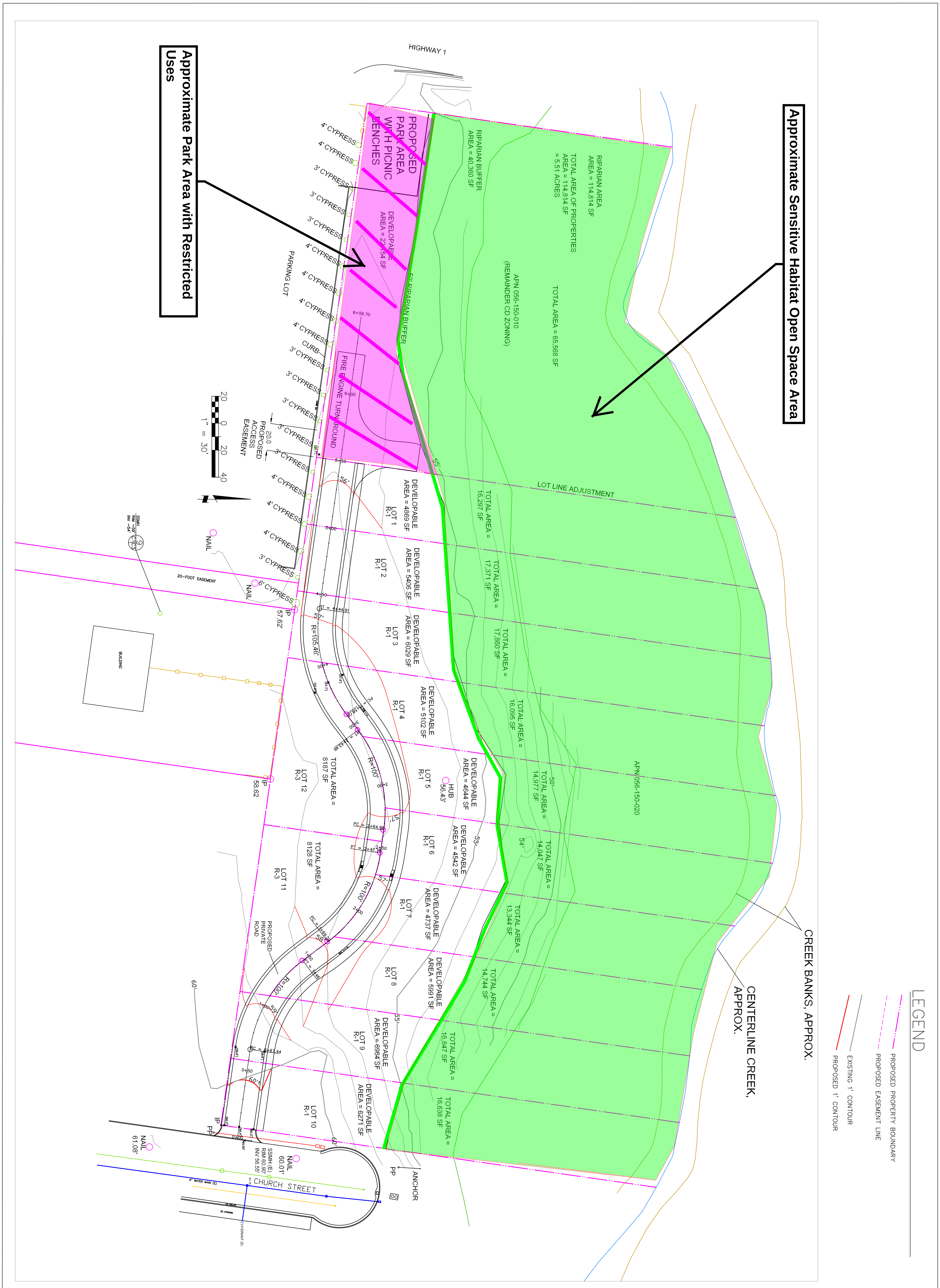


Approximate Park Area at Project's West End
Approximate Sensitive Habitat Open Space Area
Approximate property boundaries (APNs 056-150-010 and 056-150-120)
HIGHWAY 1
PROPOSED PARK AREA WITH PICNIC BENCHES
DEVELOPABLE AREA = 22,154 SF
RIPARIAN BUFFER AREA = 40,360 SF
RIPARIAN AREA AREA = 114,814 SF
TOTAL AREA OF PROPERTIES AREA = 114,814 SF = 5.51 ACRES
TOTAL AREA = 65,568 SF
APN 056-150-010 (REMAINDER CD ZONING)
APN 056-150-020
50' RIPARIAN BUFFER
FIRE ENGINE TURNAROUND
PARKING LOT
CURB
20.0' PROPOSED ACCESS EASEMENT
20-FOOT EASEMENT
LOT LINE ADJUSTMENT
1" = 30'
BUILDING
LOT 1 R-1 DEVELOPABLE AREA = 4869 SF
TOTAL AREA = 16,297 SF
LOT 2 R-1 DEVELOPABLE AREA = 5406 SF
TOTAL AREA = 17,371 SF
LOT 3 R-1 DEVELOPABLE AREA = 6029 SF
TOTAL AREA = 17,860 SF
LOT 4 R-1 DEVELOPABLE AREA = 5102 SF
TOTAL AREA = 16,095 SF
LOT 5 R-1 DEVELOPABLE AREA = 4644 SF
TOTAL AREA = 14,977 SF
LOT 6 R-1 DEVELOPABLE AREA = 4542 SF
TOTAL AREA = 14,047 SF
LOT 7 R-1 DEVELOPABLE AREA = 4737 SF
TOTAL AREA = 13,344 SF
LOT 8 R-1 DEVELOPABLE AREA = 5991 SF
TOTAL AREA = 14,744 SF
LOT 9 R-1 DEVELOPABLE AREA = 6964 SF
TOTAL AREA = 16,847 SF
LOT 10 R-1 DEVELOPABLE AREA = 6271 SF
TOTAL AREA = 16,638 SF
LOT 12 R-3 TOTAL AREA = 8187 SF
LOT 11 R-3 TOTAL AREA = 8128 SF
PROPOSED PRIVATE ROAD
CHURCH STREET
ANCHOR
CREEK BANKS, APPROX.
CENTERLINE CREEK, APPROX.
LEGEND
PROPOSED PROPERTY BOUNDARY
PROPOSED EASEMENT LINE
EXISTING 1' CONTOUR
PROPOSED 1' CONTOUR

SHEET C-4	PROPERTY MAP CHURCH STREET CONSTRUCTION	DATE: 1-28-11 DRAWN BY: CMK CHECKED BY: AZG REV. DATE: 3-4-11 REV. DATE: 4-26-11 REV. DATE: 9-20-11 REV. DATE: 4-23-12 REV. DATE: 9-24-12	Sigma Prime Geosciences, Inc. SIGMA PRIME GEOSCIENCES, INC. 111 VASSAR STREET HALF MOON BAY, CA 94019 (650) 728-3590 FAX: 728-3593

REGISTERED PROFESSIONAL ENGINEER CHARLES M. KISSICK No. 62264 CIVIL STATE OF CALIFORNIA

A-2-HMB-12-011
Exhibit 8
Page 1 of 1



Approximate Park Area with Restricted Uses
Approximate Sensitive Habitat Open Space Area
HIGHWAY 1
PROPOSED PARK AREA WITH PICNIC BENCHES
DEVELOPABLE AREA = 22,154 SF
RIPARIAN BUFFER AREA = 40,360 SF
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TOTAL AREA OF PROPERTIES AREA = 114,814 SF = 5.51 ACRES
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50' RIPARIAN BUFFER
FIRE ENGINE TURN AROUND
PARKING LOT
LOT LINE ADJUSTMENT
20-FOOT EASEMENT
20.0' PROPOSED ACCESS EASEMENT
1" = 30'
BUILDING
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CHURCH STREET
LOT 1 R-1 DEVELOPABLE AREA = 4869 SF
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CREEK BANKS, APPROX.
CENTERLINE CREEK, APPROX.
LEGEND
PROPOSED PROPERTY BOUNDARY
PROPOSED EASEMENT LINE
EXISTING 1' CONTOUR
PROPOSED 1' CONTOUR

PROPERTY MAP CHURCH STREET CONSTRUCTION	DATE: 1-28-11 DRAWN BY: CMK CHECKED BY: AZG REV. DATE: 3-4-11 REV. DATE: 4-26-11 REV. DATE: 9-20-11 REV. DATE: 4-23-12 REV. DATE: 9-24-12	Sigma Prime Geosciences, Inc. SIGMA PRIME GEOSCIENCES, INC. 111 VASSAR STREET HALF MOON BAY, CA 94019 (650) 728-3590 FAX: 728-3593

SHEET C-4

REGISTERED PROFESSIONAL ENGINEER CHARLES M. KISSICK No. 62264 CIVIL STATE OF CALIFORNIA

A-2-HMB-12-011
Exhibit 9
Page 1 of 1

320 Church Street Infill TOD Project, Half Moon Bay, California

Church Street Infill Project is located on 320 Church Street in downtown Half Moon Bay. The site is adjacent to the existing Shoreline Station retail, restaurant and office center and Coastside Farmers' Market, Our Lady of the Pillar Catholic Church property, the Half Moon Bay Police Department headquarters at the south boundary, the Pilarcitos Creek at its north boundary, Highway 1 at the west boundary, and Church Street at the East Boundary.

The proposal is to convert two parcels (APN. 056-150-010 & 056-150-120), zoned Commercial Downtown, into a small downtown neighborhood on the landward side of Highway 1. The project is planned to provide 10 clustered homes and 6 multifamily homes, an urban riparian conservation area, and pedestrian access to Main Street—with all of the associated amenities within a two to three block walk. The project location has a "Walk Score" of 88, which is higher than San Francisco and tied with New York City, and is "Very Walkable" for errands, restaurants, offices, recreation and transit.

In contrast to previous projects that have been required to do lot requirements for traffic impacts in Half Moon Bay, this project is not auto dependent, not expected to appreciably affect local traffic congestion, and is expected to improve per capita traffic for the region. This project is a transit-oriented development (TOD) located less than 250 yards from regional and local public transit, which reduces local and regional traffic. The project is in the downtown transit hub with an adjacent 511 Park & Ride lot with 54 spaces—serving residents living in non-TOD, auto-dependent locations.

In addition, an additional $27,500.00 traffic mitigation fee will be contributed to the Coastside Land Trust, the local Non-Profit organization which has independently retired over 52 lots in Half Moon Bay over the last 2 years, or similar organization[1]. The organization will use the fee to support additional lot retirements, in concert with the City of Half Moon Bay and other local traffic and open space preservation efforts.

Pilarcitos Creek is an important coastal resource in downtown Half Moon Bay and the project has been designed to minimize biological impacts and protect the aquatic and riparian habitat. A conservation easement will be provided to protect the creek, avoid wetlands, and permanently protect the important urban riparian habitat. The easement will include the remaining westerly parcel adjacent to Highway 1. In addition to carrying out the riparian habitat LCP policies, over 65% of this clustered downtown project will be protected in perpetuity.

The project has been continually improved to incorporate feedback and comments from local agencies, stakeholders, and initial comments from the California Coastal Commission. The original plans included direct vehicle intersection onto Highway 1, which has been eliminated and redesigned to discourage and dissipate traffic.

The fire turnaround hammer-head has been designed to replace the original access intersecting Highway 1. The hammerhead design has been redone to avoid the riparian buffer zone. The new design will not impact or encroach into the protected area.

- [1] Since 1997, Coastside Land Trust has worked to preserve open space from Montara to Half Moon Bay and beyond. CLT has acquired 143 parcels of land and holds 19 conservation easements along the coastline on both sides of Highway One.

Numerous biological measures have been incorporated in coordination the city and USFWS-certified biologist. For example, bio-filtration will be employed to retain overflow and bio-swales will be used to minimize water quality impacts. Dumping and other existing abuses currently occurring within the riparian corridor will be reduced or eliminated with the project.

The project helps implement regional sustainable communities strategies to reduce per capita local and regional vehicles miles traveled. In addition, the project will invest $30,000 for the City traffic mitigation fee, as well as contributing $27,500 to the Coastside Land Trust.

As redesigned and mitigated, two traffic analyses have shown that the project will not appreciably affect congestion and associated coastal recreational access along Highway 1 or Highway 92.

1. In Lieu Traffic Mitigation Fee.
a. The Applicant or any successor(s) in interest to the subject property shall pay a traffic mitigation in lieu fee to the Coastside Land Trust, City of Half Moon Bay, the Coastal Conservancy, or other entity acceptable to the Executive Director, of an amount not less than $27,500.00, to purchase parcels within the City of Half Moon Bay to be retired in perpetuity. Any portion of the fee that remains after five years shall be donated to Coastal Conservancy, Coastside Land Trust, or other organization acceptable to the Executive Director, for the purpose of coastal traffic mitigation and/or public recreational access improvements in San Mateo County. PRIOR TO EXPENDITURE OF ANY FUNDS CONTAINED IN
THIS ACCOUNT, the Executive Director must review and approve the proposed use of the funds as being consistent with the intent and purpose of this condition. Any alternative project shall provide for public access improvements in the vicinity of the project site that reduce vehicular traffic and promote public access to the shoreline.
b. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, but only after the Executive Director of the Coastal Commission has indicated, in writing, that the Commission has entered into an agreement with the entity accepting the funds (the "Agreement"), the Applicant shall provide to the identified recipient, through a financial instrument subject to the review and approval of the Executive Director, a in lieu mitigation fee in an amount not less than $27,500.00 as described in subsection A, payable to the recipient agency.
Note that the Coastside Land Trust in the last 2 calendar years has retired 52 vacant lots, mostly on the blufftops overlooking the beach in Half Moon Bay. This is an active Non-Profit organization whose purpose is dedicated to the preservation, protection and enhancement of the open space environment including the natural, scenic, recreational, cultural, historical, and agricultural resources of Half Moon Bay and the San Mateo County coast for present and future generations.

A-2-HMB-12-011
Exhibit 11
Page 1 of 1

Cameron Jeffs | Lic#: 01446257

Real Estate Broker - Bailey Creek Investments Inc.
Real Estate Sales & Services

Office: 650-726-0135
Cell: 415-990-5934
Fax: 650-560-6132
cameron@baileycreek.net

Welcome Cameron Jeffs

Welcome

Map | Email from May 30 2014 | Display | 0 | 0

Previous · Next · **1-16** of **16** at 25 per page

	Sent	MLS #	S	Street Address	Price	DOM	Bds	Baths	Sqft	Lot Size	City
☐	05/30/14	**81316158**	S	0 Thone	$25,000	273				15,000 Sqft	Half Moon Bay
☐	05/30/14	**81239546**	S	0 Rose AVENUE	$24,000	465				12,000 Sqft	Half Moon Bay
☐	05/30/14	**81041947**	S	0 ANNA AVE	$15,000	968				10,000 Sqft	Half Moon Bay
☐	05/30/14	**81041959**	S	0 THONE AVE	$12,500	698				7,500 Sqft	Half Moon Bay
☐	05/30/14	**81041969**	S	0 THONE AVE	$12,500	699				7,500 Sqft	Half Moon Bay
☐	05/30/14	**81041950**	S	0 ANNA	$10,000	1186				5,000 Sqft	Half Moon Bay
☐	05/30/14	**81041979**	S	0 THONE AVE	$10,000	1186				5,000 Sqft	Half Moon Bay
☐	05/30/14	81227005	S	0 Fairview Avenue	$5,000	29				8,400 Sqft	Half Moon Bay
☐	05/30/14	**81227008**	S	0 Bella Vista	$2,525	18				2,800 Sqft	Half Moon Bay
☐	05/30/14	**81107901**	S	0 Beach	$2,500	199				5,000 Sqft	Half Moon Bay
☐	05/30/14	**81013432**	S	0 Grand View Bl	$1,500	703				2,500 Sqft	Half Moon Bay
☐	05/30/14	81013448	S	0 Railroad Ave	$1,500	703				10,000 Sqft	Half Moon Bay
☐	05/30/14	**81013449**	S	0 Dolores AVENUE	$1,500	703				2,500 Sqft	Half Moon Bay
☐	05/30/14	**81013451**	S	0 Dolores Av	$1,500	703				5,000 Sqft	Half Moon Bay
☐	05/30/14	**81014094**	S	0 Grand View Ave	$1,500	699				2,500 Sqft	Half Moon Bay
☐	05/30/14	**81014097**	S	0 Channing Av	$1,500	699				2,500 Sqft	Half Moon Bay

Checked **0** | Print | Email | Mark as Viewed

CALIFORNIA COASTAL COMMISSION
NORTH CENTRAL COAST DISTRICT OFFICE
45 FREMONT ST, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5260
FAX (415) 904-5400
TDD (415) 597-5885

Memorandum

July 10, 2014

To: Commissioners and Interested Parties

FROM: Dan Carl, North Central Coast District Deputy Director
North Central Coast District

Re: **Additional Information for Commission Meeting**
Friday, July 11, 2014

Agenda Item	Applicant	Description	Page
F7a	City of Half Moon Bay LCP Amend. # 1-11	**Staff Report Addendum**	
F8a	A-2-HMB-12-011 Gibraltar Capital	**Staff Report Addendum**	
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F 7a

California Coastal Commission
North Central Coast District Office
45 Fremont Street, Suite 2000
San Francisco, California 94105-2219

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COASTAL COMMISSION

We are writing in regard to Agenda Number 7 (Local Coastal Programs), referencing the City of Half Moon Bay LCP Amendment No. HMB-MAJ-1-11.

Our parcel (056-057-220), which measures 50 x 100 feet, is subject to severe building size restrictions that should be remedied by approval of this amendment. We urge you to pass this request by the planning department of Half Moon Bay.

Thank you for your time and consideration. We have waited a long time for some relief from these building limitations.

Sincerely,

Alan and June Cozad

F8a

Ms. Stephanie Rexing
California Coastal Commission
North Central District Office
45 Fremont Street, Suite 2000
San Francisco, CA 94105

July 8, 2014

Dear Ms. Rexing:

Thank you for the June 27, 2014 notice of the de novo hearing on my appeal of the subdivision of 320 Church Street approved by the City of Half Moon Bay. The project is certainly improved, but I am concerned that the revised project does not conform to the City's Local Coastal Program in important ways. I am unable to travel 350 miles to personally testify at the Commission's meeting in Ventura, and so I hope that staff and the Commission will consider these written comments instead.

Upland habitat outside of riparian area is not recognized by staff as habitat. Required for frogs for foraging, and for snakes for thermoregulation. Also required for escaping high water. Their life stages includes the lands upland of the drip line of riparian vegetation to escape waters flooding their refuge, for estivation and foraging, and for thermoregulation. The buffer area required by 18.38.085(D) of at least fifty feet should begin at the edge of this upland habitat, not at the drip line of riparian vegetation. This is tacitly recognized by the similarity of proposed restrictions in the buffer area to the restrictions required by the LCP for the habitat of listed species. The net effect is that the listed species habitat is not acknowledged, and while the proposed conditions would protect upland habitat, it would not have the buffer required by LCP policy and zoning ordinance.

In addition, the project location was the subject of a June 13, 2012 comment from the U.S. Fish and Wildlife Service. LCP Policy 3-x and associated zoning ordinance requires conformance with USFWS regulations, but there is no record of an opinion of "no take" or "not likely to take" from the USFWS.

The applicant's wetlands report made a curious distinction between natural and artificial wetland. Even if the wetland at sample point 9 were the byproduct of earlier development, it is unclear how the LCP policies and zoning can be interpreted to justify the proposed absence of protection the allegedly "constructed" wetlands. I would appreciate clarification on this point, or a revision in the project conditions to impose the required buffer area.

In addition, the report of wetlands investigation was curiously restricted to areas outside the riparian corridor, when wetlands may be collocated within the riparian corridor. Since section 18.38.080(D) of the LCP's implementing ordinance requires a 100-foot buffer zone around wetlands, the presence of such a wetland within the out fifty feet of the riparian area would result in addition buffer requirements. I would appreciate reports of data from all points investigated within the riparian area, or a justification of why no locations inside the riparian area were investigated.

The project effectively rewards the unpermitted and un-remediated removal of riparian vegetation, which was well documented for the City of Half Moon Bay by Biotic Resources Group in an April 30, 2001 report entitled Wolverine Parcel Riparian Assessment. To avoid rewarding the violations documented in

this report, the riparian buffer area required by Coastal Act 30231, LCP policies 3-10 and 3-11, and implementing ordinance 18.38.075(D) should extend a minimum of fifty feet from the pre-violation edge of riparian vegetation clearly identified in that report, rather than the post-violation riparian drip line which has been maintained by mowing into blackberry and other riparian species.

Some conditions associated with the protection of staging areas appears to water down the protections afforded to environmentally sensitive habitat areas (e.g., "minimize construction encroachment on sensitive habitat areas" in condition 6.a, in contrast to avoidance of sensitive habitats required by condition 6.c.5 on page 11) and provides no explicit protection for buffer areas, including those which are being protected de facto as upland habitat for listed species.

Although the staff report cites LCP Policy 3-21 requiring the City to revise its Habitat Areas and Water Resources Overlay (HAWRO) to show the location of habitat for rare and endangered species such as the San Francisco garter snake, the required HAWRO update is not a condition of the project.

Thank you for obtaining the analysis of the flood hazards. Although the report was based on 1929 data does not reflect changes in topography such as significant amounts of fill on the north side of the Pilarcitos Creek near the proposed development, the report states that Highway 1's will act as a weir holding the water to a maximum height of between 59.4 and 59.6 feet. However, the areas marked "developable area" on the map (included as page 41 of the Commission's staff report) appear to be below this elevation. I remain unclear on what minimum elevation will be used for building pads, and did not fmd conditions require building pads to be sited where the ground level is above 59.6 feet.

I applaud the staff recommendation that the applicant protect coastal access by retiring a meaningful, legal development coastside entitlement each entitlement that this subdivision created. The applicant's proposal for in-lieu fees provides no assurance that an equivalent number of building entitlements on legally formed parcels would in fact be retired, and creates a conflict of interest for proposed recipients of those funds. I believe that the Coastside Land Trust has distanced itself from applicant's fee proposal.

I hope to listen to the hearing over the internet, and hope that the above concerns about mapping and protection of endangered species, wetland, and pre-violation sensitive habitats and their buffer areas will be addressed, that building sites' elevation above flood hazard will be included as a condition, and that the coastal access protection of requiring no net increase in development entitlements is affirmed.

Thank you for considering my comments.

Respectfully.

John Lynch (Appellant)
2098 Touraine Lane
Half Moon Bay, CA 94019