FINAL

SAN BERNARDINO

GENERAL PLAN

UPDATE AND

ASSOCIATED

SPECIFIC PLANS

ENVIRONMENTAL

IMPACT REPORT

SCH #2004111132



prepared for:

CITY OF SAN BERNARDINO

Contact: Terri Rahhal, Principal Planner

prepared by:

THE PLANNING CENTER

Contact: William Halligan, Esq., Director of Environmental Services

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SBC-15.0

SEPTEMBER 30, 2005

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Calculation Sheets

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1. Introduction

Section 15088 of the California Environmental Quality Act (CEQA) Guidelines requires the Lead Agency (City of Industry) to evaluate comments on environmental issues received from public agencies and interested parties who reviewed the Draft EIR and prepare written responses.

This document contains responses to comments received on the San Bernardino General Plan Update and Associated Specific Plans Environmental Impact Report (DEIR), State Clearinghouse #2004111132, during the public review period, which commenced on July 25, 2005 and closed on September 8, 2005. This document has been prepared in accordance with CEQA and the CEQA Guidelines and represents the independent judgment of the Lead Agency. This Response to Comments volume, together with the DEIR, technical appendices, and other written documentation prepared during the EIR process, as those documents may be modified by the City Council at the time of certification, will constitute the Final EIR, as defined in the State CEQA Guidelines, §15132, and the City of San Bernardino environmental document reporting procedures.

This Response to Comments package is organized as follows: Section 1 provides a brief introduction to this report. Section 2 provides a list of agencies and interested persons commenting on the DEIR. This section also contains individual comments followed thereafter by responses. To facilitate review of the responses, an index number (e.g., A-1, A-2, B-1) has been assigned to each comment and to its corresponding responses. Section 3 contains revisions to the Draft EIR as a result of the comments by agencies and interested persons as described in Section 3.

The responses to comments contained in this package contain material and revisions that will be added or made to the text of the Final EIR. City staff has reviewed this material and determined that none of this material constitutes the type of significant new information that requires a second recirculation period for further public comment under CEQA Guideline §15088.5. None of this new material indicates that the project will result in a significant new environmental impact not previously disclosed in the DEIR. Additionally, none of this material indicates that there would be a substantial increase in the severity of a previously identified environmental impact that will not be mitigated, or that there would be any of the other circumstances requiring recirculation described in §15088.5.



1.1 CEQA REQUIREMENTS REGARDING COMMENTS AND RESPONSES

CEQA Guidelines Section 15204 (a) outlines parameters for submitting comments, and reminds persons and public agencies that the focus of review and comment of Draft EIRs should be, "on the sufficiency of the document in identifying and analyzing possible impacts on the environment and ways in which significant effects of the project might be avoided or mitigated." Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible...CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by those submitting comments. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR."

CEQA Guidelines Section 15204 (c) further advises, "Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to Section 15064, an effect shall not be considered significant in the absence of substantial evidence." Section 15204 (d) also states, "Each responsible agency and trustee agency shall focus its comments on environmental information germane to that agency's statutory responsibility." Section 15204 (e) states, "This section shall not be used to restrict

1. Introduction

| the ability of reviewers to comment on the general adequacy of a document or of the lead agency to reject comments not focused as recommended by this section." |
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This section includes all written responses received on the DEIR and the City's responses to each comment.

Comment letters and specific comments are given letters and numbers for reference purposes. Where sections of the DEIR are excerpted in this document, the sections are shown indented. Changes to the DEIR text are shown in **bold and italics** for additions and strikeout for deletions.

The following is a list of agencies and persons that submitted comments on the DEIR during the public review period:

| Number Reference | Commenting Person/Agency | Date of Comment | Page No. |
|---------------------|---|--------------------|----------|
| Α | Britt W. Wilson, Morongo Band of Mission Indians | August 8, 2005 | 2-3 |
| | Brian Wallace, Southern California Association of | | |
| В | Governments | September 8, 2005 | 2-15 |
| С | Rohan Kuruppu, Omnitrans | September 8, 2005 | 2-19 |
| D | Lisa Belenky, Center for Biological Diversity | September 8, 2005 | 2-35 |
| Late Letters | | | |
| | Terry Roberts, State Clearing House and Planning | | |
| E | Unit | September 9, 2005 | 2-55 |
| | Daniel Kopulsky, California Department of | | |
| F | Transportation | September 12, 2005 | 2-59 |
| | Kathleen Rollings-McDonald, Local Agency | | |
| G | Formation Commission | September 14, 2005 | 2-65 |



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LETTER A – Morongo Band of Mission Indians (4 PAGES)

August 10, 2005

Ms. Terri Rahhal Principal Planner City of San Bernardino **Development Services Department** 300 North "D" Street San Bernardino, CA 92418-0001



MORONGO BAND OF MISSION INDIANS



Re: General Plan (including Specific Plans for Arrowhead Springs and University District)

Dear Ms. Rahhal,

On behalf of the Morongo Band of Mission Indians ("Tribe") including its Tribal Historian (Ernest H. Siva), thank you for meeting with me on August 8, 2005 to discuss the above referenced project in relation to consultation under Government Code §65352.3 (SB18). Also present was the city's Deputy Director/City Planner, Ms. Valerie Ross.

As you know, we discussed several things including general plan policies, standard conditions etc. I also subsequently downloaded the city's General Plan environmental documents and the cultural resources appendix. Based on our meeting and my review of the documents, the Tribe would like to make the following comments/requests under the consultation process:

Comments on EIR:

- 1. Page 5.4-2, sub-heading "California Senate Bill 18": First, the Tribe would like to commend the city of San Bernardino and your general plan consultant for putting this language in the EIR. The Tribe requests this during consultation and you are the first city to actually have it in the document prior to consultation. The Tribe does, however, note that the discussion about a "Traditional Tribal Cultural Site (TTCS) Register" is not known to the Tribe to be a part of the SB18 language. You may wish to review this. As far as our SB18 consultation, it has no direct impact on the Tribe but if it is incorrect, it should come out of the document.
- 2. Figure 5.42, Archaeological Sensitivities Map: No concerns here but, again, the Tribe would like to compliment the city for having such a planning tool available to your staff. Based on our conversation, it is my understanding that your planners would require Records Search/Cultural Resource surveys for projects that fall within those sensitive areas.



A2

A3

3. Page 5.4-25, sub-heading Policy 11.1.2: This policy indicates that an "Historic Resources Reconnaissance Survey" be maintained and updated and be used as part of the city's "environmental review process." The Tribe would like to request that if Native American cultural resources are included within that "Survey" that they are kept confidential and not available to the general public. It is unclear how the "Survey" would be used and that is why the Tribe is concerned over confidentiality of Native American resources. The Tribe suggests adding specific language about confidentiality to this policy point.

A4

- 4. Page 5.4-26, Policy 11.1.4: Same comment as above concerning confidentiality.
- 5. Page 5.4-27, Policy 11.5.1, Policy 11.5.1: Same comment as above concerning confidentiality.
- 6. Page 5.4-27, Policy 11.5.2: This policy indicates that mitigation measures will be developed for projects in archaeological sensitive areas to "...remove artifacts, and retain them for educational display." If these artifacts are of Native American origin, the Tribe should be consulted. And certainly if any project within those areas is subject to SB18 consultation, the Tribe will have consultation comments regarding the disposition of any artifacts.

A5

As you know from our meeting, if Native American artifacts are collected from a development site, the Tribe wants to right to seek the return of those artifacts. That does not mean that the Tribe is opposed to an educational facility having/using the artifacts, but the Tribe should be involved in determining the disposition of the artifacts. Therefore, if this policy concerns Native American cultural resources, some language about consulting with the Tribe, either as reviewing agency or under formal SB18 consultations, should be added to the policy statement.

7. Page 5.4-30, Existing Regulations and Standard Conditions, 4th bullet: See comment No. 1 above about SB18 "Register"; revise as appropriate.

ΙA

8. Page 5.4-31, Mitigation Measures: GP 5.4-1 and GP 5.4-2 appear to be duplicative. Also, the measures include mitigations for the accidental discovery of human remains, but does not have a measure for the accidental discovery of cultural resources (some areas that may show "low-sensitivity" to archaeological resources end up having buried components that were not expected and those finds need to be addressed). The Tribe requests that the following standard condition be added to the list of mitigation measures:

A8

| • | In the event that Native American cultural resources are discovered during project development/construction, all work in the immediate vicinity of the find shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the overall project may continue during this assessment period. | A8 | |
|--|---|-------|---|
| | If Native American cultural resources are discovered, the developer/contractor shall immediately contact the City which shall contact the Morongo Band of Mission Indians ("Tribe"). If requested by the Tribe, the City/Developer shall, in good faith, consult on the discovery and its disposition (e.g. avoidance, preservation, return of artifacts to tribe, etc.). | cont. | |
| artifa institu Amer The 8 abo dispo | e 5.4-34, 5 th bullet: This point indicates that any archaeological cts recovered "shall be donated to a qualified scientific ution". As indicated above, the Tribe may seek return of Native rican cultural resources – with or without formal SB18 consultation. Tribe suggests adding some language similar to that in comment No. ove about consulting with the Tribe in good faith regarding the osition of artifacts. (see AHS 5.4-3C, page 5.4-37 that seems to ess tribal concerns; perhaps use that language here.) | А9 | |
| to a d that I | ast four lines on this page contain similar language about "donation qualified scientific institution." Again, the Tribe recommends revising anguage to reflect the Tribe's desire to take ownership of Native rican cultural resources. | A10 | S |
| a qua | e 5.4-36, 5 th bullet point: This bullet point has the same "donation to alified scientific institution" language indicated above. Please revise comments above. | A11 | |
| | on the Archaeology Survey for the Arrowhead Springs Project by ronmental, January 20, 2005: | | |
| "reco mand Muse the p | e 12, Findings, 4 th line: This section indicates a mano was overed." There is no further information on the disposition of the co. Was it kept by SWCA? Given to San Bernardino County eum? The Tribe would like to request that the mano be donated by property owner to the Tribe if at all possible. The Tribe would also the site record/artifact record from SWCA for the provenance of the co. | A12 | |
| | | | |

As you know from our meeting, I stressed the fact that the city and the Tribe are

in formal, government-to-government consultations pursuant to Government

A13

Code §65352.3; the Tribe is NOT merely providing public comments or "reviewing agency" comments. Consultation is to be conducted in good faith and is considered complete when, if feasible, both parties agree. The Tribe's view is that written records of our consultation substantiates those "good faith" negotiations. In that light, the Tribe would ask that the city respond in writing to the Tribe's above comments, at which point we will know if we reached agreement or not. Until the Tribe receives your response, it shall consider our consultation open and ongoing.

A13 cont.

Thank you again for meeting with the Tribe and for having a well crafted document. Please contact me at (951) 755-5206 or Britt_wilson@morongo.org if I can provide any additional information.

D. H. M. MAIL

Project Manager & Cultural Resources Coordinator

c. Ernest H. Siva, Tribal Historian, Morongo Band of Mission Indians Thomas E. Linton, Director, Planning & Economic Dev. Dept, MBMI

- A. Response to Comments From Morongo Band of Mission Indians, Dated August 10, 2005.
- A-1 This comment acknowledges that the City and the Morongo Band of Mission Indians met on August 8, 2005 to discuss the project pursuant to SB 18.
- A-2 Beginning on page 5.4-2, Section 5.4-1 Environmental Setting of the DEIR starting with the second paragraph under the heading *California Senate Bill 18* has been modified (replaced) pursuant to the *General Plan Guidelines* 2005 Supplement (also known as Tribal Consultation Guidelines) published by the Governor's Office of Planning Research as follows:

Senate Bill 18, signed into law in September 2004, requires cities and counties to notify and consult with California Native American Tribe(s) about proposed local land use planning decisions for the purpose of protecting Traditional Tribal Cultural Places ("cultural places"). It requires establishment of a Native American Traditional Tribal Cultural Site (TTCS) Register, which would list all Native American sites deemed by the NAHC to be sacred to local tribes. SB 18 provides a new definition of TTCS requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. Previously a site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities.

SB 18 institutes as new process which would require a city or county to consult with the NAHC and any appropriate Native American tribe for the purpose of preserving relevant TTCSs prior to the adoption, revision, amendment, or update of a city's or county's general plan or specific plan. As of March 1, 2005, cities and counties must send their general plan and specific plan proposals to those California Native American Tribes that are on the NAHC's contact list and have traditional lands located within the city or county's jurisdiction. To help local officials meet these new obligations, SB 18 requires the Governor's Office of Planning and Research (OPR) to amend its General Plan Guidelines to include advice to local government on how to consult with California Native American Tribes.



Developed in cooperation with the NAHC, the OPR guidelines include advice for consulting with California Native American Tribes for:

- The preservation of, or the mitigation of impacts to cultural places;
- Procedures for identifying through the NAHC the appropriate California Native American tribes;
- Procedures for continuing to protect the confidentiality of information concerning the specific identity, location, character, and use of cultural places; and
- Procedures to facilitate voluntary landowner participation to preserve and protect the specific identity, location character, and use of cultural places [GC §65040.2(g)].

Also under SB 18, a new process requires the Lead Agency on a project covered by CEQA to ask the NAHC whether the proposed project is within a 5 mile radius of a TTCS. The NAHC would have 30 days to inform the Lead Agency if the proposed project is within proximity to a TTCS and another 45 days to determine whether the project would have an adverse impact on the TTCS. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's EIR. If both the City and the tribe agree that adequate mitigation or preservation measures cannot be take, then neither party is obligated to take action.

Senate Bill 18 was signed into law in September 2004 and went into effect on March 1, 2005. It places new requirements upon local governments for developments within or near Traditional Tribal Cultural Places (TTCP). Per SB 18, the law requires local jurisdictions to provide opportunities for involvement of California Native Americans tribes in the land planning process for the purpose of preserving traditional tribal cultural places. The General Plan Guidelines, 2005 Supplement (also known as Tribal Consultation Guidelines) published by the Governor's Office of Planning and Research recommends that the Native American Heritage Commission (NAHC) provide written information as soon as possible but no later than 30 days to inform the Lead Agency if the proposed project is determined to be in proximity to a TTCP and another 90 days for tribes to respond to a local government if they want to consult with the local government to determine whether the project would have an adverse impact on the TTCP. There is no statutory limit on the consultation duration. Forty-five days before the action is publicly considered by the local government council, the local government refers action to agencies, following the CEQA public review time frame. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's EIR. If both the City and the tribe agree that adequate mitigation or preservation measures cannot be taken, then neither party is obligated to take action.

Per SB 18, the law institutes a new process which would require a city or county to consult with the NAHC and any appropriate Native American tribe for the purpose of preserving relevant TTCP prior to the adoption, revision, amendment, or update of a city's or county's general plan. While SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, the Final Tribal Guidelines advises that SB 18 requirements extend to specific plans as well, as State planning law requires local governments to use the same process for amendment or adoption of specific plans as general plans (defined in Government Code §65453). In addition, SB 18 provides a new definition of TTCP requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. Previously, the site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities. In addition, SB 18 law also amended Civil Code §815.3 and adds California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting their cultural places.

- A-3 The commentor is correct. Mitigation measures 5.4-1 and 5.4-2 in Section 5.4.7.1 address this issue by stating that City staff shall require studies to document the presence or absence of historic, archeological and/or paleontological resources in areas of documented or inferred resource presence.
- A-4 This comment expresses concern that Native American cultural resources, which are identified in the Cultural Resources Reconnaissance Survey (Policy 11.1.2 of the General Plan), be kept confidential and appropriate language added the General Plan. Accordingly, the following changes to Policies 11.1.2, 11.1.4, and 11.5.1 have been incorporated into the Draft General Plan. Policy 11.1.2 on page 5.4-25 of Section 5.4.3.1 is hereby modified as follows:

Policy 11.1.2: Maintain and update the Historic Resources Reconnaissance Survey database files of historic, architectural, and cultural resources conducted in 1991, and integrate it into the City's ordinance and environmental review process. **Prior to public distribution, Native American tribes should be consulted to address any issues of confidentiality.**

Policy 11.1.4 on page 5.4-26 of Section 5.4.3.1 is hereby modified as follows:

Policy 11.1.4: Compile and maintain an inventory, based on the survey, of the Planning Area's significant historic, architectural, and cultural resources. **Prior to public distribution, Native American tribes should be consulted to address any issues of confidentiality.**

Policy 11.5.1 on page 5.4-27 of Section 5.4.3.1 is hereby modified as follows:

Policy 11.1.5: Continue to adopt historic district and overlay zone ordinances as described in the Historic Resources Reconnaissance Survey Report. Consider the designation of Historic Districts and Historic Overlay Zones as described in the Historic Resources Reconnaissance Survey Report. **Prior to public distribution, Native American tribes should be consulted to address any issues of confidentiality.**

A-5 This comment expresses concern over the disposition of Native American artifacts. Accordingly, the following changes to Policy 11.5.2 has been incorporated into the Draft General Plan, Policy 11.5.2 on page 5.4-27 of Section 5.4.3.1 is hereby modified as follows:

Policy 11.5.2: Develop mitigation measures for projects located in archaeologically sensitive areas to protect such locations, remove artifacts, and retain them for educational display. **Native American tribes should be consulted to determine the disposition of any Native American artifacts discovered.**

- A-6 Page 5.4-30, Section 5.4.4 Existing Regulations and Standard Conditions, fourth bullet, is hereby modified as follows:
 - State Bulletin 18, Traditional Tribal Cultural Places, signed into law in late 2004, places new requirements within CEQA for developments within or near Traditional Tribal Cultural Places. This Bill requires establishment of a Native American Traditional Tribal Cultural Site Register (TTCS Register), which would list all Native American sites deemed to be sacred to local tribes by the Native American Heritage Commission (NAHC). Under SB 18, a new process that would require the lead agency on a project covered by CEQA to ask the NAHC whether the proposed project is within a 5-mile radius of a TTCS. The NAHC would have 45 days to inform the lead agency if the proposed project is determined to be in proximity to a TTCS and another 75 days to determine whether the project would have an adverse impact on the TTCS. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's Environmental Impact Report (EIR). If there is no agreement, either the NAHC may determine lesser mitigations that would be acceptable for inclusion in the EIR or they may ask the Attorney General to take appropriate legal action against the project proponents.
 - SB 18 also institutes a new process which would require a city or county to consult with the NAHC and any appropriate Native American tribe for the purpose of preserving relevant TTCSs prior to the adoption, revision, amendment, or update of a city's or county's general plan. In addition SB 18 gives a new definition of TTCS requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. Previously, the site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities.
 - Senate Bill 18 was signed into law in September 2004 and went into effect on March 1, 2005. It
 places new requirements upon local governments for developments within or near Traditional
 Tribal Cultural Places (TTCP). Per SB 18, the law requires local jurisdictions to provide
 opportunities for involvement of California Native Americans tribes in the land planning



process for the purpose of preserving traditional tribal cultural places. The General Plan Guidelines, 2005 Supplement (also known as Tribal Consultation Guidelines) published by the Governor's Office of Planning and Research recommends that the Native American Heritage Commission (NAHC) provide written information as soon as possible but no later than 30 days to inform the Lead Agency if the proposed project is determined to be in proximity to a TTCP and another 90 days for tribes to respond to a local government if they want to consult with the local government to determine whether the project would have an adverse impact on the TTCP. There is no statutory limit on the consultation duration. Forty-five days before the action is publicly considered by the local government council, the local government refers action to agencies, following the CEQA public review time frame. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's EIR. If both the City and the tribe agree that adequate mitigation or preservation measures cannot be taken, then neither party is obligated to take action.

- A-7 This comment expresses concern over the seemingly duplicative nature of mitigation measures 5.4-1 and 5.4-2. Although similar, mitigation measures 5.4-1 and 5.4-2 are not duplicative. Mitigation measure 5.4-1 addresses historic resources, such as historic structures, while mitigation measure 5.4-2 addresses archeological and/or paleontological resources.
- A-8 Comment 1-8 is twofold. First, the Morongo Band of Mission Indians provides comment on the DEIR and requests an additional mitigation measure related to the accidental discovery Native American resources be placed in Section 5.4.7.1, Mitigation Measures for the San Bernardino General Plan. Second, as a part of the formal SB 18 consultation, which is still ongoing, the Morongo Band of Mission Indians expresses procedural concern over being consulted to determine the disposition of Native American cultural resources and the right to seek the return of discovered artifacts. Part A of the following response will address the DEIR comment and part B will address the SB 18 procedural requests.
 - (A) As to the General Plan Update DEIR comment, the City acknowledges the Tribe's desire to protect, preserve and be consulted anytime Native American resources are discovered, accidentally or otherwise. The accidental discovery of archaeological resources is governed by Section 21082 of the Public Resources Code (CEQA Guidelines Section 15064.5 (f)). The existing regulation states that as part of the objectives, criteria, and procedures required by Section 21082, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. Accordingly, the following language has been added to page 5.4-2, Section 5.4.1, Environmental Setting, Regulatory Background, California Public Resources Code, as the 4th bullet:
 - As part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place. (CEQA Guidelines Section 15064.5 (f)).

This General Plan DEIR is a program level document that broadly looks at the General Plan update's impact on Cultural Resources. However, the mitigation measure requested in comment A-8 is a specific, project-level mitigation measure regulating how to handle accidentally found Native American cultural resources. This type of mitigation measure is appropriate for a project specific EIR in which future entitlements provide triggers for ensuring compliance with the mitigation measure (i.e., approval of a Conditional Use Permit or issuance of a grading permit). However, a broad level program EIR, such as the current San Bernardino General Plan Update and Associated Specific Plans DEIR, is not an appropriate vehicle for project-specific mitigation measures because there are no future approvals or entitlements that will trigger enforcement of said mitigation measures.

Existing regulations protect the accidental discovery of Native American cultural artifacts. Further, as stated in Section 5.4.3.1, adoption of the General Plan in itself will not directly affect any archeological or paleontological resources. As a result, requested mitigation measure will not be included in the General Plan FEIR. However, the procedures outlined within the mitigation measure itself are addressed in part B below.

(B) As a part of the formal SB 18 consultation, the Morongo Band of Mission Indians expresses procedural concern over being consulted to determine the disposition of Native American cultural resources and the right to seek the return of discovered artifacts. Pursuant to Section 21082 of the Public Resources Code and as a part of the formal SB 18 consultation, which is still ongoing, the Morongo Band of Mission Indians and the City will need to establish a formal procedure for the disposition of Native American artifacts and cultural resources discovered within the City. Once agreed upon, this procedure will be the tool through which General Plan Policies related to Native American cultural and historic preservation are implemented, particularly revised policies 11.1.1, 11.1.4, 11.5.1 and 11.5.2 (see comments A-4 and A-5 above).



The details of the procedure for notifying the Morongo Band of Mission Indians upon the discovery of Native American cultural resources, the type and extent of the consultation that will take place to determine the disposition on Native American artifacts discovered, and the procedure through which the Tribe may seek the return of cultural resources will have to worked out between the Tribe and City of San Bernardino as a part of the SB 18 consultation process. The establishment of this process is beyond the scope of the General Plan Update DEIR.

- A-9 This comment expresses the Tribe's desire to be consulted to determine the disposition of Native American artifacts. Page 5.4-33, Section 5.4.7.1, Mitigation Measure AHS 5.4-1B, has been revised accordingly as follows:
- AHS 5.4-1B The DEIR concludes that there are or may be significant historical structures/resources not currently ascertainable within areas where ground disturbing activity is proposed by the project. Therefore, prior to issuance of the first preliminary or precise grading permit for development in the Arrowhead Springs Specific Plan area, the landowner or subsequent project applicant shall provide evidence that an qualified historic preservation professional has been retained by the landowner or subsequent project applicant, and has conducted a site survey of the development area at such time as all ground surfaces are visible after current uses are removed. If any sites are discovered, the historian shall conduct surveys and/or test level investigations. Testing and evaluation may consist of surface collection and mapping, limited subsurface excavations, and the appropriate analyses and research necessary to characterize the artifacts and deposit from which they originated. Upon completion of the test level investigations, for sites are

determined to be unique a "historical resource" as set forth in CEQA Guidelines Section 15064.5, the following measures shall be undertaken: the historian shall submit its recommendations to the landowner or subsequent project applicant and the Director of Community Development on the measures that shall be implemented to protect the site. Appropriate measures could include preservation in place through planning construction to avoid the historical resource, incorporation into greenspace, parks, or open space, data recovery excavations of the finds or compliance with the Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic buildings (1995).

- Preparation of a research design for those sites determined to the "historical resources" that cannot be avoided that describes the recommended field investigations, and makes provisions for adequately recovering the scientifically consequential information from and about the "historical resource."
- Conducting site excavations in accordance with the research design with an
 emphasis on obtaining an adequate sample for analysis within the limits of the
 research questions being addressed. Special studies such as pollen analyses,
 soil analyses, radiocarbon dating, and obsidian hydration dating should be
 conducted as appropriate.
- Monitoring of all field excavations by a Native American representative.
- Preparation of a final report of the Phase 3 data recovery work and submittal of the research design and final report to the South Central Coastal Information Center (SCCIC), and other agencies, as appropriate.
- If any Native American archaeological artifacts are recovered, the project applicant shall contact the City, which shall in turn contact the Morongo Band of Mission Indians and any other designated Tribe(s)' tribal representative, as determined by the Native American Heritage Commission (NAHC) to notify them of the discovery. The applicant shall coordinate with the City of San Bernardino and the designated Tribe(s) to determine, in good faith, the appropriate disposition Native American artifacts and the designated Tribe(s) shall be given the opportunity to seek the return of any Native American artifacts discovered. Any non-Native American archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Director of Community Development where they would be afforded long-term preservation to allow future scientific study.

disturbing activities. These consultants shall be selected from the roll of qualified

A-10 This comment expresses the Tribe's desire to be consulted to determine the disposition of any Native American artifacts. Page 5.4-34, Section 5.4.7.1, Mitigation Measure AHS 5.4-2A, has been revised accordingly as follows:

AHS 5.4-2A Prior to issuance of the first preliminary or precise grading permit, and for any subsequent permit involving excavation to increased depth, the landowner or subsequent project applicant shall provide evidence that an archaeologist and/or paleontologist have been retained by the landowner or subsequent project applicant, and that the consultant(s) will be present during all grading and other significant ground

archaeologist and paleontologists maintained by the County of San Bernardino. Should any archeological/paleontological resources be discovered, the monitor is authorized to stop all grading in the immediate area of the discovery, and shall make recommendations to the Director of Development Services on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. If the resources are determined to be "historic resources" at that term is defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Director of Development Services. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in greenspace, parks or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Director approves the measures to protect these resources. If any Native American paleontological or archaeological artifacts are recovered as a result mitigation the City shall contact the Morongo Band of Mission Indians and any other designated Tribe(s)' tribal representative, as determined by the Native American Heritage Commission(NAHC) to notify them of the discovery. The applicant shall coordinate with the City of San Bernardino and the designated Tribe(s) to determine, in good faith, the appropriate disposition Native American artifacts and the designated Tribe(s) shall be given the opportunity to seek the return of any Native American artifacts discovered. Any non-Native American paleontological or archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Director of Community Development where they would be afforded long-term preservation to allow future scientific study.



- A-11 This comment expresses the Tribe's desire to be consulted to the determine the disposition of Native American artifacts. Page 5.4-35, Section 5.4.7.1, Mitigation Measure AHS 5.4-2C, has been revised accordingly as follows:
- AHS 5.4-2C

The EIR concludes that there are or may be significant archaeological resources within areas where ground disturbing activity is proposed by the project. Therefore, prior to the first preliminary or precise grading permit for development in the Arrowhead Springs Specific Plan area, each **prehistoric** and **historic archeological site** (listed below and described in Table 5.4-3) located within the project grading footprint must be tested and evaluated, following clearing and scraping activities.

- CA-SBR-2268/H, including the four loci
- CA-SBR-6870H
- CA-SBR-7019H
- CA-SBR-7020H
- CA-SBR-7022H
- CA-SBR-7049H
- P1071-21
- P36-017732

Testing and evaluation may consist of surface collection and mapping, limited subsurface excavations, and the appropriate analyses and research necessary to characterize the artifacts and deposit from which they originated. Upon completion of the test level investigations, for sites are determined to be unique archaeological sites or historical resources as set forth in CEQA Guidelines Section 15064.5, the following

measures shall be undertaken: the archaeologist shall submit its recommendations to, the landowner or subsequent project applicant and the Director of Community Development on the measures that shall be implemented to protect the sites. Appropriate measures for unique archaeological resources or historical resources could include preservation in place through planning construction to avoid archaeological sites; incorporation of sites within parks, greenspace, or other open space; covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site or deeding the site into a permanent conservation easement. When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code.

- Preparation of a research design for those sites determined to the "historical resources" that cannot be avoided that describes the recommended field investigations, and makes provisions for adequately recovering the scientifically consequential information from and about the "historical resource."
- Conducting site excavations in accordance with the research design with an
 emphasis on obtaining an adequate sample for analysis within the limits of the
 research questions being addressed. Special studies such as pollen analyses,
 soil analyses, radiocarbon dating, and obsidian hydration dating should be
 conducted as appropriate.
- Monitoring of all field excavations by a Native American representative.
- Preparation of a final report of the Phase 3 data recovery work and submittal of the research design and final report to the South Central Coastal Information Center (SCCIC), and other agencies, as appropriate.
- If any Native American archaeological artifacts are recovered, the project applicant shall contact the City, which shall in turn contact the Morongo Band of Mission Indians and any other designated Tribe(s)' tribal representative, as determined by the Native American Heritage Commission(NAHC) to notify them of the discovery. The applicant shall coordinate with the City of San Bernardino and the designated Tribe(s) to determine, in good faith, the appropriate disposition Native American artifacts and the designated Tribe(s) shall be given the opportunity to seek the return of any Native American artifacts discovered. Any non-Native American archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Director of Community Development where they would be afforded long-term preservation to allow future scientific study.
- A-12 Comment requests information on the recovery of a mano. This is a part of the SB 18 Consultation, and not an DEIR issue. Please contact SWCA and the City of San Bernardino to facilitate the disposition of the artifact and for further information on the mano. This is an excellent opportunity to establish the procedures discussed in comment A-8B above.

A-13 Comment noted. The SB 18 consultation is considered open and ongoing.

LETTER B – Southern California Association of Governments (1 page)



ASSOCIATION of GOVERNMENTS

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Los Angeles - Hash Grunie, Cuddly, Janice Hahr,
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- Wess, Los Angeles - Dornes Carlos, Angeles
- Orange County, Chris Morby, Orange Courty

Orange County: Chris Norby, Orange County:
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Richard Chavez, Anaherim - Debbie Cook,
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Beach

Roberts, Jennecula
San Bernardino County: Gary Ovitt, San
Bernardino County: Lawrence Dale, Barstow -
Paul Eaton, Montatia - Lee Ann Carrai, Grand
Jerrare - Timi Issper, Jown of Apple Valley - Larry
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Alan Wapner, Ontario
Ventura County: Judy Mikels, Ventura County -
Glein Bererra, Simi Valley - Call Morehouse, San
Buenaventura - Ioni Young, Port Hueneme
Chaese County -
Transportation Authority: Jou

Orange County Transportation Authority: Lou Correa, County of Orange

Riverside County Transportation Commission: Robin Lowe, Hemet

6 September 2005

Ms. Terri Rahhal Principal Planner City of San Bernardino 300 North D Street San Bernardino, CA 92418-0001

> Comments on the Notice of Completion of a Draft Environmental Report for the City of San Bernardino General Plan Update

SCAG No. 120050480

Dear Ms. Rahhal:

Thank you for submitting the Notice of Completion of a Draft Environmental Report for the City of San Bernardino General Plan Update to SCAG for review and comment. As areawide clearinghouse for regionally significant projects, SCAG reviews the consistency of local plans, projects, and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and

SCAG staff has evaluated your submission for consistency with the Regional Comprehensive Plan and Guide (RCPG), the Regional Transportation Plan (RTP), and the Compass regional growth vision. The Draft EIR addresses SCAG's policies and forecasts appropriately and has provided sufficient explanation of how the project helps meet and support regional goals. Based on the information provided in the EIR we have no further

A description of the proposed Project was published in the July 15-31, 2005 Intergovernmental Review Clearinghouse Report for public review and comment.

If you have any questions, please contact me at (213) 236-1851. Thank you.

Sincerely,

Brian Wallace Associate Regional Planner Intergovernmental Review

DOCS # 113661v1





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- B. Response to Comments From Southern California Association of Governments, Dated September 6, 2005
- B-1 This comment acknowledges that the DEIR has adequately addressed SCAG's policies and forecasts, and there are no further comments. Comment is herby noted, included in the official environmental record of the proposed project, and will be forwarded to the appropriate City of San Bernardino decision makers for their review and consideration.



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Letter C - Omnitrans (13 pages)



September 8, 2005

Ms. Terri Rahhal Principal Planner City of San Bernardino 300 North "D" Street San Bernardino, CA 92418-0001

RE: General Plan Draft Environmental Impact Report (DEIR), SCH# 2004111132

Dear Ms. Rahhal:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) for the above referenced project. The project is a DEIR for the comprehensive update of the City's General Plan. This provides a perfect opportunity to incorporate transit supportive policies within the General Plan that can support and improve the quality of public transportation service in the City of San Bernardino.

As part of the DEIR, a traffic study was completed to determine the impacts that the General Plan Land Use designations would have on the City. Although several segments and intersections would require mitigation, a majority of the points surveyed would not require any form of mitigation.

While transit corridors have not been included in the traffic impact report, we feel that such transit corridors will not have a major impact on a roadway's level of service (LOS) given the reports findings. Currently, Omnitrans is producing a traffic model that will help gauge the impact of a transit corridor on San Bernardino's road network. The model has been accepted by the Federal Transit Administration (FTA), Southern California Association of Governments (SCAG), and San Bernardino Associated Governments (SANBAG). Once the final outputs have been produced, we will gain a clear understanding of the true impacts of rapid transit service in the valley.

We would like to take this opportunity again to request that the transit supportive language on the attached document be included in the City's General Plan update. Doing so demonstrates that the local government supports public transportation which in turns, allows us to acquire funding to implement such service. Let me reassure you that including these goals and policies will not commit the City into unwanted transit service. Improvements such as transit corridors often require City approval before actual design/engineering can begin.

Omnitrans • 1700 West Fifth Street • San Bernardino, CA 92411 Phone: 909-379-7100 • Web site: www.omnitrans.org • Fax: 909-889-5779

Service the communities of China China Hills Colton County of San Remarding Footana Grand Tarraco Highland



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Ms. Terri Rahhal September 8, 2005 – Page 2

Thank you again for this opportunity to provide comments. We look forward to continuing to work with the City to improve the mobility needs of the people of San Bernardino. Should you have any questions, please feel free to contact me at 909.379.7251.

Respectfully,

Rohan Kuruppu

Director of Planning

cc: Fred Wilson, City Administrator, City of San Bernardino

Teri Baker, Senior Administrative Analyst, City of San Bernardino

Valerie Ross, City Planner, City of San Bernardino

Encl.

TRANSIT SUPPORTIVE PLANS AND POLICIES THE CITY OF SAN BERNARDING GENERAL PLAN – JANUARY 2005

The Federal Transit Administration (FTA), in reviewing funding for transit projects, looks favorably on projects that have strong transit supportive policies in regional and local plans, and zoning ordinances. In the case of the E Street Transit Corridor project, these transit supportive policies may well mean the difference between approval and rejection of our grant application.

We have reviewed the City of San Bernardino Draft General Plan dated January 2005 to see if it provides the type of language that will receive a positive review from FTA. There are several items in the draft General Plan that are supportive of transit in general and of the E Street sbX project in particular. For example, recognition of the E Street sbX project is provided in two separate locations. Land use policies 2.2.3, 2.3.2 and 2.3.7 are supportive of the development of transportation corridors. Statements in the University Strategic area and the E Street Corridor Strategic Area are transit-supportive. Circulation Element Goal 6.6 contains several transit-supportive policies.

While these transit-supportive polices have been provided in the draft General Plan, we believe that stronger transit supportive polices will be needed that reflect the recent transit corridor analysis to date in order to achieve a positive FTA review.

Background

Omnitrans prepared a System-wide Transit Corridor Plan in September 2004 which analyzed seven major transit corridors in the Omnitrans system. This plan determined the E Street Corridor from California State University San Bernardino to Loma Linda University and Medical Center in the City of Loma Linda as the highest priority corridor for enhanced high-quality rapid transit services and improvements. The E Street Corridor was extended north to Palm Avenue during the public involvement process. Omnitrans is currently preparing an E Street Transit Corridor Alternative Analysis which will result in the selection and adoption of a locally preferred alternative (LPA) for the E Street Corridor. The selection of the LPA is expected in late 2005 or early 2006.

The analysis of the corridor is following the overall planning and project development process for federally-funded transit project prescribed by the FTA and is referred as the New Start Process. In reviewing and rating transit projects for funding, FTA includes a number of evaluation factors. An important evaluation criterion is "Existing Land Use, Transit Supportive Land Use Polices and Future Patterns." The land use rating categories involved included:

| I. Existing Land Use |
|---|
| II. Transit Supportive Plans and Policies |
| III. Performance and Impacts of Policies |
| IV. Other Land Use Considerations |

Table 1 (Attachment A) explains the rating categories, information requested by FTA and documentation regarding regional and local policies.

Page 1 of 6

City of San Bernardino – General Plan Comments Omnitrans 1700 W. 5th Street, San Bernardino, CA 92411

Draft General Plan Goals Related to Transit

A note in the margin on pages 2-69 and 6-13 of the Draft General Plan dated January 2004 acknowledges that the E Street Transit Corridor is underway. However, although transit is mentioned in the document, premium transit service and development adjacent to it is not emphasized as a solution to address traffic congestion and air quality concerns or as a strategy to encourage new development.

Policies and goals related to transit are primarily included in Chapter 6 Circulation, Public Transit and Chapter 2 Land Use.

Chapter 6 - Circulation and Suggested Policies

Pages 6-27 and 6-28 of the Draft General Plan includes a public transit discussion and the public transit goals and policies for Section 6 Circulation. The language in the draft General Plan is provided below, together with our suggestions for revisions (in **bold** print).

PUBLIC TRANSIT

As the population grows, the level of congestion on streets will also rise. As a result, it will become increasingly important to provide alternate means of transportation.

Public transportation plays an important role in providing a well-balanced transportation system for the City. A well planned and efficient public transportation system provides an essential primary mode of transportation to those without access to automobiles and an alternative mode of travel to the motorists to help reduce the demand and congestion on the City's street network. The various modes of public transportation including bus, commuter rail, demand responsive transportation, etc., should provide efficient connectivity and integration via coordinated park-and-ride facilities and multi-modal terminals.

The City plays a vital role in the use of transit through sound land use planning efforts and ensuring that developments are designed in a manner that facilitates the provision of transit services.

Goal 6.6 – Promote a network of multi-modal transportation facilities that are safe, efficient, and connected to various points of the city and the region.

- Policy 6.6.1: Support the efforts of regional, state, and federal agencies to provide additional local and express bus service in the City.
- Policy 6.6.2: Create a partnership with Omnitrans to identify public transportation infrastructure needs that improve mobility.

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City of San Bernardino - General Plan Comments Omnitrans 1700 W 5th Street, San Bernardino, CA 92411

- Policy 6.6.3: In cooperation with Omnitrans, require new development to provide transit facilities, such as bus shelters and turnouts, as necessary and warranted by the scale of the development. (LU-1)
- Policy 6.6.4: Ensure accessibility to public transportation for seniors and persons with disabilities.
- Policy 6.6.5: In cooperation with Omnitrans, explore methods to improve the use, speed, and efficiency for transit services. These methods might include dedicated or priority lanes/signals, reduced parking standards for selected core areas, and incorporating Intelligent Transportation System architecture.
- Policy 6.6.6: Support and encourage the provision of a range of paratransit opportunities to complement bus and rail service for specialized transit needs.
- Policy 6.6.7: Encourage measures that will reduce the number of vehicle-miles traveled during peak periods, including the following examples of these types of measures:
 - Incentives for car-pooling and vanpooling.
 - Preferential parking for car-pools and vanpools.
 - Conveniently located bus stops with shelters. (A-1)
 - Adequate sidewalk width for transit patrons and other pedestrians.
 - Bicycle and pedestrian access to existing and future transit stations/stops.
- Policy 6.6.8: Promote the use of car-pools and vanpools by providing safe, convenient park-and-ride facilities.
- Policy 6.6.9: Support and encourage premium transit corridors throughout the City to increase transit ridership, reduce traffic congestion, improve air quality, and encourage new development. In cooperation with Omnitrans, explore an initial premium transit corridor linking CSUSB and Hospitality Lane and other major activity centers along E Street.

Policy 6.6.9

 Consider shared and reduced parking standards near premium transit stations that provide pedestrian-friendly environments and incorporate transit-friendly services such as child care, convenience retail, and housing.

Chapter 2 - Overall Land Use and Suggested Policies

Section 2 The Land Use section includes a land use map LU-2 with land use designations. In general, land use designations along the E Street Corridor includes commercial uses south of Highland Avenue and predominantly commercial and multi-family development between the

Page 3 of 6

City of San Bernardino – General Plan Comments Ormitrans 1700 W. 5th Street, San Bernardino, CA 92411



210 Freeway and California State University San Bernardino with single-family between Highland Avenue and 210 Freeway and again between California State University San Bernardino and Palm Avenue.

Draft General Plan land use goals and policies that relate to transit are provided below, together with our suggestions for revisions.

LAND USE

- Policy 2.2.3: Sensitively integrate regionally beneficial land uses such as transportation corridors, flood control systems, utility corridors, and recreational corridors into the community. (LU-1 and CD-1)
- Policy 2.3.1: Commercial centers, open spaces, educational facilities, and recreational facilities should be linked to residential neighborhoods. (LU-1)
- Policy 2.3.2: Promote development that is compact, pedestrian-friendly, and served by a variety of transportation options along major corridors and in key activity areas (LU-1)
- Policy 2.3.7: Improvements shall be made to transportation corridors that promote physical connectivity and reflect consistently high aesthetic values. (CD-1)
- Policy 2.3.__: Integrate development policies with the creation of premium transit corridors to encourage new development in strategic areas and corridor strategic areas through:
 - Concentrating mixed-use commercial/residential uses, retail, employment opportunity, educational and civic/government uses around premium transit station/stops to encourage transit ridership and address air quality and traffic congestion while protecting established low density residential neighborhoods.
 - Providing incentives for increased density development and transit-oriented developments within ½ mile of premium transit stations. Potential incentives include density bonuses, FAR increases, a reduction in parking requirements, and expedited review, etc.
 - Working with Omnitrans and SANBAG to prepare detailed plans for land use and development of transit-oriented developments along premium transit corridors.
 - Modifying the Development Code (zoning code) to include transit supportive policies including mixed use, transit-oriented developments, increased density, reduced parking requirements, and expedited zoning review for projects along premium transit corridors.

Strategic Area Policies

The Land Use section also includes specialized goals and policies related to strategic policy areas of the City shown in Figure LU-5. "The strategic areas are areas where change is either imminent and needs stimulation/guidance or where change is desired and

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City of San Bernardino - General Plan Comments Omnitrans 1700 W. 5th Street, San Bernardino, CA 92411

needs stimulation/guidance." The strategic plan areas affected by the E Street Corridor include¹:

■ Verdemont Area

No specific mention of transit is included in the discussion of this strategic area.

Add the following policy to support transit, "Transit and transit-oriented developments - At the vicinity of Palm Avenue and Kendall Drive is in close proximity to Freeway access and the University, this location provides an excellent opportunity for a park and ride lot, premium transit stations, and potential transit-oriented development permitted at a higher intensity than the surrounding neighborhoods."

■ The University Area

The Draft Plan states, "Encourage the development of trolley connections between the University and downtown and the Metrolink station at the Santa Fe Depot."

- Substitute the words "transit for "trolley" in the above sentence.
- Add a new policy, "Locate transit station/stops in close proximity to the highest use areas of the campus and near higher density student housing to reduce auto dependency.
- Add new policy, "Create strong attractively designed pedestrian linkages to transit stations/stops from classrooms, common facilities and student/faculty housing."

Downtown Strategic Area

Page 2-67 states, "Promote downtown revitalization by seeking and facilitating mixed use projects (e.g., combination of residential, commercial and office uses.)"

- o Add "especially adjacent to a premium transit station" to this policy.
- Add a new policy, "Provide incentives for private property to improve the environment adjacent to premium transit stations, including a mix of transit supported land uses, well lit pedestrian-oriented ground level uses adjacent to the stations/stops, wider landscaped sidewalks, and pedestrian amenities."
- Corridor Strategic Areas (refers to Highland Avenue, Baseline Avenue and E Street Strategic Areas – E Street between Highland Avenue and 9th Street only)

Page 2-70 – The plan states, "E Street currently (as of 2004) has the greatest number of transit trips in the Omnitrans system, which makes it an ideal candidate for roadway improvements and redevelopments. The Strategic Area itself occupies a limited portion of the roadway between Highland Avenue on the northern end and 9th Street on the southern end."

City of San Bernardino - General Plan Comments Omnitrans

1700 W 5th Street, San Bernardino, CA 92411



Page 5 of 6

¹ Parenthesis indicate E Street stations.

 Insert ", premium transit service," after "roadway improvements" in the above policy.

Pages 2-71 and 2-72 include The Corridor Improvement Program and an option package of policy, regulatory and programs that are intended to stimulate private investment. On page 2-71, Priority Locational Projects are those that: 1) develop or improve commercial and/or mixed uses on the intersections of arterials, and/or 2) replace strip commercial use with residential uses or improved existing residential uses between the intersection of arterials.

 Add and/or 3) develop commercial and/or mixed uses adjacent to a premium transit station.

Page 6 of 6

| | development around major transit facilities \$ Local comprehensive plans or capital improvement plans that give priority to infill development and/or provide for opportunities for high density redevelopment |
|----------------------------------|---|
| Land conservation and management | \$ Growth management plans (e.g., growth management areas, urban growth boundaries, agricultural preservation plans, open space preservation plans) with maps \$ Policies that allow for transfer of development rights from open space or agricultural land to urban areas |

II. TRANSIT SUPPORTIVE PLANS AND POLICIES (continued) b. Transit Supportive Corridor Policies

| Information Requested | Documentation Supporting Land Use Criterion |
|---|--|
| Plans and policies to increase corridor and station area development | s Adopted city, county, and regional plans and policies and private sector plans and initiatives that promote development in the transit corridor and station areas; plans may include general plans, specific plans (subarea, station area, etc.), redevelopment project plans, or other district plans Examples of transit supportive policies include: general policy statements in support of transit as a principal mode of transportation within the corridor; policies that support and promote the use of transit; policies/plans that provide for high density development within the corridor and station areas; and policies that support changes to zoning within the corridor and station areas |
| Plans and policies to enhance transit- friendly character of station area development | \$ Elements of adopted city, county, and regional plans and policies that promote transit-friendly character of corridor and station area development policies to promote mixed-use projects Policies to promote housing and transit-oriented retail Policies that allow/promote vertical zoning within the corridor Façade improvement programs Funds to support transit-oriented plans Private sector plans and initiatives consistent with the public plans and policies listed above |
| Plans to develop pedestrian facilities and enhance disabled access | \$ Requirements and policies for sidewalks, connected street or walkway networks, and other |



| | pedestrian facility development plans for station areas 5 Capital improvement programs to enhance pedestrian-friendly design in station areas 5 Curb ramp transition plans and milestones required under CFR 35.150(d)(2), and other plans for retrofitting existing pedestrian infrastructure to accommodate persons with disabilities in station areas 5 Street design guidelines or manuals addressing pedestrian and transit-oriented street design (lighting, street furniture, sidewalk width, etc.) |
|---|---|
| Parking policies (allowances for reductions in parking requirements and traffic mitigation requirements for development near station areas, plans for park-and-ride lots, parking management) | \$ Policies to reduce parking requirement or cap parking in station areas \$ Policies establishing maximum allowable parking for new development in areas served by transit \$ Shared parking allowances \$ Mandatory minimum cost for parking in areas served by transit \$ Parking taxes |

II. TRANSIT SUPPORTIVE PLANS AND POLICIES (continued)

c. Supportive Zoning Regulations Near Transit Stations

| Information Requested | Documentation Supporting Land Use Criterion |
|--|--|
| Zoning ordinances that support increased development density in transit station areas | Ordinances and maps describing existing zoning (allowable uses and densities) Recent changes to zoning ordinances to allow or encourage development with transit supportive densities and uses Transit overlay zoning Zoning incentives for increased development in station areas (density bonuses, housing fund subsidies, regulation relaxation, expedited zoning review, etc.) |
| Zoning ordinances that enhance transit- oriented character of station area development and pedestrian access | \$ Zoning regulations that allow mixed-use development \$ Zoning regulations addressing placement of building footprints, pedestrian facilities, façade treatments, etc. \$ Architectural design guidelines and mechanisms for implementation/enforcement of these guidelines |
| Zoning allowances for reduced parking | \$ Residential and commercial parking requirements (minimums and/or maximums) in station areas under existing zoning |

\$ Zoning ordinances providing reduced parking requirements for development near transit stations
\$ \text{ } \t

II. TRANSIT SUPPORTIVE PLANS AND POLICIES (continued)

d. Tools to Implement Land Use Policies

| Information Requested | Documentation Supporting Land Use Criterion |
|---|--|
| Outreach to government agencies and the community in support of land use planning | Promotion and outreach activities by the transit agency, local jurisdictions, and/or regional agencies in support of station area planning, growth management, and transit-oriented development Inter-local agreements, resolutions, or letters of endorsement from other government agencies in support of coordinating land use planning with transit investment Actions of other groups, including Chambers of Commerce, professional development groups, citizen coalitions, as well as the private/commercial sector, in support of transit-oriented development practices Public outreach materials and brochures |
| Regulatory and financial incentives to promote transit-supportive development | Regulatory incentives (e.g., density onuses, streamlined processing of development applications) for developments near transit Zoning requirements for traffic mitigation (e.g., fees and in-kind contributions) and citations of how such requirements can be waived or reduced for locations near transit stations? Programs that promote or provide incentives for transit-oriented development such as tax increment financing zones, tax abatement programs, and transit-oriented loan support programs Other economic development and revitalization strategies for station areas or within the corridor |
| Efforts to engage the development community in station-area planning and transit-supportive development | s Outreach, education, and involvement activities targeted at the development community (including developers, property owners, and financial institutions) s Transit-oriented market studies s Joint development programs and proposals s Letters of endorsement or other indicators of support from the local development community |
| Public involvement in corridor and station area planning | Description of public involvement process, including corridor and station area land use planning activities |



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| s Description of the level of participation in land use planning activities and support for these activities by the general public and community groups s Public outreach materials and brochures |
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III. PERFORMANCE AND IMPACTS OF LAND USE POLICIES

a. Performance of Land Use Policies

| Information Requested | Documentation Supporting Land Use Criterion |
|--|--|
| Demonstrated eases of developments affected by transit supportive policies | Documentation of projects that have recently been built consistent with transit-oriented design, principles (higher density, orientation toward street, provision of pedestrian access from transit, etc.) Documentation of projects that incorporate a mix of uses or increased amounts of housing |
| Station area development proposals and status | s Descriptions and plans for new development, including joint development proposals, including size, types of uses, and expected dates of start of construction and completion |

III. PERFORMANCE AND IMPACTS OF LAND USE POLICIES (continued) b. Potential Impact of Transit Project on Regional Land Use

| Information Requested | Documentation Supporting Land Use Criterion |
|---|--|
| Adaptability of station area land for development | \$ Description or inventory of land near transit stations that is vacant or available for redevelopment, and amount of development anticipated for these parcels \$ Projected timeline for development of station area properties \$ Amount of development allowed at station area build-out compared to existing amount of development |
| Corridor economic environment | Regional and corridor economic conditions and growth projections Development market trends in existing corridors and station areas (for areas with existing transit) Demonstrated market support for higher-density and transit/pedestrian-oriented development Locations of major employment centers in the region, and expected growth in these centers Projected population, employment, and growth rates in corridor or station areas compared to region |

IV. OTHER LAND USE CONSIDERATIONS (Optional)

| Information Requested | Documentation Supporting Land Use Criterion |
|---|---|
| Other unidentified or unusual circumstances, conditions, or constraints under which the transit agency operates and which influence local and regional land use policies, plans, and implementation | \$ Regional plans or policies that promote increased community preservation and enhancement \$ Topography \$ Brownfields redevelopment \$ Central city redevelopment \$ Designation as a Federal Enterprise Zone/ Empowerment Community \$ Type and condition of market (e.g., resort, seasonal) \$ Intermodal connections \$ Other factors |



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C. Response to Comments From Omnitrans, Dated September 8, 2005

- C-1 This comment voices an appreciation for the opportunity to review the DEIR and the opportunity to incorporate transit supportive policies into the General Plan. The comment also summarizes that the traffic study identifies segments that require mitigation and that some do not. This comment does not relate to the content or adequacy of the EIR.
- C-2 This comment informs the City of an impending traffic model, prepared by Omnitrans, that will identify potential impacts of transit projects on San Bernardino's roadways. This comment is herby noted, included in the official environmental record of the proposed project, and will be forwarded to the appropriate City of San Bernardino decision makers for their review and consideration.
- C-3 The bulk of the comment letter, the six attached pages entitled "Transit Supportive Plans and Policies, The City of San Bernardino General Plan-January 2005" repeat a letter from Omnitrans to Mr. Fred Wilson dated June 23, 2005. This attachment requests that language supportive of the E Street sbX project and transit in general be added to the General Plan. Many of the broad policies already included in the Draft General Plan accommodate the requested language. However, in response to the original letter, the City has incorporated the following changes (additions in bold) into the Draft General Plan and will forward to the Planning Commission and City Council for adoption. These changes in the text of the Draft General Plan do not affect the content or analysis in DEIR.

Circulation Element

6.1.1 Encourage measures that will reduce the number of vehicle-miles traveled during peak periods, including the following examples of these types of measures:



- Incentives for car-pooling and vanpooling.
- Preferential parking for car-pools and vanpools.
- An adequate, safe, and interconnected system of pedestrian and bicycle paths.
- Conveniently located bus stops with shelters that are connected to pedestrian/bicycle paths. (A-1)
- 6.1.2 Promote the use of car-pools and vanpools by providing safe, convenient park-and-ride facilities.
- 6.1.3 Work with Omnitrans to create transit corridors, such as the one currently being explored on E Street linking CSUSB to Hospitality Lane, to increase transit ridership, reduce traffic congestion, and improve air quality.
- 6.1.4 Consider the provision of incentives, such as reduced parking standards and density/intensity bonuses, to those projects near transit stops that include transit-friendly uses such as child care, convenience retail, and housing.

Land Use Element

Work with Omnitrans to explore initiatives that promote redevelopment near transit stops in order to 2.4.6 encourage transit ridership, reduce vehicular trips, improve air quality, and improve traffic congestion:

- a. Concentrate mixed use development, retail, employment, entertainment, educational, and civic/government uses within walking distance of transit stops.
- b. Explore the use of incentives that can be awarded to projects that provide pedestrian amenities (wide sidewalks, public plazas, seating areas, etc...) and/or include desirable uses located within walking distance (1/2 mile) of transit stops. Incentives may include density bonuses, increases in non-residential floor area, reductions in parking requirements, and modified development standards.

Downtown Strategic Plan

Strategy #13 Encourage mixed use development and pedestrian friendly uses/development adjacent to transit stops.

Verdemont Heights Area Plan

Strategy #12 Working with Omnitrans, explore the feasibility of "transit friendly" uses, such as park-and-ride lots, higher density transit oriented developments, and transit stations.

Letter D - Center for Biological Diversity (12 pages of letter and one page acknowledging attachments)



protecting and restoring natural ecosystems and imperiled species through science, education, policy, and environmental law

September 8, 2005

VIA ELECTRONIC MAIL (with Exhibits)

Terri Rahhal, Principal Planner City of San Bernardino Development Services Department 300 North "D" Street San Bernardino, CA 92418-0001 generalplan@sbcity.org

Re: Arrowhead Springs Specific Plan and Draft Environmental Impact Report for City of San Bernardino General Plan Update and Associated Specific Plans

Dear Ms. Rahhal,

I. Introduction.

These comments are submitted on behalf of the Center for Biological Diversity ("Center") on the combined Draft Environmental Impact Report ("DEIR") for the City of San Bernardino General Plan Update and Associated Specific Plans, including the General Plan Update, the University Specific Plan, and the Arrowhead Springs Specific Plan. The Center is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 14,000 members throughout California and the western United States, including in San Bernardino County where the projects are located. The Center objects to the DEIR based on the inadequacy of the current environmental documents particularly as they pertain to the Arrowhead Springs Specific Plan. The DEIR failed to identify and adequately analyze several potential environmental impacts of the Arrowhead Springs Specific Plan, and has failed to provide alternatives that would avoid those impacts or enforceable mitigation measures to minimize those impacts. Most importantly, the DEIR fails to provide site-specific detailed information about the impacts of the Arrowhead Springs Specific Plan on biological resources and water resources and improperly defers identification and analysis of those impacts in violation of the California Environmental Quality Act ("CEQA").

Tucson • Phoenix • Silver City • San Diego • San Francisco • Joshua Tree • Portland

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D1

A revised, independent draft EIR must be prepared for the Arrowhead Springs Specific Plan that properly identifies and analyzes the impacts of the proposed development, analyzes a meaningful range of alternatives that avoid those impacts, and provides specific, detailed, enforceable mitigation measures to minimize impacts that cannot be avoided. An adequate EIR for the Arrowhead Springs Specific Plan must include, at minimum: (1) identification and analysis of impacts to biological resources based on detailed, scientifically valid surveys of plants and animals on the project site and adjacent to the project site; (2) a meaningful range of alternatives that avoid those impacts including at least one alternative based on preservation of the currently undeveloped portions of the site and inclusion of all or part of the site in ongoing efforts to maintain and restore essential wildlife corridors in the San Bernardino Mountains; and (3) specific, enforceable measures to mitigate impacts to biological resources, water resources, and other resources in the project area.

D2

II. THE DEIR FAILS TO MEET THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

An EIR is a detailed statement, prepared under the California Environmental Quality Act, Public Resources Code §§ 21000-21178 ("CEQA"), describing and analyzing all significant impacts on the environment of a proposed project and discussing ways of mitigating or avoiding those effects. Pub. Res. Code §21100; 14 CCR § 15362. The purpose of an EIR "is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made." Laurel Heights Improvement Association v. Regents of University of California, 6 Cal. 4th 1112, 1123 (1993) (emphasis in original) (citations omitted). An EIR should provide decision making bodies and the public with detailed information about the effect a proposed project is likely to have on the environment, to list ways in which the significant effects of a project might be avoided or minimized, and to indicate alternatives to the project. Pub. Res. Code § 21061; 14 Cal. Code Regs. ("CCR") § 15002. California courts have emphasized that an EIR should: disclose all relevant facts; provide a balancing mechanism whereby decision makers and the public can weigh the costs and benefits of a project; provide a means for public participation; provide increased public awareness of environmental issues; provide for agency accountability; and provide substantive environmental protection. Because of the combined DEIR for the General Plan Update and the two Specific Plans obscurs, rather than illuminates, the environmental impacts of the proposed Arrowhead Springs Specific Plan, the DEIR is inadequate to meet both the procedural and substantive mandates of CEQA.

D3

A. The DEIR Improperly Defers CEQA Mandated Environmental Review and Is Wholly Inadequate For the Arrowhead Springs Specific Plan.

Many of the inadequacies of the DEIR identified in these comments can be attributed to the fact that the DEIR improperly defers identification and analysis of many of the Arrowhead Springs Specific Plan's impacts, as well as formulation of specific mitigation measures, to later stages of project development. This deferral frustrates informed decision-making and violates CEQA. See Stanislaus Natural Heritage Project v. County of Stanislaus, 48 Cal. App. 4th 182 (1996). Deferring analysis of the impacts of a project "until after adoption of the specific plan calling for the project to be built would appear to be putting the cart before the horse." *Id.* at

D4

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200. For example, the DEIR defers site-specific surveys for biological resources completely and proposes as a mitigation measure that such surveys be conducted prior to issuance of grading permits and prior to construction of the golf course. DEIR at 5.3-48 to 51. This procedure turns CEQA on its head. Rather than identify and analyze impacts before project approval, the City is attempting to approve the project first and analyze its impacts later. Such a process undermines informed decision making and the public's right to know the environmental consequences of proposed actions and comment upon them *before* projects are approved. *Laurel Heights Improvement Association v. Regents of University of California*, 6 Cal. 4th 1112, 1123 (1993).

D4 cont.

The failure to provide detailed information and analysis regarding many environmental impacts highlights the need for an *independent*, site-specific EIR for the Arrowhead Springs Specific Plan. Unlike an EIR for a general plan update, CEQA requires that the EIR for a specific plan provide detailed, thorough environmental review for the project, not merely preliminary or programmatic review.

D5

As the City is well aware, the CEQA Guidelines provide that residential projects, including land subdivision, zoning changes, and residential planned unit developments, that are consistent with a specific plan for which an EIR was prepared and adopted will often require no further CEQA compliance. 14 CCR §15182; see also 14 CCR §15181 (exemption for housing and neighborhood commercial facilities consistent with a specific plan for which an EIR was prepared). Subsequent stages of development will only be required to prepare detailed subsequent or supplemental environmental review if the standards of CEQA Guidelines section 15162 are met—that is, only if substantial changes are made to the project, substantial changes occur to the project circumstances, or new information shows that the project will have impacts that were not considered or are more severe, or mitigation measures could now be imposed that were infeasible or unanalyzed at the time the EIR was prepared. 14 CCR § 15162. Accordingly, the specific plan EIR is the stage at which a thorough environmental review under CEQA of a proposed specific plan is required. An EIR for a specific plan must identify and analyze the project's impacts, avoid those impacts where possible, and impose specific, enforceable mitigation measures to minimize those impacts.

D6



Here, the City is attempting to adopt a specific plan for Arrowhead Springs that includes both lands currently within the City limits and lands that are in the unincorporated portions of the County. The City apparently intends this specific plan to act as a "pre-zoning" that can be presented as part of its application to annex the entire Arrowhead Springs area. *See also* DEIR, Appx. K, Annexation Study. The proposed annexation of the Arrowhead Springs area does not represent a logical extension of the City limits, but rather, will "leap-frog" high intensity development out of the City and off the valley floor into the San Bernardino Mountains—displacing open space, interfering with vital wildlife corridors, destroying vital riparian resources, and degrading air and water quality. Of course, the annexation process is itself a project subject to CEQA review. *See Bozung v. LAFCO*, 13 Cal. 3d 263 (1975). Because the DEIR is clearly inadequate for the adoption of the Arrowhead Springs Specific Plan, the City cannot properly rely on this DEIR in the annexation process for Arrowhead Springs.

D7

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- B. The DEIR Fails To Properly Identify and Analyze The Direct, Indirect, And Cumulative Impacts To Biological Resources.
 - The DEIR fails to properly identify and analyze impacts to rare, threatened, and endangered species.

As the City is well aware, the vast majority of the remaining endemic species in the San Bernardino Mountains are largely restricted to National Forest lands. The public has made an enormous investment in conservation and has dedicated significant resources to maintaining habitat integrity and areas for wildlife movement in the San Bernardino Mountains. Although the Arrowhead Springs area is surrounded by National Forest, the specific plan and the DEIR fail to properly address the potential impacts of the Arrowhead Springs Specific Plan on the biological resources of the surrounding area including, but not limited to, impacts from direct loss of habitat, habitat fragmentation, loss of access to critical water resources, and invasive plant and animal species.

D8

The DEIR relies on "field surveys" conducted on two consecutive days in November, 2004, that consist only of brief observation of the site. DEIR Appx. B at B-11. No protocol surveys or other detailed surveys were conducted for any species, although many endemic, rare, threatened, and endangered species, and species of concern are known to inhabit and utilize the project site. Instead, the biological resources section of the DEIR for the Arrowhead Springs Specific Plan relies heavily on a literature review including the California Department of Fish and Game's California Natural Diversity Data Base. DEIR, Appx. B at B-8. This is inadequate. As a disclaimer for the CNDDB by the Wildlife and Habitat Data Analysis Branch of DFG warns:

D9

Important Notice on the Proper use of the CNDDB:

The CNDDB . . . will not in itself meet the requirements of the California Environmental Quality Act (CEQA), and it does not replace the need for conducting field work.

CNDDB database at http://www.dfg.ca.gov/whdab/html/rarefind_notice.html (emphasis added).

The DEIR does not even attempt to provide meaningful information regarding the potential impacts of the Arrowhead Springs Specific Plan on endemic, rare, threatened and endangered species. For example, the DEIR fails to properly identify and analyze the replacement of the natural riparian areas along Waterman Canyon and West Twin Creek with a golf course and impacts from the proposed creek realignment. Instead, the DEIR defers identification and analysis of these critical issues to the be done *after* project approval as part of obtaining grading permits. *See* DEIR at 5.3-50. The DEIR completely fails to discuss the impacts of the realignment of the creek and loss of native riparian habitat although the DEIR notes that many species use this area. For example, there is a high probability that the Mountain yellow-legged frog may be found and a moderate probability that the California red-legged frog may be found along West Twin Creek/Waterman Canyon and East Twin Creek. *See* Table 5.3-4. As a "mitigation measure" the DEIR calls for 50 foot setback zone and 25 foot buffer zones

D10

D1

DEIR Comments For San Bernardino GP Update, Arrowhead Springs SP, and University SP September 8, 2005 Page 4 of 12

along the realigned creek but provides no basis for this choice of mitigation measure or any evidence that it will be effective. DEIR at 5.3-50. The City is attempting to turn CEQA on its head by proposing mitigation measures for impacts to species that have not yet been properly identified or analyzed.

D11 cont.

As another example, although the DEIR acknowledges that the project would impact nearly all of the Southern Willow riparian habitat, a majority of the Sycamore Willow woodlands, and a large area of Chamise chaparral on site, the DEIR completely fails analyze these impacts or provide any alternatives to avoid them. DEIR at 5.3-41 Table 5.3-5. Again, the DEIR simply adopts mitigation measures that are not specific but rather depend on deferred identification and analysis of impacts. DEIR at 5.3-48 to 50. This is entirely improper.

D12

The DEIR acknowledges that the threatened Santa Ana Sucker ("SAS") may occur within the site of the Arrowhead Springs Specific Plan but, rather than require site-specific surveys, and identify and analyze impacts to this species, the DEIR simply states that it is "unknown" whether SAS occurs on site. DEIR at 5.3-42. The DEIR then simply concludes that "if" the SAS occurs on site "then construction would potentially impact [this] species." DEIR at 5.3-43. CEQA requires more. Even for speckled dace which is *known* to occur on the project site the DEIR provides no meaningful analysis of the impacts of the project. DEIR at 5.3-42 to 43. As another example, although the project may impact the threatened thread-leaved brodiaea known to occur on site (DEIR at 5.3-26), the DEIR provides no specific information about the number or extent of these plants or the potential impacts to them—relying instead on general statements and, again, improperly deferring specific survey requirements and analysis until after project approval. DEIR at 5.3-42

D13

The DEIR also fails to identify or properly analyze impacts to other species including, but not limited to, San Gabriel slender salamander, Arroyo Toad, California red-legged frog, Mountain yellow legged frog, San Diego Horned lizard, Coronado skink, orange throated whiptail, Coastal western whiptail, Rosy boa, Coast patch-nosed snake, Northern red-diamond rattlesnake, White-tailed kite, Northern harrier, Cooper's hawk, bald eagle, golden eagle, Black Swift, Loggerhead shrike, California Gnatcatcher, Southern California rufus-crowned sparrow, Townsend's western big-eared bat, Pallid bat, Spotted bat, California mastiff bat, Big free-tailed bat, San Diego Black-tailed jackrabbit, Los Angeles pocket mouse, San Bernardino kangaroo rat, Northwestern San Diego pocket mouse, San Diego woodrat, Nelson's bighorn sheep, and many plant species known to occur on site.

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D14

DEIR is critical. For example, the DEIR states that the Mountain yellow-legged frog may occur in the West Twin Creek/Waterman Canyon area, if the Mountain yellow-legged frog is present that fact is extremely important to the analysis of the project's impacts. The most recent published numbers of Mountain yellow-legged frogs in Southern California is estimated to be 79 adult frogs. 67 Fed. Reg. at 44384. The USFWS stated that "the few remaining occurrences of this species in southern California are now at risk of extinction. Any activity that results in disturbance to the species or which may harm eggs, tadpoles or adult frogs could negatively

The lack of specific information regarding rare, threatened, and endangered species in the

D15

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affect the continued survival of the DPS." Id. It is therefore extremely probable that if the

Mountain yellow-legged frog is present or if the site contains habitat for the species that could aid in its recovery, any level of habitat disturbance may jeopardize the continued existence of the species. Given the precarious situation with this species, protocol surveys must be conducted to determine whether the Arrowhead Springs Specific Plan site contains occupied habitat or essential habitat for the Mountain yellow-legged frog.

D15 cont.

Further, one of the potential causes of decline of the Mountain yellow-legged frog (and many other riparian species) is the development of dams and water diversions in many of the major streams flowing through the Southern California mountains historically inhabited by the species. 67 Fed. Reg. at 44383. In addition, wildfires have decreased habitat for this and other species. See Exhibit D, Impacts of the 2003 Southern California Wildfires on Four Federally Listed Species. Given the increasing probability of drought in the region due to global warming and other factors, the retention of water in streams that provide suitable breeding habitat for the Mountain yellow-legged frog and other riparian species would be an important conservation measure. However, the Arrowhead Springs Specific Plan calls for a natural stream to be realigned and water to be removed from the streams through out the site and held in reservoirs or underground basins. See Arrowhead Springs Specific Plan at 121-124; DEIR, Figure 5.19. The impacts of such diversions on riparian-dependent species, including the Mountain yellow-legged frog and others, must be more specifically addressed in the DEIR.

D16

Despite the fact that impacts to biological resources have barely been identified and none have been properly analyzed, the DEIR makes the unfounded and astonishing assertion that "potential significant impacts associated with biological resources would be reduced to a level of less than significant and no unavoidable impacts would occur." DEIR at 5.3-51. The CEQA Guidelines require a mandatory finding of significance where the project will, *inter alia*, "substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; [or] substantially reduce the number or restrict the range of an endangered, rare, or threatened species." 14 CCR § 15065. Because, at minimum, the project will restrict movement of many species along the West Twin Creek/Waterman Canyon riparian corridor and inhibit access to these scarce water resources, a mandatory finding of significance is required here.

D17

The DEIR's failure to properly identify and analyze the potential impacts of the Arrowhead Springs Specific Plan on biological resources renders the DEIR wholly inadequate. Moreover, the imposition of general mitigation measures based on a lack of information fails to comply with CEQA and the lack of meaningful analysis of alternatives that would avoid impacts to biological resources also renders the DEIR wholly inadequate. Lastly, the DEIR completely fails to discuss cumulative impacts to biological resources as required by CEQA.

D18

2. The DEIR fails to analyze impacts to Wildlife Corridors.

The Arrowhead Springs Specific Plan will interfere with wildlife movement and impair key linkages within the San Bernardino Mountains. The South Coast Wildlands report entitled "South Coast Missing Linkages Project: A Linkage Design for the San Gabriel - San Bernardino

D19

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Connection" ("Linkage Design") ¹ examines key linkages required for wildlife conservation within the San Bernardino Mountains based on careful scientific studies of key species and habitat requirements. The Linkage Design specifically calls for the lands along Highway 18 and in Arrowhead Springs to be preserved as part of these essential linkages and for wildlife bridges or overpasses to be constructed along Highway 18. *See* Exhibit A, Linkage Design, Figure 55; Existing Infrastructure (showing potential crossings) Figure 56. Unlike the DEIR, the Linkage Design takes a scientific, conservation based, approach to the landscape and has determined several key areas that are critical to preservation and conservation of the biological resources in the area. *See* Exhibit B, Conservation Planning Approach. The DEIR completely fails to address the issues raised in the Linkage Design.

D20

The DEIR's discussion of wildlife corridors fails to accurately identify the use of the project area by wildlife and is not based on any recent site specific surveys conducted in accordance with scientific protocols. Inevitably, the failure to properly identify the impacts also leads to a complete failure to analyze the impacts on wildlife corridors. The DEIR simply provides no meaningful basis for decision makers or the public to evaluate the impacts that the Arrowhead Springs Specific Plan would have on wildlife movement.

D21

Lastly, the inclusion of "private" hiking trails throughout the project site is puzzling given that the area is surrounded by National Forest lands. See Arrowhead Springs Specific Plan at 97. How will these trails remain "private"? If fencing or gates are intended to be built around the open space in the eastern portion of the property the impacts of those barriers on wildlife corridors and movement must be identified and evaluated as well.

D22

B. The DEIR Fails To Identify And Analyze The Full Range Of Direct, Indirect, And Cumulative Impacts To Surface Water Resources and Water Quality.



The DEIR also fails to properly identify and analyze impacts to surface water resources and water quality. The Arrowhead Springs Specific Plan calls for realigning a creek and constructing miles of infrastructure to accommodate the use of over 1,559,000 gallons of water per day on the project site. Arrowhead Springs Specific Plan at 122. The plan calls for utilizing nearly all of the on-site water available in the creeks and potential on-site wells – simply assuming that the current owner has the rights to use nearly all of this water. *See* DEIR, Appx. I, Water Supply Assessment, at I-8 to 10. However, if that water has not previously been put to beneficial use on the project site that assumption may be challenged. Oddly, the DEIR includes as a *mitigation measure* ensuring that all water rights have been granted through the State before approval of the first tentative tract map. DEIR at 5.15-10. Again, the City is putting the cart before the horse, under CEQA the City must ensure that adequate water supplies are available and must identify and analyze the impacts of that water use on the environment *before* approving the specific plan for the project.

D23

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¹ The entire Report is incorporated herein by reference and is available for download at http://scwildlands.org/missinglinks/reports/download_sangab_sanbernardino.htm. Two sections are attached hereto as Exhibits A and B.

The DEIR does not provide any meaningful analysis of the impacts that the use of all of the available on-site water will have on the surrounding environment. Because the DEIR fails to provide this critical information and analysis it is inadequate.

D24

The DEIR acknowledges that the project would increase water demand by approximately 4,035 acre-feet at build-out including both domestic and irrigation uses. DEIR at 5.15-6. In drought years this demand will far outstrip the water resources on site and the proposed use of the Bunker Hill sub-basin for "balancing" high and low water years "has not been proven or approved nor is their certainty regarding quantities of water granted through the exercise of water rights." DEIR at 5.15-8. The DEIR also fails to analyze the impacts of using the Bunker Hill sub-basin as a reservoir for project water or the cumulative impacts of the water extractions required by this project when compared with other projects in the area.

D25

As a final fall-back the DEIR contemplates the use of imported State Water Project water but provides no analysis of the environmental impacts either locally or statewide. DEIR, Appx. I, Water Supply Assessment, at I-24. Indeed, the DEIR fails to acknowledge that in drought years these and other off-site supplies may also be uncertain. Moreover, the imported water from the State Water Project is of a far lower quality than local creek water, this fact is neither acknowledged nor analyzed. As a recent report from a coalition of Southern California water districts noted, due to the increased salinity of imported water supplies from the Sacramento Delta and Colorado River, use of such water "may not be a viable strategy within a 20-year horizon for Southern California." Exhibit C, Southern California Salinity Coalition, 2002-2003 Strategic Action Plan. It is irresponsible for the City to approve any entitlements for housing and hotels, conference centers or other commercial enterprises where the water supply is uncertain. It is even more egregious for the City to approve the use of water and the destruction of a creek and the native riparian ecosystem in Waterman Canyon/West Twin Creek for a golf course.

D26

In addition, the DEIR fails to identify and analyze the potential impacts from construction and operation of the proposed water treatment plants, water distribution system, pumping stations, and reservoirs. Such impacts may include, but are not limited to, loss of riparian areas, creation of waste, noise from pump operation, noise from construction of the project, providing habitat and opportunities for invasive species of fish, amphibians, and plants to become established that may predate upon or displace endemic species.

D27

D. The DEIR Fails To Analyze A Meaningful Range of Feasible Alternatives.

An EIR is required to describe a range of reasonable alternatives to the project, which would feasibly attain most of its basic objectives but would avoid or substantially lessen its significant effects. 14 CCR § 15126.6(a). The City has a substantive duty to adopt feasible, environmentally superior alternatives. Pub. Res. Code § 21002; 14 CCR §§ 15002(a)(3), 15021(a)(2). A lead agency cannot abdicate this duty unless substantial evidence supports a finding that the alternative is infeasible. See, e.g., Citizens of Goleta Valley v. Board of Supervisors, 197 Cal. App. 3d 1167, 1181 (1988).

D28

DEIR Comments For San Bernardino GP Update, Arrowhead Springs SP, and University SP September 8, 2005 Page 8 of 12

The DEIR fails to describe a reasonable range of alternatives to the Arrowhead Springs Specific Plan. The lack of a reasonable range of alternatives is tied to both the failure to properly identify and analyze environmental impacts of the project, particularly impacts to biological resources, and the overly narrow "project objectives" which the City has imposed on the project. The DEIR fails to describe even one project alternative that would include less housing.

D8 cont.

Moreover, the so called "Wetlands Avoidance Alternative," which would eliminate the golf course – the project component that the DEIR admits will cause the greatest impacts to biological resources – is rejected because it "fails to fully realize the goal of creating a unique and resort [sic] and the objective to create both passive and active recreational opportunities." DEIR at 7-22. This makes no sense both as written and as one can only suppose it was intended to be written. There are myriad opportunities for active recreation in the Arrowhead Springs area that do not require the sacrifice of an entire riparian corridor and the species that depend on it. The City cannot define its project objective so narrowly that it undermines meaningful CEQA review, putting a golf course in a riparian corridor is neither a proper nor a sensible project objective.

D29

The DEIR also fails to include any alternative based on preservation of the currently undeveloped portions of the site and inclusion of all or part of the site in ongoing efforts to maintain and restore essential wildlife corridors in the San Bernardino Mountains. The alternatives analysis in the DEIR must be revised to include a meaningful range of alternatives that avoid the environmental impacts of the Arrowhead Springs Specific Plan once those impacts are properly identified and analyzed.

D30

E. The DEIR Fails to Properly Identify and Analyze Many Other Project Impacts.

X

In addition to the inadequacies noted above, the DEIR for the Arrowhead Springs Specific Plan fails to adequately identify and analyze impacts to local air quality and traffic in Arrowhead Springs that will occur with build-out of the project. The DEIR also minimizes the growth-inducing impacts of the project which will set a precedent for large-scale development in the San Bernardino Mountains by replacing a very small resort community with large intensive development. Moreover, the ill-conceived replacement of a riparian area by a golf course will set a precedent that other developers may seek to repeat.

D31

The DEIR also fails to properly identify and analyze the increased risks of fire due to build-out of the Arrowhead Springs Specific Plan, to provide meaningful alternatives that will avoid these risks, or mitigation measures that address these specific risks. In addition, the increased risk of fire due to housing and commercial uses will fall disproportionately on National Forest lands and the species that depend on them—these areas have already been heavily impacted by fire in recent years. The financial costs of fire fighting in the National Forest will be borne by the public at large, not by the project proponent. These impacts need to be fully identified and analyzed in an independent EIR for the Arrowhead Springs Specific Plan.

D32

DEIR Comments For San Bernardino GP Update, Arrowhead Springs SP, and University SP September 8, 2005 Page 9 of 12

Lastly, the DEIR does not even attempt to analyze the cumulative impacts of the Arrowhead Springs Specific Plan. While reliance on a summary of projections for a cumulative impacts analysis in a general plan update may be appropriate, it is not appropriate for a project such as the Arrowhead Springs Specific Plan. See DEIR at 4-6. While the City's desire to fold the Arrowhead Springs Specific Plan into the general plan update is understandable, the City cannot use this procedure to avoid the required CEQA analysis. The cumulative impacts of the build-out of the Arrowhead Springs Specific Plan must be analyzed along with other projects in the area that will similarly impact wildlife corridors and biological resources in the area, water resources, and other environmental resources. The cumulative impacts analysis cannot only include projects within the City and its Sphere of Influence. The failure to properly analyze the cumulative impacts of the Arrowhead Springs Specific Plan alone render the DEIR inadequate.

D33

III. THE CITY SHOULD PREPARE AN INDEPENDENT EIR FOR THE ARROWHEAD SPRINGS SPECIFIC PLAN; FAILING THAT, THE CITY SHOULD REVISE AND RE-CIRCULATE THE ENTIRE DEIR.

Because the DEIR fails to provide detailed site-specific information required by CEQA regarding the Arrowhead Springs Specific Plan, the City should withdraw the DEIR as to that project and prepare a revised, independent, sufficiently detailed EIR for the Arrowhead Springs Specific Plan.

D34

In the alternative, if the City chooses to keep the combined DEIR structure for the City General Plan Update, the Arrowhead Springs Specific Plan, and the University Specific Plan, it must revise and re-circulate the entire DEIR for public review and comment. A lead agency must re-circulate an EIR for further public comment under any of four circumstances:

- (1) When the new information shows a new, substantial environmental impact resulting either from the project or from a mitigation measure;
- (2) When the new information shows a substantial increase in the severity of an environmental impact, except that recirculation would not be required if mitigation that reduces the impact to insignificance is adopted;

(3) When the new information shows a feasible alternative or mitigation measure that clearly would lessen the environmental impacts of a project and the project proponent declines to adopt the mitigation measure; or

(4) When the draft EIR was "so fundamentally and basically inadequate and conclusory in nature" that public comment on the draft EIR was essentially meaningless. CEQA Guidelines §15088.5.

Based on the comments above, it is clear that the EIR must be re-drafted and recirculated. Conditions (1), (2), and (3) above will be met by meaningful and adequate discussion of the Arrowhead Springs Specific Plan's impacts, mitigation measures, and cumulative impacts. The combined effect of these omissions makes it clear that the fourth condition has also been met.

D36

D35

DEIR Comments For San Bernardino GP Update, Arrowhead Springs SP, and University SP September 8, 2005 Page 10 of 12

IV. CONCLUSION

In sum, the current DEIR has not adequately disclosed, analyzed, avoided, minimized, and mitigated the environmental impacts of the Arrowhead Springs Specific Plan. Because of the document's shortcomings, the public and decision makers cannot make informed decisions about the proposed Arrowhead Springs Specific Plan's costs in areas including biological resources, water resources, water quality, and air quality.

Should the City wish to move forward with the Arrowhead Springs Specific Plan and annexation of Arrowhead Springs into the City, the Center looks forward to reviewing a revised, independent EIR for the Arrowhead Springs Specific Plan. Thank you very much for your consideration of these comments.

Sincerely, /s/ Lisa Belenky Center for Biological Diversity

List of Exhibits

Exhibit A: Penrod, et al., South Coast Missing Linkages Project: A Linkage Design for the San Gabriel - San Bernardino Connection, South Coast Wildlands Project. 2004, Linkage Design.

Exhibit B: Penrod, et al., South Coast Missing Linkages Project: A Linkage Design for the San Gabriel - San Bernardino Connection, South Coast Wildlands Project. 2004, Conservation Planning Approach.

Exhibit C: Southern California Salinity Coalition, 2002-2003 Strategic Action Plan, Southern California Salinity Coalition in Affiliation with the National Water Research Institute.

Exhibit D: Bradley and Bond, Impacts of the 2003 Southern California Wildfires on Four Federally Listed Species: Quino checkerspot butterfly, Mountain yellow-legged frog, Coastal California gnatcatcher, Least Bell's vireo, Center for Biological Diversity.

CC: (without exhibits)

Kathleen Rollings-McDonald, Executive Officer San Bernardino County LAFCO 175 West Fifth Street, Second Floor San Bernardino, CA 92415-0490

Field Supervisor USFWS- Ecological Services

DEIR Comments For San Bernardino GP Update, Arrowhead Springs SP, and University SP September 8, 2005 Page 11 of 12 **D37**



Carlsbad Field Office 6010 Hidden Valley Road Carlsbad, CA 92011 Attn: Karin Cleary-Rose

California Department of Fish and Game Los Alamitos Administrative Office 4665 Lampson Avenue, Suite J Los Alamitos, CA 90720 Attn: Curt Taucher, Regional Manager, Region 6

Steve Loe, Forest Biologist San Bernardino National Forest Supervisors Office 1824 S. Commercenter Circle San Bernardino, CA 92408 sloe@fs.fed.us

DEIR Comments For San Bernardino GP Update, Arrowhead Springs SP, and University SP September 8, 2005 Page 12 of 12

The Exhibits A, B, C, and D cited and/or listed on page 11 of Letter D from the Center for Biological Diversity were received via e-mail in electronic format as an attachment to the letter and are available in electronic format on the City of San Bernardino website (www.sbcity.org) or in hard copy at the Development Services Department of the City located at 300 North "D" Street.



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D. Response to Comments From Center for Biological Diversity, Dated September 8, 2005

D-1 The City of San Bernardino has complied with CEQA Guidelines Sections 15120 to 15132 with regard to content of an EIR by providing distinctly different and complete impact analysis of all elements for the General Plan Update separate from the Arrowhead Springs Specific Plan. As stated in Section 15146 of the CEQA Guidelines the degree of specificity required in an EIR should correspond to the degree of specificity of the underlying activity. Section 1.2.2, *Type and Purpose of this DEIR* fully explains that this document is a Program EIR for the purpose of implementation of the General Plan Update and implementation of a development plan for the Arrowhead Springs area. A program level EIR is the appropriate level of documentation for the Arrowhead Springs Specific Plan and Section 15168 of the Guidelines explains thoroughly the function of a program EIR. The level of analysis provided in the DEIR for the Arrowhead Springs Specific Plan is commensurate with a program level EIR where project level specificity (site specific design and construction detail) is not completely known. As tentative tract maps or subsequent site specific projects are submitted to the City, a review will be conducted to determine if they are within the scope of the certified program EIR in accordance with Section 15162 of the Guidelines.

A "reasonable" range of alternatives were presented and analyzed for the Arrowhead Springs Specific Plan per Section 15126.6, for the purposes of avoiding or reducing the significant environmental impacts of the project, which were determined to be the loss of riparian habitat/wetlands and increased traffic. Mitigation measures for biological resource impacts have also been developed to minimize significant impacts and are enforceable through permit conditions, such as the requirement to "comply with project-specific permit conditions and requirements developed through consultation with USFWS and CDFG" before issuance of grading permits as stated in Mitigation Measure AHS 5.3-1 on page 5.3-48. The mitigation measures for impacts in the DEIR indicate responsible parties, minimum performance criteria and timing which form the basis for enforcement. For these reasons and others stated in responses that follow, the City concludes that the DEIR does provide an adequate analysis of the Arrowhead Springs Specific Plan at a program level commensurate with the degree of specificity included in the specific plan.



D-2 This comment and comments made elsewhere in this letter assert that a revised DEIR should be recirculated or an independent draft EIR should be prepared for the Arrowhead Springs Specific Plan due to lack of analysis of impacts of the Arrowhead Springs Specific Plan or an appropriate range of alternatives or enforceable mitigation measures for the Arrowhead Springs Specific Plan. As stated in comment response D-1, a program level analysis for all environmental subjects was prepared for the Arrowhead Springs Specific Plan separate from the analysis of the General Plan Update but contained in the same document for efficiency. The format complies with the requirements of Section 15120 of the CEQA Guidelines to include an analysis of all environmental subjects of each project thus an independent EIR for Arrowhead Springs would not be necessary solely on the basis of format.

Section 15088.5 of the CEQA Guidelines states four situations where re-circulation of an EIR would be required. In general, re-circulation would be required if: 1) new information shows a new substantial impact, 2) new information shows a substantial increase in the severity of an impact unless mitigation reduces the impact to less than significant, 3) new information shows a feasible alternative or mitigation measure and the project proponent declines to adopt or 4) the DEIR is fundamentally and basically inadequate and conclusory in nature that public comment on the DEIR was essentially meaningless. Impact analysis of the Arrowhead Springs development was based on a general development concept as described in Section 3.3.4.1, including a conceptual grading plan as shown in Figure 3.3-6. A program level analysis was conducted to the degree that development information was known with conservative assumptions about the extent of impacts. Given the

conceptual nature of the development plan, detailed scientifically valid surveys (focused surveys) were not considered warranted for a programmatic EIR. Court cases (*Association of Irritated Residents et al.*, *v. County of Madera et al. and Diamond H Dairy, April 2003*) have found that the lack of protocol level surveys does not in itself necessarily constitute a lack of adequacy in analysis. Field surveys were conducted on the Arrowhead Springs property and the biological resources report acknowledges that protocol level surveys were not conducted primarily due to seasonal restrictions. The field surveys along with extensive literature review, use of air photos and professional expertise and experience in the area conducting previous biological studies formed the basis for impact conclusions. For the reasons stated herein, none of the conditions requiring re-circulation of the DEIR have occurred, thus re-circulation is not necessary in accordance with Section 15088.5 of the CEQA Guidelines.

Responses to concerns about the range of alternatives and enforceable mitigation measures can be found in comment response D-1.

- D-3 See comment responses D-1 and D-2.
- D-4 The DEIR did not defer identification and analysis of the impacts of the Arrowhead Springs development plan given the level of specificity required for a programmatic EIR. There was a broad, quantified approach to the analysis, appropriate for a program EIR that identified the extent of potential impacts based on the proposed development footprint. See comment response D-1 for discussion of mitigation measures.
- D-5 As stated in comment response D-1, D-2 and D-4.
- D-6 The City agrees that this comment correctly describes the purpose of a Program EIR, which is the type of EIR that was prepared for the Arrowhead Springs Specific Plan. For reasons stated in comment response D-1 and D-2 the City asserts that a *thorough* environmental review in accordance with CEQA was conducted commensurate with a programmatic EIR and the degree of specificity included in the specific plan.
- D-7 A portion of the Arrowhead Springs Specific Plan currently lies within the jurisdictional boundaries of the City of San Bernardino as shown on Figure 5.8-3. The remaining portion of the property is located within the sphere of influence (SOI) of the City as shown in Figure 5.8-1, *Existing General Plan*. Decisions on the extent of any City's SOI are determined by the Local Agency Formation Commission (LAFCO), giving consideration to the potential of annexation of those areas into the City boundaries. Therefore, a decision on the logical extension of the City boundary has previously been made in favor of the potential annexation of Arrowhead Springs. Adoption of the Specific Plan will act as pre-zoning for an application to LAFCO for annexation of the remaining property. The DEIR along the comments and responses contained in this Final EIR will be used as resource information for the application. Comment responses D-1 and D-2 support the City's finding that the DEIR is adequate.
- D-8 The plan of development for the Arrowhead Springs area takes into consideration the fact that it is surrounded by the National Forest by setting aside approximately 1,400 acres of open space and confining the most intensive uses to a centralized area where development already exists to avoid impact to the biological resources of the surrounding lands. The Specific Plan contains numerous development standards, which will be adopted by resolution and enforceable by law, that provide for the protection of the natural resources of the area including a requirement to preserve areas having "biological significance" (*Arrowhead Springs Specific Plan*, p.78), a mobility plan that avoids impact to drainages through use of bridges and reduction of noise through use of electric vehicles. A

thorough discussion of habitat loss (420.2 acres) can be found in Section 5.3.3.2, pages 5.3-41 to 5.3-45 of the DEIR. The Specific Plan and DEIR through development standards and mitigation measures, has properly addressed potential impacts to the surrounding forest lands.

- D-9 See discussion in comment response D-1 and D-2 on the adequacy of the DEIR with regard to protocol surveys.
- D-10 The DEIR has taken a conservative approach (commensurate with a Program EIR) in the analysis of impacts to Waterman Canyon/West Twin Creek riparian area by assuming the full extent of impact to potential jurisdiction waters of the United States Army Corp of Engineers (USACE) and California Department of Fish and Game (CDFG) as described on page 5.3-43 and 5.3-44. The extent of jurisdictional waters is shown on Figure 5.3-4. The impacts have been determined to the extent possible given that the final design of the golf course area has not been determined using the full extent assumption. Mitigation measures prescribe a minimum standard for mitigation and provide performance standards to ensure impacts are adequately mitigated.
- D-11 Mitigation measures cited here establish a "minimum" standard for protection commensurate with a Program EIR. Listing the probability of occurrence as "high" and "medium" for these species was conservative in keeping with a program level analysis. Page B-34 of Appendix B, Biological Resources states that populations of Mountain yellow-legged frogs were "identified more than 30 years ago, and may no longer persist along these drainages." Given that Waterman Canyon in particular has been altered considerably by recent flooding events and construction of the inland feeder project by the Metropolitan Water District, the probability listing in Table 5.3-4 is very conservative. This mitigation measure along with measures AHS 5.3-1, AHS 5.3-2A and AHS 5.3-2B provide for consultation with resource agencies who will determine the detailed mitigation program.
- D-12 The analysis as stated before is commensurate with a Program EIR, where exact details of development are not known. The extent of impacts in this regard is very conservative. The development standards for the Arrowhead Springs Specific Plan require restoration of natural vegetation (p.78) and mitigation measures have been provided that assure a minimum standard with exact details to be negotiated with resource agencies. Section 7, Alternatives, provides a discussion of alternatives including a wetland avoidance alternative which would preserve the riparian vegetation to the greatest extent possible.
- D-13 See comment response D-1 and D-2 as to level of specificity of analysis required for a Program EIR.
- D-14 See comment response D-1 and D-2 as to level of specificity of analysis required for a Program EIR.
- D-15 See comment response D-1 and D-2 as to level of specificity of analysis required for a Program EIR and comment response D-11.
- D-16 No damming of East Twin Creek is proposed as part of the proposed project for Arrowhead Springs. As discussed in Section 3.3.4.3, Infrastructure, the exact location of the main channel of East Twin Creek has not been determined and is known to have shifted due to flooding events. Impacts have been assessed on the best approximation of its location. As indicated in the text in this section the hydrologic and wetland function of these drainages would be restored to approximate the "natural" location of the main channel while taking into consideration loss of habitat by replacing it and prevention of flooding.
- D-17 See comment response D-1 and D-2 as to level of specificity of analysis required for a Program EIR and adequacy of analysis.



- D-18 See comment response D-1 and D-2 as to level of specificity of analysis required for a Program EIR and adequacy of analysis.
- D-19 The DEIR examined the impacts of development within the property boundaries of the Arrowhead Springs Specific Plan with regard to wildlife corridors, taking into consideration that the development has no control over existing roadways adjacent to and through the property that may have already affected wildlife corridors. The analysis does note on pages 5.3-44 through 5.3-45 that impacts to wildlife corridors would be partially off-set by the preservation of over 70 percent of the property as open space including Strawberry Creek which will not be affected by any of the development. It further states that habitat fragmentation would not be substantial for most of the project since most of the development would take place in areas previously developed. The Specific Plan does take into consideration wildlife corridors by providing bridges over water courses and canyons and culverts (which can be seen in conceptual locations on Figure3.3-10) to avoid blockage of wildlife linkages and drainages. The DEIR does identify the impacts to wildlife corridors along Waterman Canyon as significant given the conservative approach to analysis commensurate with a Program EIR. Mitigation measures (AHS 5.3-4A) with appropriate specificity have been developed for a Program EIR level analysis.
- D-20 See comment response D-19.
- D-21 See comment response D-20.
- D-22 The private hiking trails identified in the Specific Plan refer to existing dirt fire roads within the property that continue beyond the property and circulate throughout the canyons and mountains. These roads are primarily maintained by the Forest Service for forestry patrol and fire-fighting. Access to these roads from the Arrowhead Springs property will be restricted through management of the development without the need for fences or gates. Limiting general access by the public will minimize disturbance to existing wildlife and potential damage to forest resources from motorized vehicle.
- D-23 Impacts to surface water resources have been analyzed in Section 5.7, Hydrology and Water Quality and in Section 5.15, Utilities and Service Systems. On page 5.15-2, under the heading Water Supply is a description of the water rights which are further detailed in Appendix I, Water Supply Assessment. These water rights have been put to beneficial use and are available for use by the project as stated on Page 3-43 of the DEIR under the section titled Water Sources and documented in Appendix I. Because the amount of available on-site water is variable the analysis was conservative to look at worst case draught years and "average" flows but concludes that even under those circumstances there would be adequate water supplies (page 5.15-8). The State has the authority to limit the quantity of water to be appropriated for the protection of the environment. The mitigation measure was intended to assure the City that no limit had been placed on the quantities of water appropriated. For clarification, mitigation measure AHS 5.15-1 on page 5.15-10 is herby modified as follows:
- AHS 5.15-1 Prior to approval of the first Tentative Tract Map, evidence shall be provided to Public Works/Engineering to confirm the availability and quantity of existing that appropriate water rights have been granted through the State and that the drinking water system has obtained all appropriate operating and design permits through the California State Department of Heath Services.

- D-24 As stated above impacts from use of on-site water have been analyzed in Section 5.3, *Biological Resources*, Section 5.7, *Hydrology and Water Quality* and in Section 5.15, *Utilities and Service Systems* at a program level. See comment response D-1 and D-2 regarding specificity of analysis for a Program EIR.
- D-25 As stated in paragraph 2 on page 5.15-8, only under extraordinary circumstances does the possibility exist that water would be extracted from the Bunker Hill sub-basin that is not accounted for by "banking" excess water from high flow years. In an average year, 650 acre-feet would need to be obtained from the banked water in the basin and the analysis here is very conservative. Given that high water flow in West Twin Creek has been as much as 10,700 acre feet per year, close to 6,665 acre-feet of water could be banked in the Basin in a single year after the average demand is satisfied. It is unlikely that there would be a need for obtaining water in the Basin that is not under the ownership of the mutual water companies supplying the development or from the State Water project. Impacts from cumulative water demand in the Basin can be found in Section 5.15.1.3 as part of the General Plan Update analysis.
- D-26 See comment response D-25 above.
- D-27 The conceptual grading footprint shown in Figure 3.3-6 formed the basis for the extent of impacts including vegetation removal. All utilities and facilities were assumed to be located within the grading footprint, thus all construction impacts including noise and air for those facilities were accounted for in the respective sections of the DEIR where appropriate. Operational impacts from these facilities were also included using conservative assumptions commensurate with the specificity of a Program EIR.
- D-28 Alternatives were selected on the basis of significant impacts which were determined to be biological resource impacts and traffic with the associated impacts of noise and air quality. The reduced intensity alternative would have reduced traffic by 38% or 9,339 average daily trips (ADT) at full build-out. Section 15126.6 of the CEQA Guidelines states that "an EIR need not consider every conceivable alternative to a project." A reduced housing alternative was not selected because housing produces far less traffic impact than commercial development. The total residential component of the project represents only 30% of the ADT. Also the development footprint for the housing was far smaller than that of the golf course or commercial component; therefore, a reduced housing alternative would not have diminished the level of impacts to the extent that the reduced intensity and wetland avoidance alternatives would. Please refer to comment responses D-1 and D-2 regarding a "reasonable range of alternatives."
- D-29 The first objective of the Arrowhead Springs Specific Plan as stated on Page 3-8 of Section 3.2.3 is: "Create a unique and economically viable mixed-use resort and residential living environment that utilizes the existing natural and historic resources to the greatest extent possible." (Italics added for emphasis.) The second objective is to preserve and enhance the historic hotel and spa and make them the centerpiece of the development. The second objective would not be possible without creating the viable mixed-use resort that includes a golf course to off-set the cost of historic restoration. A competitive luxury resort can not exist without the type of amenities that are planned for Arrowhead Springs. Additionally, the entire riparian corridor will not be sacrificed for a golf course as suggested here. As stated in comment response D-16, the hydrologic and wetland function of these drainages will be restored in conjunction with development of the golf course. These uses are not necessarily mutually exclusive.
- D-30 As currently designed, the development preserves approximately 70% of the undeveloped portions of the site. Other than Waterman Canyon, wildlife corridors have been preserved with this plan of



development and the portion of the development that will be occupied by facilities is only about 100 acres larger than the existing facilities footprint. The wetland avoidance alternative takes into consideration the impacts to wildlife corridors in that area therefore is was not deemed necessary to provide an alternative that preserved more of the undeveloped area.

D-31 Operational air quality impacts which assume full buildout can be found in Section 5.2.3.2 starting on page 5.2-18 and primarily summarized in Table 5.2-9. Traffic impacts can be found in Section 5.14.3.2 starting on page 5.14-30.

The growth inducing impacts of the project are sufficiently detailed in Section 10 on Page 10-1. There are no other parcels within the jurisdiction of the City of San Bernardino and its sphere of influence located in the San Bernardino Mountains. Therefore, the City would have no control over other the growth of developments that may choose to locate in mountainous regions. As stated on Page 10-1 the infrastructure presented here is only sufficient for this plan of development and any expansion beyond that would require an amendment and additional environmental documentation. See comment response D-16 for discussion of riparian areas.

- D-32 Section 5.12.1, *Fire Protection and Emergency Services* provides a complete analysis of impacts to fire services recognizing the need for fire fighting facilities to be located within the Arrowhead Springs development to reduce the threat of fire to the community and the forest lands and developing a mitigation measure (AHS 5.12-1) requiring facilities to be built.
- D-33 Since the Arrowhead Springs Specific Plan area is within the SOI of the City of San Bernardino, it is included in the summary of projections for the General Plan Update, which is considered an appropriate basis for analysis of cumulative impacts per Section 15130(b)(1) as stated on Page 4-6.
- D-34 See comment response D-1 and D-2.
- D-35 See comment response D-1 and D-2.
- D-36 See comment response D-1 and D-2.
- D-37 See comment response D-1 and D-2.

LETTER E - State Clearing House (1 page)



Arnold Schwarzenegger Governor

STATE OF CALIFORNIA Governor's Office of Planning and Research State Clearinghouse and Planning Unit



Sean Walsh Director

September 9, 2005

Terri Rahhal City of San Bernardino 300 North D Street, 3rd Floor San Bernardino, CA 92418-0001



CITY OF SAN BERNARDINO DEVELOPMENT SERVICES DEPARTMENT

Subject: City of San Bernardino General Plan Update and Associated Specific Plans EIR SCH#: 2004111132

Dear Terri Rahhal:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on September 7, 2005, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely.

Director, State Clearinghouse

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- E. Response to Comments From California State Clearing House and Planning Unit, Dated September 9, 2005
- E-1 This comment acknowledges that the City of San Bernardino has complied with the State Clearing House review requirements per CEQA and that no state agencies had submitted comments during the public review period. No response is necessary.



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LETTER F California Department of Transportation (3 pages)

STATE OF CALIFORNIA—BUSINESS, TRANSPORT / J AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 8 PLANNING AND LOCAL ASSISTANCE (MS 722) 464 WEST 4th STREET, 6th FLOOR SAN BERNARDINO, CA 92401-1400 PHONE (909) 383-4557 FAX (909) 383-5936 TTY (909) 383-6300



September 12, 2005

City of San Bernardino Attention: Mrs. Terri Rahal Principal Planner Planning and Building Department 300 North D Street San Bernardino, CA 92418-0001

Dear Mrs. Rahal:

Proposed Arrowhead Springs Specific Plan State Clearinghouse 2004111132 (08-SBd- 18 PM 9.15 +/-)

The California Department of Transportation (Caltrans) has reviewed the Arrowhead Springs Specific Plan and related environmental documents. The transmittal materials describe the original approved specific plan as approximately 1,350 dwelling units, hotel, office, commercial and golf courses on 1,916 acres.

The site adjoins either side of State Route 18 (SR-18) to west; to the south portions of the Waterman Flood Control Basin and then 40th Street; to the north and east portions of the San Bernardino National Forest.

Due to the number of dwelling units and other land uses that are proposed and that it abuts the SR-18 right-of-way, we believe project development will impact existing State facilities. This is particularly true due to additional traffic on SR-18 at the Arrowhead Road Intersection and south to State Route 30/I-210.

We recommend that amendments to the specific plan consider the following design issues, studies and related specific plan amendments be undertaken or considered:



"Caltrans improves mobility across California" CITY OF SAN BERNARDINO DEVELOPMENT SERVICES

F1

Mrs. Terri Rahal September 12, 2005 Page 2

Traffic Impact Mitigation:

| <u>1 r</u> | affic impact Mitigation: | |
|------------|---|----|
| • | Both the land use exhibit and the traffic impact study analysis appear to indicate that Arrowhead Road from SR-18 will provide a major street connection to this development, however, no analysis of the 2007 and 2030 operational conditions, signal warrant, turning movements etc appears to have been provided. This type of analysis is required. In this way the impacts of this development may be fully evaluated and effectively mitigated. | F2 |
| • | The Caltrans "Guide for the Preparation of Traffic Impact Studies" (Guide), updated December 2002, states that a Traffic Impact Study (TIS) may be needed when a project, "generates over 100 peak-hour trips assigned to a State highway facility". Since the anticipated traffic volume will greatly exceed the peak-hour trip threshold, a TIS that is prepared in accordance with the Guide and contains appropriate mitigation measures, should be provided for in the environmental document. A copy of the Guide can be downloaded at: http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports | F3 |
| • | There are missing intersection turning movement volumes for several intersections. Please provide AM and PM peak hour volumes for the year 2003, 2007, and 2030. | F4 |
| • | There are missing calculation sheets for Valencia Avenue and 30th Street and Valencia Avenue and 40th Street. | F5 |
| • | Year 2003 existing, year 2007, year 2030 traffic volumes do not balance. Please check and balance the turn movements. | F6 |
| • | Provide traffic signal warrant study. | F7 |
| <u>Dı</u> | rainage Impacts: | |
| • | Existing capacity of affected State drainage systems cannot be exceeded. Should 100-year project runoff volumes be determined to exceed the maximum capacity of the existing State drainage facilities, construction of on-site detention basins, new drainage systems or other impact mitigation will be required. | F8 |
| • | Future review of project drainage design will include an evaluation of runoff impacts to adjacent State Right-of Way (R/W). Where applicable, compliance with pertinent National Pollutant Discharge Elimination System (NPDES)/water quality standards will be required. | F9 |

"Caltrans improves mobility across California"

Mrs. Terri Rahal September 12, 2005 Page 3

Site Grading:

• Plans detailing slopes proposed for construction within or adjacent to existing State R/W should be submitted to Caltrans for review prior to grading permit issuance.

F10

 Landscaping and irrigation of slopes may be required to provide adequate erosion control and to deter graffiti. Plant materials and irrigation devices selected for use may be subject to State standards. Preparation of landscape/irrigation plans for Caltrans review may also be required.

F11

 We appreciate the opportunity to offer comments concerning this project. If you have any questions regarding this letter, please contact Mark Roberts, IGR/CEQA Liaison at (909) 383-2515 for assistance.

Sincerely,

DANIEL KOPULSKY

Office Chief

Special Studies, IGR/CEQA Review

c: Mark Roberts

"Caltrans improves mobility across California"

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- F. Response to Comments From California Department of Transportation, Dated September 12, 2005.
- F-1 This comment acknowledges receipt of DEIR and expresses concern over the potential for additional traffic on SR-18 at the entrance to Arrowhead Road and impact to SR30/I-210.
- F-2 The existing Arrowhead Road from SR-18 will continue to provide access to the Site with the proposed development. However, with construction of a primary access road to the south from 40th Street, approximately 15% of project related trips would use the intersection of SR-18 and Arrowhead Road – 5% destined to and from the south, and 10% destined to and from the north. This intersection will provide primary access to only 25% of project development by 2007 (i.e., Phase I or 2007 scenario), or approximately 7,500 daily trip generated from the project. The project's major access from 40th Street is expected to be in place prior to a trip generation threshold of 7,500 trips per day. The heaviest peak hour (PM peak hour in this case) trip generation under Phase I is estimated to be 516 trips (270 trips inbound, 246 trips outbound). Phase I development would include the renovation/redevelopment of an existing hotel, a chapel and a spring house as part of the commercial development. Trips associated with these developments will not be considered new trips since the infrastructure is already designed and in operation to handle these trips. Therefore, the net new trips under Phase I development would not be large enough to have a significant impact at this location. Similarly, the 2030 scenario is expected to generate a total of approximately 2,075 trips during the heaviest PM peak hour (999 trips inbound, 1,076 trips outbound). Five percent (5%) of these trips would amount to approximately 104 trips, including trips that are not considered "new" trips. The critical movement from the intersection will be left-turn out, which will include 5% of project related trips, or less than 100 net "new" trips. Therefore, a detailed study of this intersection was not deemed warranted. Sound traffic engineering judgment would not suggest signalization at this intersection, since SR-18 is on a downward grade from north to south and includes a prohibitive horizontal curvature at this location. From a traffic engineering viewpoint, it can be logically assumed that future traffic would find the proposed southern access to 40th Street more attractive to access the site in the event a potential impact materializes at the SR-18 access due to congestion. A detailed study of the location may be undertaken at that time when future traffic patterns are established and realistic mitigation measures can be identified.



- F-3 The Caltrans "Guide for the Preparation of Traffic Impact Studies" updated December 2002 was reviewed and appropriately followed in preparing the traffic study for this project. As mentioned in response to Comment No. 2 above, the threshold of 100 peak hour trips is not expected to be exceeded by the project. However, based on specific details of the project, prevailing highway conditions, and the forecasted traffic volumes, it was determined that providing traffic counts for existing and future traffic conditions on SR-18 would adequately satisfy the Guide's requirements of a traffic study. These counts were provided in the study.
- F-4 The existing 2003 traffic counts of turning movements taken at all 14 study intersections are available for review and can be provided as needed. The 2007 and 2030 turn volumes are estimated based on existing turn volumes, ambient growth, related project information and SCAG traffic model runs. These estimated volumes were applied in calculating 2007 and 2030 V/C ratio, delays and level of service for the study intersections. These volumes are available in the level of service calculation sheets placed in the Technical Appendix of the traffic report.
- F-5 The missing calculation sheets for 14 intersections including the intersections with Valencia can be found in Appendix A of this FEIR document.

- F-6 The traffic volumes used in calculating level of service at the study intersections represent the heaviest hourly approach movements during the 3-hour peak period of a typical weekday. This was done to address the worst traffic scenario at each individual intersection. Two adjacent intersections may not experience the heaviest hourly volumes at the same hour because of varying traffic patterns of directional movements. Therefore, the volumes may not balance in most cases. Also, it should be noted that the traffic model utilized for this study is forecasting reduced trips at certain intersection locations because of proposed zone changes, land use modifications, network improvement, roadway reclassification, etc. being considered to update the City of San Bernardino's General Plan.
- F-7 A traffic signal warrant study for the intersection of SR-18 and Arrowhead Road was deemed unnecessary because of reasons explained in comment response F-2 above.
- F-8 Comment is herby noted, included in the official environmental record of the proposed project, and will be forwarded to the appropriate City of San Bernardino decision makers for their review and consideration.
- F-9 Comment is herby noted, included in the official environmental record of the proposed project, and will be forwarded to the appropriate City of San Bernardino decision makers for their review and consideration.
- F-10 Comment is herby noted, included in the official environmental record of the proposed project, and will be forwarded to the appropriate City of San Bernardino decision makers for their review and consideration.
- F-11 Comment is herby noted, included in the official environmental record of the proposed project, and will be forwarded to the appropriate City of San Bernardino decision makers for their review and consideration.

Letter G- Local Agency Formation Commission (5 pages)

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D. 1



LOCAL AGENCY FORMATION COMMISSION

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Deputy Clerk to the Commission

LEGAL COUNSEL

CLARK H. ALSOP

September 14, 2005 Via Facsimile (909) 384-5080 and regular mail

Ms. Terri Rahhal, Principal Planner Development Services Department City of San Bernardino 300 North "D" Street San Bernardino, CA 92418-0001

RE: Notice of Completion/Notice of Availability of a Draft Environmental Impact Report

Dear Ms. Rahhal:

The Local Agency Formation Commission has received a Notice of Completion/Availability of the City of San Bernardino General Plan Update and associated Specific Plans Draft Environmental Impact Report (DEIR). A copy of this document has also been forwarded to the Commission's Environmental Consultant. Tom Dodson and Associates, who may respond under separate cover. After reviewing the submitted document, LAFCO has the following comments:

- The City clearly identifies in the Project Description that it will prezone only the unincorporated area within the Arrowhead Springs Specific Plan. Therefore, all future annexation applications will require that this process be undertaken, making the City the lead agency for the further required environmental assessment.
- The DEIR did not address the environmental impacts from the City's pre-zoning of the Arrowhead Springs area. Given that the land use designations are changing from those assigned through the existing General Plan, the impacts should have been clearly identified and analyzed in the Land Use and Planning Section of the environmental analysis.
- On Page 3-51 the identification of the intended uses of the EIR identifies the "Local Area Formation Commission"; the correct identification is Local Agency Formation Commission.

G1

G2

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To-CITY OF SAN BERNARDI

G3



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CITY OF SAN BERNARDINO GEN. PLAN UPDATE NOC/NOA - DEIR September 14, 2005

Topic Hazards and Hazardous Materials.

We have no comments on the General Plan portion of this topic.

- For the Arrowhead Springs Specific Plan, on page 5.6-18, the first line in the paragraph identifies "Municipal Water Department" is constructing the Inland Feeder Project it is the Metropolitan Water District constructing these facilities. Page 5.6-20 includes a discussion of sewage spill events from the existing sewage treatment plant (there is a duplication of the paragraph beginning "Review of the Santa Ana Regional") and other operational concerns. The DEIR identifies no mitigation measures for the new treatment plant. It would appear that the installation of a new facility and the dismantling and removal of the old wastewater treatment plant would require some mitigation measures.
- Topic Hydrology and Water Quality.

We have no comments on the General Plan Update portion of this topic. However, we have the following comments on the Arrowhead Springs Specific Plan portion.

G5

G4

• The requirement for evidence of a water right to support the intended land uses, including the determination of maximum and minimum withdrawals of water from the East and West Twin Creek watersheds, is deferred until the approval of the first Tentative Tract Map (Mitigation Measure AHS 5.7-2A). In our opinion such evidence and determinations should be provided prior to approval of the Specific Plan allowing for 1,350 dwelling units and 1.04 million square feet of commercial buildings.

G6

• The location of this site with an anticipated golf course and residential uses above two percolation basins used for recharge of the Bunker Hill Basin appears to require very specific controls on the application of fertilizers and pesticides. Mitigation Measure AHS 5.7-1D appears to provide for submission of a management plan on how these chemicals can be applied and/or used. This appears easily controllable for the golf course management; how will it be implemented for the residential homes within this area?

G7

 The location of discharge from the wastewater treatment plant proposed for this Specific Plan is not listed in this portion of the DEIR for discussion. However, release of treated effluent into the existing streams may impact water quality issues for downstream users and should be evaluated in the Specific Plan portion of the document.

G8

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CITY OF SAN BERNARDINO GEN. PLAN UPDATE NOP - DEIR September 14, 2005

Topic – Public Services – Fire Protection

The document (under Hazards and Hazardous Materials Section and the Public Services Section – Fire Protection and Emergency Services) identifies the Foothill Fire Zones that overlay portions of the City, including the area of the Arrowhead Springs Specific Plan. However, there is no mention that these areas are designated as State Responsibility Areas (SRAs) for wildland fire protection. The document should indicate whether or not the City contracts with the State Department of Forestry for retention of its services upon annexation, or if other financial arrangements are made regarding wildland fire protection. Since the City is proposing to annex the Arrowhead Springs area which is overlaid by this SRA designation, it is important to discuss the removal of the SRA designation from these lands upon annexation since the financial responsibility for State support in a wildland fire situation is transferred to the City.

G9

On page 5.12-4, related to the Arrowhead Springs Specific Plan, discussion of fire protection issues is somewhat confusing in that it indicates that the City provides for fire protection services to this area at the request of County (not community) Service Area 38 due to its proximity. However, the line following this statement indicates "Because the closest San Bernardino City Fire Department resources are located significantly farther away than the closest County Fire Department resources, the County Fire Department and the San Bernardino City Fire Department have established an automatic aid agreement for this area." Clarification of this paragraph, we believe, is needed.

- G10
- On page 5.12-6 it indicates that the future fire demands from the Arrowhead Springs Specific Plan have not been determined. However, it is identified that the City's desired response time for 90% of calls is five minutes; but the anticipated response time within the Specific Plan area is 8 to 12 minutes. Due to the fire hazard of this area, along with the residential component of this Specific Plan, more detailed information should be prepared prior to approval of the Specific Plan.

G11

Under the General Plan topic for fire protection, a Water Pressure System
was discussed and an outline of fire hydrants listed. There is no discussion
of such a system within the Arrowhead Springs Specific Plan. This should
be included to either identify the existing condition or the needed
infrastructure to provide this level of protection for the Specific Plan Area.

G12

• Topic - Utilities and Service Systems

We have no comments on the General Plan portion of this Topic. We have comments related to the Arrowhead Springs Specific Plan portion of the Topic.

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CITY OF SAN BERNARDINO GEN. PLAN UPDATE NOC/NOA - DEIR September 14, 2005

Water Supply:

 On page 5.15-6 a discussion of water demand is outlined for domestic purposes. At the end of that discussion it identifies that the irrigation system would supply water for the golf course, parks, fuel modification zone and other landscaped areas. However, in other portions of the report it identifies the irrigation water system would supply the needs for fire flow and fire hydrants. It is not clear that the assessment of this water demand is included in the discussion of the irrigation system.

G13

Mitigation Measure 5.15-1 identifies that evidence shall be provided to the
City that appropriate water rights have been granted for the drinking water
system prior to approval of the first Tentative Tract Map. As outlined
earlier, we believe that the determination of the water rights available to
support the anticipated development should be provided at the Specific
Plan stage authorizing the 1,350 dwelling units and the commercial
buildings.

G14

• The Plan for Service referenced in this section (included as Appendix K to the DEIR) states that the water provider for this project is to be the Arrowhead Water and Power (AWP), a limited liability company formed by the property owner. However, this document and the DEIR does not identify if this is proposed to be a private water company, governed by the California Public Utilities Commission, a mutual water company selling shares for service, governed by the California Department of Corporations, or another type of entity authorized to charge for its water services. This should be identified in the document and evaluated if necessary.

G15

Sewer System:

• The DEIR does not identify the operator of the wastewater system. However, the Plan for Services identifies that this service will be provided by the Del Rosa Mutual Water Company – a shareholder owned company. Is this Company authorized through the Department of Corporations to be a private sewage provider? If not, that process should be undertaken and the requirements known and evaluated at this juncture. Mitigation Measure 5.15-2 should be expanded if necessary.

G16

On page 5.15-14 it identifies that the bio-solids and recycled water from the
treatment plant used as irrigation water have the potential to affect the
water quality of local streams if not carefully controlled. If the irrigation
system is anticipated to provide the fire flow and fire hydrant water uses for
the project, would this cause an impact to downstream users? If so, it
should be identified and evaluated.

G17

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CITY OF SAN BERNARDINO GEN. PLAN UPDATE NOP – DEIR September 14, 2005

Solid Waste:

• Under the identification of Solid Waste for the Arrowhead Springs Specific Plan it states that operations have been curtailed in the recent past but the statement implies that the service has been provided. No specific solid waste provider is identified in the DEIR. However the Plan for Service identifies that this has been provided by the "County of San Bernardino". The County does not provide for direct pickup service for solid waste disposal so the correct provider should be identified in the DEIR and the Plan for Service.

G18

 Upon annexation there is a five (5) year window to allow for transition from an existing provider to City service. This should be clarified in both the DEIR and the Plan for Service.

G19

· Dry Utilities:

 Under Electricity the DEIR states that this service is to be provided by Southern California Edison (SCE) through contracts to the Arrowhead Water and Power LLC. However, Arrowhead Water and Power is an entity created by the existing property owner who receives service from SCE. Is this the contract identified in the discussion? How would this contract be any different from an existing user's service? The text of this discussion appears to indicate that the AWP will resell this service to the homes and businesses within the Specific Plan. This should be clarified.

G20



Our discussion in this document does not include a thorough review and comment on the Plan for Service included as an Appendix to the DEIR. This document will be reviewed in greater detail either prior to submission of an annexation application or through the annexation review process itself.

Thank you for providing LAFCO the opportunity to provide comments to the DEIR. Please maintain LAFCO on your distribution list to receive further information related to this process. If you have any questions regarding the information outlined above, please do not hesitate to contact me at (909) 387-5866. We look forward to working with the City in the future.

Sincerely

KATHLEEN ROLLINGS-MCDONALD

Executive Officer

Tom Dodson, Tom Dodson & Associates, LAFCO Environmental Consultant

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To-CITY OF SAN BERNARDI Page

- G. Response to Comments From Local Agency Formation Commission, Dated September 14, 2005.
- G-1 Comment is herby noted, included in the official environmental record of the proposed project, and will be forwarded to the appropriate City of San Bernardino decision makers for their review and consideration.
- G-2 This comment addresses the City's pre-zoning of unincorporated lands within the Arrowhead Springs Specific Plan. Section 7.3.2.1 of the Draft EIR, No-Project/Existing Zoning Alternative, specifically analyzes the impacts of development under the existing City and County land use designations in comparison with the proposed Arrowhead Springs Specific Plan.
- G-3 This comment identifies an error in the name of a responsible agency. The fourth listing of responsible agencies in Section 3.4, *INTENDED USES OF THE EIR*, Page 3-51 is hereby modified as follows:

Local Area Formation Commission (LAFCO) Local Agency Formation Commission

The fifth listing of responsible agencies in Section 3.4, *INTENDED USES OF THE EIR* Page 3-51 is hereby modified as follows:

Local Area Formation Commission (LAFCO) Local Agency Formation Commission

G-4 This comment identifies an error in the in the name of the owner and builder of the Inland Feeder Project. In Section 5.6.1.2, the first line of the first paragraph under the heading Proximity to High-Pressure Water Lines on page 5.6-18 is hereby modified as follows:

The Municipal Metropolitan Water Department District (MWD) is constructing the Inland Feeder Project, which is nearly 44 miles of pipeline, 12 to 14 feet in diameter, which will convey water between Devil Canyon and MWD's Colorado River Aqueduct south of Lake Perris, near the City of San Jacinto.

G-5 This comment addresses a duplication of the paragraph beginning "Review of the Santa Ana Regional." Section 5.6.1.2 the third paragraph under the heading Sewage Treatment System on page 5.6-20 is hereby modified as follows:

Review of the Santa Ana Regional Water Quality Control Board revealed a sewage spill on the subject site on February 13, 1987. The sewage spill reportedly happened at the sewer man hole near the cabana pool area. The sewage flowed towards Strawberry Creek, but did not reach the creek. Approximately 100,000 gallons of sewage was spilled. An inspector visited the area after the spill was cleaned and noted that the area of the spill occurred down a steep hill that did not appear to be visited often.

The comment continues to express concern that there should be mitigation measures for the construction and operation of the new treatment plant and for the demolition of the old treatment plant. Chapter 5.15, *Utilities and Service Systems*, Section 5.15.2, *Wastewater Treatment and Collection* addresses the addition of a new wastewater treatment plant. As described in the project description on Page 3-44, the new wastewater treatment system would be relatively self-sustaining. Section 5.15.2.4 Existing Regulations and Standard Conditions, subheading Arrowhead Springs Specific Plan and Mitigation Measure AHS 5.15-2, on pages 5.15-14 and 5.15-15 are sufficient to reduce all impacts resulting from the addition of a new wastewater treatment plant to less than

significant. Additionally, potential odor from the new treatment plant was addressed in the Air Quality section on pages 5.2-21 to 5.2-22 and was found to be less than significant. Section 5.6.3.2 of the Hazardous and Hazardous Materials section of the DEIR analyzes the potential environmental impacts that may have resulted from operation of the existing wastewater treatment system on page 5.6-28 in AHS Impact 5.6-1. Mitigation measure AHS 6.51b on page 5.6-32 is provided to address potential impacts from dismantling the existing plant.

- G-6 On page 5.15-2, under the heading *Water Supply* is a description of the water rights which are further detailed in Appendix I, *Water Supply Assessment*. These water rights have been put to beneficial use and are available for use by the project as stated on page 3-43 of the DEIR under the section titled *Water Sources* and documented in Appendix I. Because the amount of available on-site water is variable the analysis was conservative to look at worst case draught years and "average" flows but concludes that even under those circumstances there would be adequate water supplies (page 5.15-8). The State has the authority to limit the quantity of water to be appropriated for the protection of the environment. The mitigation measure was intended to assure the City that no limit had been placed on the quantities of water appropriated. For clarification, mitigation measure AHS 5.15-1 on page 5.15-10 is herby modified as follows:
- AHS 5.15-1 Prior to approval of the first Tentative Tract Map, evidence shall be provided to Public Works/Engineering to confirm the availability and quantity of existing that appropriate water rights have been granted through the State and that the drinking water system has obtained all appropriate operating and design permits through the California State Department of Heath Services.
- G-7 Recycled water will not be used for residential lawns.
- G-8 There will be no direct discharge to local streams from the waste water treatment system. Section 3.3.4.3, *Infrastructure* describes the treatment system on Page 3-44 including a discussion that all wastewater will be recycled for irrigation after tertiary treatment. Use of recycled water is discussed in Section 5.7.3.2 on page 5.7-26 and cross referenced to Section 5.3 *Biological Resources* and Section 5.15.1 *water Supply and Distribution*.
- G-9 In Section 3.3.4 of the project description for the Arrowhead Springs Specific Plan, on Page 3-27, first paragraph, the text states that "upon annexation the areas currently designated as State Responsibility for wildland fire protection would be transferred to the City and the State would not longer have financial responsibility in these areas."
- G-10 The forth sentence incorrectly interchanged the words City and County. The first paragraph on page 5.12-4 of Section 5.12.1.1 is herby modified as follows:

Only a portion of the Arrowhead Springs Specific Plan area is located within the City limits of San Bernardino. While the southwestern tip of the Arrowhead Springs Specific Plan area is currently serviced by the San Bernardino City Fire Department, details of which are described above, the majority of the existing developed area currently lies outside the service boundary for the Fire Department. These areas of the Arrowhead Springs Specific Plan, designated as Community Service Area (CSA) 38, are serviced by the San Bernardino County Fire Department. Because the closest San Bernardino City Fire Department resources are located significantly farther away than the closest County City Fire Department resources, the County Fire Department and the San Bernardino City Fire Department have established an automatic aid agreement for this area. The agreement calls for the San Bernardino City Fire Department to be the first responding agency to these areas. The County Fire Department will then send additional units to the area, and take over the



operations when they arrive. In addition, the Arrowhead Springs Specific Plan area is considered a hazardous fire area, evidenced by the 2002 fire which affected a large portion of the planning area.

- G-11 At the time of the writing of the DEIR no decision had been made as to the type and location of facilities that would be required for the Arrowhead Springs area. Mitigation measure AHS Impact 5.12-1 was developed in response to that situation to ensure that appropriate facilities were provided when needed.
- G-12 The water system that would supply water for fire protection is included in the discussion of water demand in Section 5.15.1, *Water Supply and Distribution* on page 5.15-6 with reference to Appendix J, *Facilities Plan* which provides details of the pressurization needed for the system. The water distribution system is shown in Figure 3.3.7.
- G-13 There will be two water systems with different sources of water primarily due to water quality issues. The poorer quality water from West Twin Creek will only be used for non-domestic purposes, supplemented with re-cycled water. The better quality water from Strawberry and East Twin Creeks will be used primarily for domestic purposed but may also be added to the irrigation system if needed. The demand for each system is included in the discussion on page 5.15-7.
- G-14 See comment response G-6.
- G-15 The Water Supply Assessment (Appendix I) identifies the two water companies (Del Rosa Mutual Water Company and West Twin Creek Water Company) supplying water for the project as "mutual" water companies and they will remain mutual water companies, issuing shares to new customers in the project area as they become active as stated on Page I-5 of Appendix I.
- G-16 An application will be prepared to the Department of Corporations to include shares for recycled wastewater for the Del Rosa Mutual Water Company. Mitigation measure AHS 5.15-2 is hereby modified as follows:
- AHS 5.15-2 Prior to approval of the first Tentative Tract Map, evidence shall be provided to the Public Works/Engineering Division that appropriate permits have been obtained from the State Water Resources Board, the State Department of Health Services, *California Department of Corporations* and the SCAQMD for the operation of the wastewater treatment plant including disposal of bio-solids and use of recycled water.
- G-17 Recycled water used for fire fighting would only be a concern if it were to reach a drinking water source in close proximity. If used to fight fires within the developed portions of the property, the water would be directed into a stormwater collection system where it would be captured and treated to meet water quality standards the same as any of the storm water collected. The Arrowhead Springs property extends to the percolation ponds to the south and no water is withdrawn from these streams in that area for drinking water purposes.
- G-18 Page 5.15-18 states that currently solid waste collection is handled by a private hauler who disposes of the waste in the San Timoteo landfill once a month.
- G-19 The DEIR explains on page 5.15-20 that the City of San Bernardino provides both commercial and residential services on a fee basis. The existing provider is private therefore transition is not a concern for such a small amount. Arrangements with the City will be made as the project progresses.

G-20 Arrowhead Power and Water will be responsible for coordination of development of electrical utility systems but individual property owners will contract for service with SCE. AWP may consider functioning as a re-seller of electricity in the future but has no plans to do so at this time.



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This section identifies any changes needed in the Draft Environmental Impact Report (DEIR) to correct or clarify the information contained in the document. Changes made to the DEIR are identified here in strikeout text to indicate deletions and in **bold and italics** to signify additions.

1. Table 1.8-1, Section 1.8, of the DEIR, Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation is hereby modified as shown on the following pages.



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| Table 1.8-1 |
|---|
| Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation |

| Environmental Impact | Level of Significance Before Mitigation | | Mitigation Measures | Level of Significance After Mitigation |
|--|--|-------------------|---|---|
| 5.3 BIOLOGICAL RESOURCES | | | | |
| AHS Impact 5.3-1: Development of the project would disturb or remove approximately 420 acres of plant communities of which approximately 124 acres contain sensitive | Potentially Significant | AHS 5.3-1 | Project implementation, primarily construction in West Twin Greek/Waterman Canyon would result in the direct removal of sensitive vegetation communities. Impacts would be potentially significant. | Less Than Significant |
| vegetation communities, plant and animal | | | Direct impacts to one federal and state listed plant species (thread | |
| species. (Threshold B-1) | | | leaved brodiaea) known to occur on the site; and four federal candidate plant species (smooth tarplant, Plummer's mariposa lily, Parry's spineflower, and many-stemmed dudleya) that were not observed but with a moderate likelihood to occur would result in a potentially significant impact. | |
| | | | Direct impacts to one federal threatened and one federal proposed endangered amphibian species, and one federal candidate wildlife species | |
| | | A HS 5.3-1 | Prior to the issuance of grading permits, a qualified biologist shall conduct detailed surveys for sensitive vegetation communities, plants, and wildlife that occur within the final grading footprint and associated construction staging areas for the proposed development. If listed species are determined to be present, consultation with the USFWS and CDFG shall be initiated. The applicant shall comply with project-specific permit conditions and requirements developed through consultation with USFWS and CDFG. Including: | |
| | | | Avoidance and minimization of impacts to listed species through revised project design. Provision of in-kind native habitat/vegetation through onsite revegetation and restoration at a minimum 2 to 1 ratio or higher ratio as required by USFWS and CDFG. Provision of compensation through acquisition of offsite mitigation areas at a minimum 2 to 1 ratio or higher ratio as required by USFWS and CDFG. | |

| Environmental Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
|--|--|---|---|
| AHS Impact 5.3-2: Development of the project would potentially result in the loss of | Potentially Significant | AHS 5.3-2 Approximately 51 acres of riparian habitat would be impacted by construction of the proposed project. | Less Than Significant |
| would potentially result in the loss of approximately 51 acres of riparian habitat (Threshold B-2) | | AHS 5.3-2A Prior to the issuance of grading permits for any project potentially affecting riparian habitat, jurisdictional waters, and/or wetland habitat, the property owner/developer shall provide evidence to the that all necessary permits have been obtained from the CDFG (pursuant to Section 1600 of the Fish and Game Code) and the USACE (pursuant to Section 404 of the CWA) or that no such permits are required, in a manner meeting the approval of the Director of Development Services for the City of San Bernardino. Section 404 Permits from the USCOE will also require a Section 401 Water Quality Certification from the California RWQCB Santa Ana. Project applicant shall provide evidence of a Section 401 Water Quality Certification. If federally listed species are present, consultation with USFWS shall also occur in conjunction with the Section 404 permit. | |
| | | AHS 5.3-2B Prior to issuance of a grading permit for any area containing resources subject to the jurisdiction of USACE and CDFG, USFWS, and RWQCB, a comprehensive Revegetation and Restoration Plan shall be developed by the applicant in consultation with the applicable agencies. The plan shall incorporate the applicable permit conditions and requirements of these agencies including the Section 404 Permit, 401 Water Quality Certification, and CDFG Section 1600 Streambed Alteration Agreement. | |
| | | Native vegetation shall be installed at a minimum ratio of 2 to 1 and maintained along the developed/wildland interface of the golf course and associated residential units, including local native plant landscaping. | |
| | | The plan will address the following items: | |
| | | Responsibilities and qualifications of the personnel to implement and supervise the plan: The responsibilities | |

| Environmental Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significanc After Mitigation |
|----------------------|---|---|--|
| | | of the landowner, specialists and maintenance personnel that will supervise and implement the plan will be specified. Site selection: The site for mitigation will be determined in coordination with the City, USFWS, CDFG, and USFWS. The site will be located within land to be purchased or preserved off site within the San Gabriel watershed. Restoration and Creation of Habitat: The plan shall require the creation of riparian habitat in the amount and of the type required by CDFG and USACE, provided, however, that, in order to assure no net loss of jurisdictional resources on an acre-for-acre basis, all impacted USACE and CDFG jurisdictional habitat shall be compensated by restoration, enhancement or creation at a minimum of 3:1 ratio. Site preparation and planting implementation: The site preparation will include: 1) protection of existing native species, 2) trash and weed removal, 3) native species salvage and reuse (i.e. duff), 4) soil treatments (i.e. imprinting, decompacting), 5) temporary irrigation installation, 6) erosion control measures (i.e. rice or willow wattles), 7) seed mix application, and 8) container species. Schedule: A schedule will be developed that includes planting to occur during the appropriate season. Maintenance plan/guidelines: The maintenance plan will include: 1) weed control, 2) herbivory control, 3) trash removal, 4) irrigation system maintenance, 5) maintenance training, and 6) replacement planting. Monitoring plan: The monitoring plan will include: 1) qualitative monitoring (i.e., photographs and general observation), 2) quantitative monitoring (i.e., randomly placed transects), 3) performance criteria as approved | |

| Environmental Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | by the resource agencies, 4) monitoring reports for three to five years, 5) site monitoring as required by the resource agencies to ensure successful establishment of riparian habitat within the restored and created area. Successful establishment is defined per the performance criteria agreed to by the USACE, USFWS, CDFG, and the City or subsequent project applicant. • Long-term preservation: Long-term preservation of the site will also be outlined in the conceptual mitigation plan. | |
| | | AHS 5.3-2C The applicant shall ensure that polluted runoff from the golf course will not enter riparian habitat and jurisdictional waters, including wetland habitat, through implementation of Mitigation Measures 5.7-1B, 5.7-1C, 5.7-1D, and 5.7-1E (Section 5.7, Hydrology). | |
| AHS Impact 5.3-3: The proposed project would impact approximately 58 acres of potential jurisdictional waters, including wetlands. | Potentially Significant | AHS 5.3-3 Approximately 58 acres of potential jurisdictional (USACE and CDFG) waters, including wetlands, would be impacted by the proposed project. | Less Than Significant |
| (Threshold B-3) | | AHS 5.3-3 Project applicant shall implement mitigation measure 5.3-2 to address impacts to jurisdictional waters and wetlands. | |
| AHS Impact 5.3-4: The proposed project would affect wildlife movement in West Twin Creek/Waterman Canyon. (Threshold B-4) | Potentially Significant | AHS 5.3-4 The proposed project may potentially affect the movement of resident or migratory wildlife species in West Twin Creek/Waterman Canyon. | Less Than Significant |
| | | AHS 5.3-4A Prior to issuance of a grading permit for the golf course construction and creek realignment, the applicant shall conduct a wildlife corridor/movement analysis of West Twin Creek/Waterman Canyon to identify and define the limits of the existing wildlife corridor. Based on the results of the analysis, and in consultation with a qualified biologist and a qualified native community restorationist, the landscaping plan for | |

| Environmental Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | manufactured slopes along the drainage shall include: Provision of north-south wildlife movement and linkage opportunities for the affected species along and adjacent to the realigned creek. Planting of a minimum 25-foot buffer zone, within a 50-foot setback, of native shrubs and trees that provide maximum screening. Exterior lighting shall be prohibited within the 50-foot setback zone. Light sources adjacent to the wildlife corridor shall be directed away from the corridor. To allow for the mobility of animals, fencing used in the 50-foot setback zone shall be limited to open fencing, such as split rail fencing, which does not exceed 40 inches in height above the finished grade. AHS 5.3-4B If construction activities, including removal of riparian vegetation or construction adjacent to riparian habitat, is to occur between March 15 and August 30, the project proponent shall have a biologist conduct a pre-construction, migratory bird and raptor nesting site check. The biologist must be qualified to determine the status and stage of nesting effort by all locally breeding raptor species without causing intrusive disturbance. If an active nesting effort is confirmed very likely by the biologist, no construction activities shall occur within at least 300 feet of the nesting site until measures to address the constraint are agreed to by the project proponent and USFWS personnel. This agreement may be made by conference call, an on-site meeting, or other mutually agreeable means. Measures available as options to address this constraint are dependent on the species and any other protections afforded it, details of the nest site, the nest stage, types and levels of ongoing disturbances, the relevant project actions, and distances involved. Specific measures would be determined by the regulating agency (USFWS). | |

| | Table 1.8-1 | |
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| Summary of Environmental Imp | pacts, Mitigation Measures and Levels of Si | gnificance After Mitigation |

| Environmental Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| AHS Impact 5.3-5: The proposed project would require compliance with the development regulations and standards for Arrowhead Springs. (Thresholds B-5 and B-6) | Less than Significant | AHS 5.3-5 The proposed project would comply with the development standards for the Arrowhead Springs Specific Plan development, including Open Space Designations, Hillside Development, Animal and Plant Life policies. There is no existing approved regional HCP or MSHCP applicable to the proposed project. While portions of the project site are within designated coastal California gnateatcher critical habitat, there is no habitat present. No conflict with existing conservation plans or area plans would occur. | ess Than Significant |
| | | No significant impacts were identified and no mitigation measures would be required. | |
| 5.4 CULTURAL RESOURCES | | | |
| | Potentially Significant | AHS 5.4-1B The EIR concludes that there are or may be significant historical structures/resources not currently ascertainable within areas where ground disturbing activity is proposed by the project. Therefore, prior to issuance of the first preliminary or precise grading permit for development in the Arrowhead Springs Specific Plan area, the landowner or subsequent project applicant shall provide evidence that an qualified historic preservation professional has been retained by the landowner or subsequent project applicant, and has conducted a site survey of the development area at such time as all ground surfaces are visible after current uses are removed. If any sites are discovered, the historian shall conduct surveys and/or test level investigations. Testing and evaluation may consist of surface collection and mapping limited subsurface excavations, and the appropriate analyses and research necessary to characterize the artifacts and deposit from which they originated. Upon completion of the test level investigations for sites are determined to be unique a "historical resource" as set forth in CEQA Guidelines Section 15064.5, the following measures shall be undertaken: the historian shall submit its recommendations to the landowner or subsequent project applicant and the Director of Community Development on the measures that shall be implemented to protect the site. Appropriate measures could include preservation in place through planning construction to avoid the historical resource, | |

| Table 1.8-1 |
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| Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation |

| Environmental Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | incorporation into greenspace, parks or open space, data recovery excavations of the finds or compliance with the Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic buildings (1995). | |
| | | Preparation of a research design for those sites determined to the "historical resources" that cannot be avoided that describes the recommended field investigations, and makes provisions for adequately recovering the scientifically consequential information from and about the "historical resource." Conducting site excavations in accordance with the research design with an emphasis on obtaining an adequate sample for analysis within the limits of the research questions being addressed. Special studies such as pollen analyses, soil analyses, radiocarbon dating, and obsidian hydration dating should be conducted as appropriate. Monitoring of all field excavations by a Native American representative. Preparation of a final report of the Phase 3 data recovery work and submittal of the research design and final report to the South Central Coastal Information Center (SCCIC), and other agencies, as appropriate. If any Native American archaeological artifacts are recovered, the project applicant shall contact the City, which shall in turn contact the Morongo Band of Mission Indians and any other designated Tribe(s)' tribal representative, as determined by the Native American Heritage Commission(NAHC) to notify them of the discovery. The applicant shall coordinate with the City of San Bernardino and the designated Tribe(s) to determine, in good faith, the appropriate disposition Native American artifacts and the designated Tribe(s) shall be given the | |

| Environmental Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | opportunity to seek the return of any Native American artifacts discovered. Any non-Native American archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Director of Community Development where they would be afforded long-term preservation to allow future scientific study | |
| AHS Impact 5.4-2: Build-out of the Arrowhead Springs Specific Plan would impact archaeological resources, paleontological resources or a unique geologic feature. (Threshold C-2, C-3) | Potentially Significant | AHS 5.4-2A Prior to issuance of the first preliminary or precise grading permit, and for any subsequent permit involving excavation to increased depth, the landowner or subsequent project applicant shall provide evidence that an archaeologist and/or paleontologist have been retained by the landowner or subsequent project applicant, and that the consultant(s) will be present during all grading and other significant ground disturbing activities. These consultants shall be selected from the roll of qualified archaeologist and paleontologists maintained by the County of San Bernardino. Should any archeological/paleontological resources be discovered, the monitor is authorized to stop all grading in the immediate area of the discovery, and shall make recommendations to the Director of Development Services on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. If the resources are determined to be "historic resources" at that term is defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Director of Development Services. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in greenspace, parks or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Director approves the measures to protect these resources. If any Native American paleontological or archaeological artifacts are recovered as a result mitigation the City shall contact the Morongo Band of Mission Indians and any other designated Tribe(s)' tribal representative, as determined by the Native American Heritage | |

| Table 1.8-1 |
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| Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation |

| Environmental Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | Commission(NAHC) to notify them of the discovery. The applicant shall coordinate with the City of San Bernardino and the designated Tribe(s) to determine, in good faith, the appropriate disposition Native American artifacts and the designated Tribe(s) shall be given the opportunity to seek the return of any Native American artifacts discovered. Any non-Native American paleontological or archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Director of Community Development where they would be afforded long term preservation to allow future scientific study. | |
| | | AHS 5.4-2C The EIR concludes that there are or may be significant archaeological resources within areas where ground disturbing activity is proposed by the project. Therefore, prior to the first preliminary or precise grading permit for development in the Arrowhead Springs Specific Plan area, each prehistoric and historic archeological site (listed below and described in Table 5.4-3) located within the project grading footprint must be tested and evaluated, following clearing and scraping activities. | |
| | | CA-SBR-2268/H, including the four loci CA-SBR-6870H CA-SBR-7019H CA-SBR-7020H CA-SBR-7022H CA-SBR-7049H P1071-21 P36-017732 | |
| | | Testing and evaluation may consist of surface collection and mapping, limited subsurface excavations, and the appropriate analyses and research necessary to characterize the artifacts and deposit from which they originated. Upon completion of the test level investigations, for sites are determined to be unique archaeological sites or historical resources as set forth in CEQA Guidelines Section 15064.5, the | |

| Table 1.8-1 | |
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| Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigat | ion |

| Environmental Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| | | following measures shall be undertaken: the archaeologist shall submit its recommendations to, the landowner or subsequent project applicant and the Director of Community Development on the measures that shall be implemented to protect the sites. Appropriate measures for unique archaeological resources or historical resources could include preservation in place through planning construction to avoid archaeological sites; incorporation of sites within parks, greenspace, or other open space; covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site or deeding the site into a permanent conservation easement. When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code. | |
| | | Preparation of a research design for those sites determined to the "historical resources" that cannot be avoided that describes the recommended field investigations, and makes provisions for adequately recovering the scientifically consequential information from and about the "historical resource." Conducting site excavations in accordance with the research design with an emphasis on obtaining an adequate sample for analysis within the limits of the research questions being addressed. Special studies such as pollen analyses, soil analyses, radiocarbon dating, and obsidian hydration dating should be conducted as appropriate. Monitoring of all field excavations by a Native American representative. | |

| Summary of | Environmental Impacts, Mitiga | Table 1.8-1 attion Measures and Levels of Significance After Mitigation | |
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| Environmental Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
| E 45 LITH ITV AND OFFINAL OVOTEND | | Preparation of a final report of the Phase 3 data recovery work and submittal of the research design and final report to the South Central Coastal Information Center (SCCIC), and other agencies, as appropriate. If any Native American archaeological artifacts are recovered, the project applicant shall contact the City, which shall in turn contact the Morongo Band of Mission Indians and any other designated Tribe(s)' tribal representative, as determined by the Native American Heritage Commission(NAHC) to notify them of the discovery. The applicant shall coordinate with the City of San Bernardino and the designated Tribe(s) to determine, in good faith, the appropriate disposition Native American artifacts and the designated Tribe(s) shall be given the opportunity to seek the return of any Native American artifacts discovered. Any non-Native American archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Director of Community Development where they would be afforded long term preservation to allow future scientific study. | |
| 5.15 UTILITY AND SERVICE SYSTEMS WASTEWATER TREATMENT AND COLLECTION | | | |
| AHS Impact 5.15-1: Implementation of the Arrowhead Springs Specific Plan would require construction of a new water system and increase on-site water demand by approximately 4,035 acre-feet at build-out (Threshold WS-1 and WS-2). | Potentially Significant | AHS 5.15-1 Prior to approval of the first Tentative Tract Map, the evidence shall be provided to Public Works/Engineering to confirm the availability and quantity of existing that appropriate water rights have been granted through the State and that the drinking water system has obtained all appropriate operating and design permits through the California State Department of Heath Services. | ess Than Significant |

| Environmental Impact | Level of Significance Before Mitigation | Mitigation Measures | Level of Significance After Mitigation |
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| AHS Impact 5.15-2: Project-generated wastewater could be adequately collected and treated by the waster service provider for the project; however, some related facility operations may affect the environment (Thresholds WW-1, WW-2, and WW-3). | | AHS 5.15-2 Prior to approval of the first Tentative Tract Map, evidence shall be provided to the Public Works/Engineering Division that appropriate permits have been obtained from the State Water Resources Board, the State Department of Health Services, <i>California Department of Corporations</i> and the SCAQMD for the operation of the wastewater treatment plant including disposal of bio-solids and use of recycled water. | Less than Significant |

2. Page 3-51, Section 3.4 of the DEIR, Intended Uses of the EIR, fourth listing of Responsible Agencies is hereby modified as follows:

Local Area Formation Commission (LAFCO) Local Agency Formation Commission

3. Page 3-51, Section 3.4 of the DEIR, Intended Uses of the EIR, fifth listing of Responsible Agencies is hereby modified as follows:

Local Area Formation Commission (LAFCO) Local Agency Formation Commission

- 4. Page 5.4-2, Section 5.4.1 of the DEIR, Environmental Setting under the heading California Public Resources Code is hereby modified to add a fourth bullet as follows:
 - As part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place. (CEQA Guidelines Section 15064.5 (f)).
- 5. Page 5.4-2, Section 5.4.1 of the DEIR, Environmental Setting under the heading California Senate Bill 18 is hereby modified as follows:

Senate Bill 18, signed into law in September 2004, requires cities and counties to notify and consult with California Native American Tribe(s) about proposed local land use planning decisions for the purpose of protecting Traditional Tribal Cultural Places ("cultural places"). It requires establishment of a Native American Traditional Tribal Cultural Site (TTCS) Register, which would list all Native American sites deemed by the NAHC to be sacred to local tribes. SB 18 provides a new definition of TTCS requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. Previously a site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities.

SB 18 institutes as new process which would require a city or county to consult with the NAHC and any appropriate Native American tribe for the purpose of preserving relevant TTCSs prior to the adoption, revision, amendment, or update of a city's or county's general plan or specific plan. As of March 1, 2005, eities and counties must send their general plan and specific plan proposals to those California Native American Tribes that are on the NAHC's contact list and have traditional lands located within the city or county's jurisdiction. To help local officials meet these new obligations, SB 18 requires the Governor's Office of Planning and Research (OPR) to amend its General Plan Guidelines to include advice to local government on how to consult with California Native American Tribes.

Developed in cooperation with the NAHC, the OPR guidelines include advice for consulting with California Native American Tribes for:

- The preservation of, or the mitigation of impacts to cultural places;
- Procedures for identifying through the NAHC the appropriate California Native American tribes;



- Procedures for continuing to protect the confidentiality of information concerning the specific identity, location, character, and use of cultural places; and
- Procedures to facilitate voluntary landowner participation to preserve and protect the specific identity, location character, and use of cultural places [GC §65040.2(g)].

Also under SB 18, a new process requires the Lead Agency on a project covered by CEQA to ask the NAHC whether the proposed project is within a 5-mile radius of a TTCS. The NAHC would have 30 days to inform the Lead Agency if the proposed project is within proximity to a TTCS and another 45 days to determine whether the project would have an adverse impact on the TTCS. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's EIR. If both the City and the tribe agree that adequate mitigation or preservation measures cannot be take, then neither party is obligated to take action.

Senate Bill 18 was signed into law in September 2004 and went into effect on March 1, 2005. It places new requirements upon local governments for developments within or near Traditional Tribal Cultural Places (TTCP). Per SB 18, the law requires local jurisdictions to provide opportunities for involvement of California Native Americans tribes in the land planning process for the purpose of preserving traditional tribal cultural places. The General Plan Guidelines, 2005 Supplement (also known as Tribal Consultation Guidelines) published by the Governor's Office of Planning and Research recommends that the Native American Heritage Commission (NAHC) provide written information as soon as possible but no later than 30 days to inform the Lead Agency if the proposed project is determined to be in proximity to a TTCP and another 90 days for tribes to respond to a local government if they want to consult with the local government to determine whether the project would have an adverse impact on the TTCP. There is no statutory limit on the consultation duration. Forty-five days before the action is publicly considered by the local government council, the local government refers action to agencies, following the CEQA public review time frame. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's EIR. If both the City and the tribe agree that adequate mitigation or preservation measures cannot be taken, then neither party is obligated to take action.

Per SB 18, the law institutes a new process which would require a city or county to consult with the NAHC and any appropriate Native American tribe for the purpose of preserving relevant TTCP prior to the adoption, revision, amendment, or update of a city's or county's general plan. While SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, the Final Tribal Guidelines advises that SB 18 requirements extend to specific plans as well, as State planning law requires local governments to use the same process for amendment or adoption of specific plans as general plans (defined in Government Code §65453). In addition, SB 18 provides a new definition of TTCP requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies. Previously, the site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities. In addition, SB 18 law also amended Civil Code §815.3 and adds California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting their cultural places.

6. Page 5.4-25, Section 5.4.3 of the DEIR, Environmental Impacts is hereby modified as follows:

Policy 11.1.2: Maintain and update the Historic Resources Reconnaissance Survey database files of historic, architectural, and cultural resources conducted in 1991, and integrate it into the City's ordinance

and environmental review process. Prior to public distribution, Native American tribes should be consulted to address any issues of confidentiality.

7. Page 5.4-26, Section 5.4.3 of the DEIR, Environmental Impacts is hereby modified as follows:

Policy 11.1.4: Compile and maintain an inventory, based on the survey, of the Planning Area's significant historic, architectural, and cultural resources. **Prior to public distribution, Native American tribes should be consulted to address any issues of confidentiality.**

8. Page 5.4-27, Section 5.4.3 of the DEIR, Environmental Impacts is hereby modified as follows:

Policy 11.1.5: Continue to adopt historic district and overlay zone ordinances as described in the Historic Resources Reconnaissance Survey Report. Consider the designation of Historic Districts and Historic Overlay Zones as described in the Historic Resources Reconnaissance Survey Report. **Prior to public distribution, Native American tribes should be consulted to address any issues of confidentiality.**

9. Page 5.4-27, Section 5.4.3 of the DEIR, Environmental Impacts is hereby modified as follows:

Policy 11.5.2: Develop mitigation measures for projects located in archaeologically sensitive areas to protect such locations, remove artifacts, and retain them for educational display. **Native American tribes** should be consulted to determine the disposition of any Native American artifacts discovered.

- 10. Page 5.4-30, Section 5.4.4 of the DEIR, Existing Regulations and Standard Conditions is hereby modified as follows:
 - State Bulletin 18, Traditional Tribal Cultural Places, signed into law in late 2004, places new requirements within CEQA for developments within or near Traditional Tribal Cultural Places. This Bill requires establishment of a Native American Traditional Tribal Cultural Site Register (TTCS Register), which would list all Native American sites deemed to be sacred to local tribes by the Native American Heritage Commission (NAHC). Under SB 18, a new process that would require the lead agency on a project covered by CEQA to ask the NAHC whether the proposed project is within a 5-mile radius of a TTCS. The NAHC would have 45 days to inform the lead agency if the proposed project is determined to be in proximity to a TTCS and another 75 days to determine whether the project would have an adverse impact on the TTCS. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's Environmental Impact Report (EIR). If there is no agreement, either the NAHC may determine lesser mitigations that would be acceptable for inclusion in the EIR or they may ask the Attorney General to take appropriate legal action against the project proponents.
 - SB 18 also institutes a new process which would require a city or county to consult with the NAHC and any appropriate Native American tribe for the purpose of preserving relevant TTCSs prior to the adoption, revision, amendment, or update of a city's or county's general plan. In addition SB 18 gives a new definition of TTCS requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. Previously, the site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities.
 - Senate Bill 18 was signed into law in September 2004 and went into effect on March 1, 2005. It
 places new requirements upon local governments for developments within or near Traditional
 Tribal Cultural Places (TTCP). Per SB 18, the law requires local jurisdictions to provide



opportunities for involvement of California Native Americans tribes in the land planning process for the purpose of preserving traditional tribal cultural places. The General Plan Guidelines, 2005 Supplement (also known as Tribal Consultation Guidelines) published by the Governor's Office of Planning and Research recommends that the Native American Heritage Commission (NAHC) provide written information as soon as possible but no later than 30 days to inform the Lead Agency if the proposed project is determined to be in proximity to a TTCP and another 90 days for tribes to respond to a local government if they want to consult with the local government to determine whether the project would have an adverse impact on the TTCP. There is no statutory limit on the consultation duration. Forty-five days before the action is publicly considered by the local government council, the local government refers action to agencies, following the CEQA public review time frame. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's EIR. If both the City and the tribe agree that adequate mitigation or preservation measures cannot be taken, then neither party is obligated to take action.

11. Page 5.4-33, Section 5.4.7 of the DEIR, Mitigation Measures is hereby modified as follows:

AHS 5.4-1B

The EIR concludes that there are or may be significant historical structures/resources not currently ascertainable within areas where ground disturbing activity is proposed by the project. Therefore, prior to issuance of the first preliminary or precise grading permit for development in the Arrowhead Springs Specific Plan area, the landowner or subsequent project applicant shall provide evidence that an qualified historic preservation professional has been retained by the landowner or subsequent project applicant, and has conducted a site survey of the development area at such time as all ground surfaces are visible after current uses are removed. If any sites are discovered, the historian shall conduct surveys and/or test level investigations. Testing and evaluation may consist of surface collection and mapping, limited subsurface excavations, and the appropriate analyses and research necessary to characterize the artifacts and deposit from which they originated. Upon completion of the test level investigations, for sites are determined to be unique a "historical resource" as set forth in CEQA Guidelines Section 15064.5, the following measures shall be undertaken: the historian shall submit its recommendations to the landowner or subsequent project applicant and the Director of Community Development on the measures that shall be implemented to protect the site. Appropriate measures could include preservation in place through planning construction to avoid the historical resource, incorporation into greenspace, parks, or open space, data recovery excavations of the finds or compliance with the Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic buildings (1995).

- Preparation of a research design for those sites determined to the "historical resources" that cannot be avoided that describes the recommended field investigations, and makes provisions for adequately recovering the scientifically consequential information from and about the "historical resource."
- Conducting site excavations in accordance with the research design with an emphasis on obtaining an adequate sample for analysis within the limits of the research questions being addressed. Special studies such as pollen analyses, soil

analyses, radiocarbon dating, and obsidian hydration dating should be conducted as appropriate.

- Monitoring of all field excavations by a Native American representative.
- Preparation of a final report of the Phase 3 data recovery work and submittal of the research design and final report to the South Central Coastal Information Center (SCCIC), and other agencies, as appropriate.
- If any Native American archaeological artifacts are recovered, the project applicant shall contact the City, which shall in turn contact the Morongo Band of Mission Indians and any other designated Tribe(s)' tribal representative, as determined by the Native American Heritage Commission(NAHC) to notify them of the discovery. The applicant shall coordinate with the City of San Bernardino and the designated Tribe(s) to determine, in good faith, the appropriate disposition Native American artifacts and the designated Tribe(s) shall be given the opportunity to seek the return of any Native American artifacts discovered. Any non-Native American archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Director of Community Development where they would be afforded longterm preservation to allow future scientific study.

12. Page 5.4-34, Section 5.4.7 of the DEIR, Mitigation Measures is hereby modified as follows:

AHS 5.4-2A

Prior to issuance of the first preliminary or precise grading permit, and for any subsequent permit involving excavation to increased depth, the landowner or subsequent project applicant shall provide evidence that an archaeologist and/or paleontologist have been retained by the landowner or subsequent project applicant, and that the consultant(s) will be present during all grading and other significant ground disturbing activities. These consultants shall be selected from the roll of qualified archaeologist and paleontologists maintained by the County of San Bernardino. Should any archeological/paleontological resources be discovered, the monitor is authorized to stop all grading in the immediate area of the discovery, and shall make recommendations to the Director of Development Services on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. If the resources are determined to be "historic resources" at that term is defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Director of Development Services. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in greenspace, parks or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Director approves the measures to protect these resources. If any Native American paleontological or archaeological artifacts are recovered as a result mitigation the City shall contact the Morongo Band of Mission Indians and any other designated Tribe(s)' tribal representative, as determined by the Native American Heritage Commission(NAHC) to notify them of the discovery. The applicant shall coordinate with the City of San Bernardino and the designated Tribe(s) to determine, in good faith, the appropriate disposition Native American artifacts and the designated Tribe(s) shall be given the opportunity to seek the return of any Native American artifacts discovered. Any



non-Native American paleontological or archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Director of Community Development where they would be afforded long-term preservation to allow future scientific study.

13. Page 5.4-35, Section 5.4.3 of the DEIR, Environmental Impacts is hereby modified as follows:

AHS 5.4-2C

The EIR concludes that there are or may be significant archaeological resources within areas where ground disturbing activity is proposed by the project. Therefore, prior to the first preliminary or precise grading permit for development in the Arrowhead Springs Specific Plan area, each **prehistoric** and **historic archeological site** (listed below and described in Table 5.4-3) located within the project grading footprint must be tested and evaluated, following clearing and scraping activities.

- CA-SBR-2268/H, including the four loci
- CA-SBR-6870H
- CA-SBR-7019H
- CA-SBR-7020H
- CA-SBR-7022H
- CA-SBR-7049H
- P1071-21
- P36-017732

Testing and evaluation may consist of surface collection and mapping, limited subsurface excavations, and the appropriate analyses and research necessary to characterize the artifacts and deposit from which they originated. Upon completion of the test level investigations, for sites are determined to be unique archaeological sites or historical resources as set forth in CEQA Guidelines Section 15064.5, the following measures shall be undertaken: the archaeologist shall submit its recommendations to, the landowner or subsequent project applicant and the Director of Community Development on the measures that shall be implemented to protect the sites. Appropriate measures for unique archaeological resources or historical resources could include preservation in place through planning construction to avoid archaeological sites; incorporation of sites within parks, greenspace, or other open space; covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site or deeding the site into a permanent conservation easement. When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code.

- Preparation of a research design for those sites determined to the "historical resources" that cannot be avoided that describes the recommended field investigations, and makes provisions for adequately recovering the scientifically consequential information from and about the "historical resource."
- Conducting site excavations in accordance with the research design with an emphasis on obtaining an adequate sample for analysis within the limits of the

research questions being addressed. Special studies such as pollen analyses, soil analyses, radiocarbon dating, and obsidian hydration dating should be conducted as appropriate.

- Monitoring of all field excavations by a Native American representative.
- Preparation of a final report of the Phase 3 data recovery work and submittal of the research design and final report to the South Central Coastal Information Center (SCCIC), and other agencies, as appropriate.
- If any Native American archaeological artifacts are recovered, the project applicant shall contact the City, which shall in turn contact the Morongo Band of Mission Indians and any other designated Tribe(s)' tribal representative, as determined by the Native American Heritage Commission(NAHC) to notify them of the discovery. The applicant shall coordinate with the City of San Bernardino and the designated Tribe(s) to determine, in good faith, the appropriate disposition Native American artifacts and the designated Tribe(s) shall be given the opportunity to seek the return of any Native American artifacts discovered. Any non-Native American archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Director of Community Development where they would be afforded long-term preservation to allow future scientific study.

14. Page 5.6-18, Section 5.6.1 of the DEIR, Environmental Setting is hereby modified as follows:

The Municipal-Metropolitan Water Department District (MWD) is constructing the Inland Feeder Project, which is nearly 44 miles of pipeline, 12 to 14 feet in diameter, which will convey water between Devil Canyon and MWD's Colorado River Aqueduct south of Lake Perris, near the City of San Jacinto.

15. Page 5.6-20, Section 5.6.1 of the DEIR, Environmental Setting, third paragraph under the heading Sewage Treatment System is hereby modified (deleted) as follows:

Review of the Santa Ana Regional Water Quality Control Board revealed a sewage spill on the subject site on February 13, 1987. The sewage spill reportedly happened at the sewer man hole near the cabana pool area. The sewage flowed towards Strawberry Creek, but did not reach the creek. Approximately 100,000 gallons of sewage was spilled. An inspector visited the area after the spill was cleaned and noted that the area of the spill occurred down a steep hill that did not appear to be visited often

16. Page 5.12-4, Section 5.12.1.1 of the DEIR, Environmental Setting, first paragraph under the heading Arrowhead Springs is hereby modified as follows:

Only a portion of the Arrowhead Springs Specific Plan area is located within the City limits of San Bernardino. While the southwestern tip of the Arrowhead Springs Specific Plan area is currently serviced by the San Bernardino City Fire Department, details of which are described above, the majority of the existing developed area currently lies outside the service boundary for the Fire Department. These areas of the Arrowhead Springs Specific Plan, designated as Community Service Area (CSA) 38, are serviced by the San Bernardino County Fire Department. Because the closest San Bernardino CityCounty Fire department resources are located significantly farther away than the closest County City Fire Department resources, the County Fire Department and the San Bernardino City Fire Department have established an automatic aid agreement for this area. The agreement calls for the San Bernardino City Fire Department to be the first responding agency



to these areas. The County Fire Department will then send additional units to the area, and take over the operations when they arrive. In addition, the Arrowhead Springs Specific Plan area is considered a hazardous fire area, evidenced by the 2002 fire which affected a large portion of the planning area.

17. Page 5.15-10, Section 5.15.1 of the DEIR, Water Supply and Distribution Systems is hereby modified as follows:

AHS 5.15-1

Prior to approval of the first Tentative Tract Map, evidence shall be provided to Public Works/Engineering to confirm the availability and quantity of existing that appropriate water rights have been granted through the State and that the drinking water system has obtained all appropriate operating and design permits through the California State Department of Heath Services.

18. Page 5.15-15, Section 5.15.2 of the DEIR, Wastewater Treatment and Collection is hereby modified as follows:

AHS 5.15-2

Prior to approval of the first Tentative Tract Map, evidence shall be provided to the Public Works/Engineering Division that appropriate permits have been obtained from the State Water Resources Board, the State Department of Health Services, *California Department of Corporations* and the SCAQMD for the operation of the wastewater treatment plant including disposal of bio-solids and use of recycled water.

Appendices

Appendix A
Calculation Sheets



Appendices

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TURNING MOVEMENT COUNT

PROJECT NAME: San Bernardino

PROJECT NO: San Bernardino30

DATE: 01/10/02

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| 07:00-07:15 | 20 | 39 | 0 | 12 | 230 | 16 | 317 | 11 | 34 | 68 | 4 | 44 | 4 | 165 | 0 | 0 | 0 | |
| 07:15-07:30 | 34 | 46 | 3 | 30 | 268 | 19 | 400 | 1 | 61 | 66 | 5 | 95 | 5 | 233 | 0 | 0 | 0 | |
| 07:30-07:45 | 48 | 55 | 0 | 38 | 256 | 23 | 420 | 8 | 84 | 72 | 2 | 95 | 4 | 265 | 3 | 0 | 0 | |
| 07:45-08:00 | 62 | 56 | 2 | 17 | 217 | 6 | 360 | 14 | 92 | 62 | 7 | 83 | 5 | 263 | 0 | 0 | 0 | |
| 08:00-08:15 | 40 | 37 | 0 | 8 | 185 | 8 | 278 | 3 | 57 | 64 | 4 | 42 | 7 | 177 | 0 | 0 | 0 | - 4 |
| 06:15-08:30 | 48 | 35 | 2 | 5 | 193 | 12 | 295 | 9 | 56 | 55 | 3 | 57 | 5 | 185 | 0 | 0 | 0 | 93 |
| 08:30-08:45 | 45 | 56 | 5 | 13 | 179 | 10 | 306 | 9 | 51 | 62 | 3 | 81 | 7 | 213 | 0 | 0 | 0 | - 1 |
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| 16:00-16:15 | 50 | 182 | 3 | 3 | 97 | 5 | 340 | 40 | 102 | 72 | 5 | 101 | 20 | 340 | 6 | 0 | 0 | - 1 |
| 16:15-16:30 | 59 | 150 | 7 | 8 | 85 | 7 | 316 | 39 | 90 | 65 | 6 | 72 | 12 | 284 | 6 | 0 | 0 | |
| 16:30-16:45 | 76 | 191 | 4 | 13 | 88 | 8 | 380 | 33 | 101 | 43 | 8 | 88 | 23 | 296 | 1 | 0 | 0 | - 33 |
| 16:45-17:00 | 90 | 196 | 10 | 15 | 64 | 6 | 381 | 42 | 103 | 37 | 11 | 95 | 25 | 313 | 0 | 0 | 0 | |
| 17:00-17:15 | 76 | 206 | 9 | 3 | 80 | 9 | 383 | 63 | 104 | 62 | 6 | 108 | 28 | 361 | 0 | 3 | 0 | |
| 17:15-17:30 | 68 | 226 | 4 | 6 | 82 | 4 | 390 | 47 | 86 | 42 | 5 | 123 | 36 | 339 | 0 | 0 | 1 | - 6 |
| 17:30-17:45 | 79 | 214 | 11 | 8 | 80 | 9 | 401 | 40 | 82 | 55 | 4 | 102 | 31 | 314 | 3 | 0 | 0 | - 8 |
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PROJECT NAME:

Arrowhead Springs

PROJEÇT NO:

DATE:

x02 01/22/03

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PROJECT NAME: Arrowhead Springs
PROJECT NO: x24

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01/22/03

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PROJECT NAME: Arrowhead Springs

PROJECT NO: x08
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| 01/21/03 | |

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| 07:30-07:45 | 4 | 167 | 0 | 2 | 414 | 1 | 588 | 0 | 0 | 8 | 0 | 0 | 1 | 9 | 0 | 0 | 0 | |
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| 08:45-09:00 | 4 | 159 | 3 | 0 | 311 | 2 | 479 | 1 | 0 | 11 | 1 | 1 | 0 | 14 | 0 | 0 | - 0 | _ |
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| 11:00-11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:15-11:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | _ |
| 11:30-11:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:45-12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | . 0 | _ |
| 12:00-12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:15-12:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | _ |
| 12:30-12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:45-13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | | | | | | | | | | | |
| 16:00-16:15 | 13 | 303 | 0 | 0 | 195 | 0 | 511 | 1 | 1 | 4 | 0 | 0 | 3 | 9 | 0 | 0 | 0 | _ |
| 16:15-16:30 | 9 | 318 | 2 | 0 | 216 | 0 | 545 | 1 | 4 | 7 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | |
| 16:30-16:45 | 12 | 321 | 0 | 0 | 200 | 0 | 533 | 0 | 0 | 4 | 1 | 0 | 5 | 10 | 0 | 0 | 0 | |
| 16:45-17:00 | 12 | 313 | 0 | 0 | 229 | 2 | 556 | 3 | 1 | 12 | 0 | 0 | 3 | 19 | 0 | 0 | 0 | |
| 17:00-17:15 | 12 | 305 | 1 | 1 | 198 | 5 | 522 | 2 | 0 | 3 | 0 | 2 | 3 | 10 | 0 | 0 | 0 | |
| 17:15-17:30 | 16 | 334 | 0 | 0 | 176 | 0 | 526 | 0 | 1 | 13 | 0 | 0 | 7 | 21 | 0 | 0 | 0 | |
| 17:30-17:45 | 8 | 360 | 0 | 0 | 188 | 3 | 559 | 2 | 0 | 10 | 0 | 0 | 4 | 16 | 0 | 0 | 0 | |
| 17:45-18:00 | 9 | 318 | 1 | 0 | 177 | 1 | 506 | 0 | - 1 | 7 | 1 | 1 | 3 | 13 | . 0 | 0 | 0 | _ |

| | CALCUL | ATED P | EAK HOUR | VOLUME | S-AM | | | ADJUST | EDPEAK | HOURY | DLUMES- | AM | |
|-------|---------|--------|------------|--------|--------|-----|-----------|----------|----------------|--------|---------------------|-------|-----|
| | | 5 | 1525 | 2 | | | | | and the second | | Constitution in the | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | |
| 1 | EL | | | | WR | 2 | | EL | | | | WR | |
| 2 | ET | | 07:00-08:0 | 0 | WT | 0 | | ET | | | | WT | |
| 36 | ER | | | | WL | 1 | 8 33 | ER | | | | WL | |
| :7:7) | - | NL | NT | NR | *** | | - | 6.0 | NL | NT | NR | . WYL | - |
| | | 11 | 585 | 1 | | | | | | | - | | |
| | CALCUL | | EAK HOUR | | S-NOON | | | ADJUST | EDPEAK | HOURVO | OLUMES- | NOON | |
| | | 0 | c | 0 | | | | | | | | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | |
| 0 | EL | | | 00 | WR | 0 | 19000-000 | EL | 311 | 3. | 3. | WR | 1 |
| 0 | ET | | 11.00-12.0 | 0 | WT | 0 | | ET | | | | WT - | - |
| 0 | ER | | 11.00-12.0 | ~ | WL | 0 | | ER | | | | | - |
| | | NL | NT | NR | WL | · · | | EK | | | | WL | - |
| | | 0 | 0 | 0 | | | | | NL | NT | NR | | |
| | CALCIII | | EAK HOUR | | | | - | 40 11167 | FORENZ | HOURN | | 511 | |
| | 2-2000 | 10 | 791 | 1 | 3-F M | | | VOV 021 | EDPEAK | HOORY | OLUMES- | РМ | |
| | | SR | ST | SL | | | | | | | - | | |
| 7 | EL | 94 | 31 | SL | | 17 | | - | SR | ST | SL | | |
| | | | | | WR | 5.0 | 87.000 | EL | | | | WR | - |
| 2 | ET | | 16 45-17:4 | 5 | WT | 2 | _ | ET | | | | WT | - |
| 3.8 | ER | | | | WIL | c | - | ER | | | | VVL. | - |
| | | NL | NT | NR | | | | | NL | NT | NR | | 372 |
| | | 48 | 1312 | 1 | | | | | | | | | / |

PROJECT NAME:

Arrowhead Springs

PROJECT NO:

±23

DATE:

01/21/03

| | N-S STE | REET: | Waterma | an Am | e | | - | E-W ST | REET: | Marshall | (A) V | 4 | | | | | | 26 |
|-------------|---------|----------|---------|-------|---------|-------|-------|--------|---------|----------|-------|----------|-------|-------|----|--------|------|-----|
| TIME | NOF | RTH BOUN | ND | 80 | UTH BOU | ND | N-S | EA | ST BOUN | D | W | EST BOUR | ND. | E-W | | PED CC | OUNT | 43. |
| | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | NL | SL I | EL I | |
| 07:00-07:15 | 1 | 111 | 0 | . 0 | 367 | 1 | 480 | 0 | 2 | 2 | 0 | 2 | 0 | 6 | 0 | 1 | 0 | |
| 07:15-07:30 | 1 | 141 | 2 | 0 | 405 | 9 | 558 | 2 | 3 | 6 | 4 | 1 | 2 | 18 | 0 | 0 | | - |
| 07:30-07:45 | 4 | 162 | 1 | 0 | 404 | 16 | 587 | 2 | 0 | 4 | 4 | 10 | 5 | 25 | 0 | 0 | 0 | |
| 07:45-08:00 | 1 | 159 | 0 | 1 | 328 | 15 | 504 | 6 | 5 | 9 | 0 | - 4 | 7 | 31 | 0 | 0 | . 0 | |
| 08:00-08:15 | 0 | 145 | 0 | 0 | 274 | 3 | 422 | 1 | 1 | 7 | 1 | 1 | 2 | 13 | 0 | 0 | .0 | |
| 08:15-08:30 | 2 | 158 | 1 | 0 | 316 | 7 | 484 | 0 | 1 | 2 | 3 | 2 | 8 | 16 | 0 | 0 | 0 | 100 |
| 08:30-08:45 | 5 | 162 | 1 | 0 | 318 | 1 | 487 | 7 | 2 | 10 | 2 | 4 | 4 | 29 | 0 | 0 | 0 | |
| 08:45-09:00 | | 160 | 0 | 0 | 317 | 4 | 486 | 6 | 4 | 10 | 0 | 7 | 4 | 31 | 0 | 0 | 0 | |
| 11:00-11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ol | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | |
| 44-00-44-45 | 0 | | 0 | 0 | - | | | - | - | | - | - | | - | | - | - | |
| 11:15-11:30 | 0 | . 0 | | 0 | 0 | _ | _ | 0 | 0 | | 0 | 0 | _ | _ | 0 | 0 | 0 | |
| 11:30-11:45 | 0 | | | 0 | | | | 0 | 0 | | 0 | 0 | | _ | 0 | 0 | 0 | |
| 11:45-12:00 | 0 | | | 0 | | _ | _ | 0 | 0 | _ | 0 | 0 | _ | | 0 | 0 | 0 | _ |
| 12:00-12:15 | 0 | 0 | _ | 0 | _ | _ | | 0 | 0 | _ | 0 | 0 | | _ | 0 | 0 | 0 | _ |
| 12:15-12:30 | 0 | 0 | 0 | 0 | 0 | _ | _ | 0 | 0 | | 0 | 0 | 0 | _ | 0 | 0 | 0 | _ |
| 12:30-12:45 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | - | 0 | 0 | 0 | | 0 | 0 | 0 | _ |
| 12:45-13:00 | 0 | | | 0 | 0 | 0 | _ | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | _ |
| | | | | | | | | | | | | | | | | | | |
| 16:00-16:15 | 14 | | | 0 | | 2 | | 1 | 1 | 10 | 0 | 6 | 7 | | 0 | 0 | . 0 | |
| 16:15-16:30 | 12 | 325 | 1 | 0 | - | . 2 | | 0 | 4 | _ | 3 | 3 | 5 | | 0 | 0 | 0 | |
| 16:30-16:45 | 8 | 326 | 1 | 0 | 209 | 7 | | 2 | | | 1 | 4 | 6 | 23 | 0 | 1 | 0 | |
| 16:45-17:00 | 18 | 311 | 1 | 1 | 239 | 2 | | 2 | 3 | 8 | 2 | 5 | 11 | 31 | 0 | 0 | 0 | |
| 17:00-17:15 | 10 | 313 | 1 | 0 | 199 | 3 | 526 | 3 | 2 | 9 | 1 | 7 | 7 | 29 | 0 | 0 | 0 | - |
| 17:15-17:30 | 8 | 328 | 3 | 0 | 188 | 3 | 528 | | 5 | 8 | 1 | 4 | 22 | 45 | 0 | 0 | : 0 | |
| 17:30-17:45 | 14 | 354 | 0 | 0 | 190 | 3 | 561 | 5 | 2 | 6 | 3 | | 16 | 37 | 0 | 0 | -0 | 1 4 |
| 17:45-18:00 | 13 | 312 | 2 | 1 | 173 | 2 | 503 | | 2 | 11 | 2 | 6 | 8 | 34 | 0 | 0 | 0 | - 1 |

| | CALCUL | ATEO P | EAK HOUR | VOLUME | S-AM | | | | ADJUST | ED PEAK | HOURY | LUMES- | AM | |
|----|--------|--------|------------|--------|--------|----|-----|---|--------|---------|---------|---------|------|-----|
| | | 41 | 1504 | 1 | | | | | | - | | | | |
| | | SR | ST | SL | | | | | | SR | ST | SL | | |
| 10 | EL | | | 3 | WR | 14 | | - | EL | | | | WR | |
| 10 | ET | | 07:00-08:0 | 0 | WT | 17 | | | ET | | | | WT | |
| 21 | ER | | | | WL | 8 | | | ER | | | | WL | |
| | | NL | NT | NR | | | | | | NL | NT | NR | | |
| | | 7 | 673 | 3 | | | | | | Notes | 7.00220 | -3830 | | |
| | CALCUL | ATED P | EAKHOUR | VOLUME | S-NOON | | - | | ADJUST | ED PEAK | HOURY | DLUMES- | ноон | |
| | | 0 | 0 | 0 | | | | | | | | | | |
| | | SR | ST | SL | | | | | | SR | ST | SL | | - |
| 0 | EL | | | | WR | 0 | | | EL | | | | WR | |
| 0 | ET | | 11.00-12.0 | 0 | WT | 0 | | | ET | | | | WT | |
| 0 | ER | | | | WL | O | | _ | ER | | | | WL | 000 |
| | | NL | NT | NR | | | | | | NL | NT | NR | | |
| | | 0 | 0 | 0 | | | | | | | | | | |
| | CALCUL | ATEDP | EAK HOUR | VOLUME | S-PM | | | | ADJUST | ED PEAK | HOURY | DLUMES- | РМ | |
| | | 11 | 814 | 1 | | | | | | | | | | |
| | | SR | ST | SL | | | | | | SR | ST | SL | | |
| 15 | EL | | | | WR | 56 | | - | EL | | | | WR | |
| 12 | ET | | 16:45-17:4 | S | WT | 21 | | _ | ET | | | | WT | |
| 31 | ER | | | | WL | 7 | - 1 | | ER | | | | WL | _ |
| | | NL | NT | NR | | | | | | NL | NT | NR | | |
| | | 50 | 1306 | 5 | | | | | | | | | | |

TURNING MOVEMENT COUNT

PROJECT NAME: Sen Bernardino

PROJECT NO:

San Bernerdino40 01/31/02

DATE

| | N-S ST | REET: | Watermer | 1 | 2011/05 | | | E-WS | REET: | 30th Stree | et | | | | | | | |
|-------------|--------|---------|----------|------|---------|-------|-------|------|---------|------------|------|---------|-------|-------|----|-------|------|----|
| TIME | NO | RTH BOU | ND | so | UTH BOX | IND. | N-S | EA | ST BOUN | ED (II) | w | EST BOU | IND | E-W | | PED C | OUNT | |
| | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | NL | SL | EL. | WL |
| 07:00-07:15 | 21 | 52 | 17 | 0 | 117 | 199 | 400 | 1 | 14 | 24 | 25 | 115 | 19 | 196 | 1 | 0 | 0 | 0 |
| 07:15-07:30 | 49 | 91 | 18 | 0 | 165 | 198 | 521 | 0 | 15 | 26 | 53 | 193 | 53 | 340 | 0 | 0 | 0 | 0 |
| 07:30-07:45 | 36 | 105 | 11 | 9 | 189 | 198 | 548 | 2 | 30 | 36 | 48 | 175 | 63 | 354 | 0 | 0 | 0 | 0 |
| 07:45-08:00 | 42 | 99 | 22 | 10 | 190 | 175 | 538 | 3 | 34 | 46 | 68 | 139 | 53 | 343 | 0 | 0 | 0 | 1 |
| 08:00-08:15 | 43 | 83 | 34 | 4 | 157 | 169 | 490 | 1 | 25 | 38 | 51 | 113 | 56 | 284 | 1 | 0 | 1 | 0 |
| 08:15-08:30 | 34 | 90 | 29 | 3 | 135 | 133 | 424 | 1 | 26 | 17 | 51 | 125 | 44 | 264 | 0 | 0 | 1 | 1 |
| 08:30-08:45 | 41 | 91 | 22 | 5 | 128 | 170 | 457 | 5 | 12 | 25 | 72 | 94 | 54 | 262 | 0 | 0 | 0 | Q |
| 08:45-09:00 | 43 | 79 | 29 | 1 | 152 | 180 | 484 | 4 | 22 | 35 | 52 | 131 | 43 | 287 | 0 | 0 | 0 | 1 |

| 11:00-11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|----|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|---|---|
| 11:15-11:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30-11:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45-12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:00-12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15-12:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30-12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45-13:00 | .0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| 16:00-16:15 | 73 | 203 | 59 | 7 | 141 | 89 | 572 | 2 | 33 | 45 | 47 | 117 | 64 | 308 | 2 | 0 | 0 | - 6 |
|-------------|----|-----|----|----|-----|-----|-----|-----|----|----|----|-----|----|-----|---|---|---|-----|
| 16:15-16:30 | 65 | 245 | 66 | 1 | 125 | 117 | 619 | 5 | 33 | 38 | 47 | 87 | 64 | 274 | 0 | 0 | 4 | 6 |
| 10:30-10:45 | 59 | 224 | 53 | 0 | 108 | 85 | 529 | 5 | 37 | 40 | 26 | 117 | 65 | 290 | 0 | 0 | 1 | 1 |
| 16:45-17:00 | 66 | 281 | 59 | 9 | 123 | 106 | 844 | 4 | 43 | 32 | 38 | 103 | 62 | 282 | 1 | 0 | 1 | 1 |
| 17:00-17:15 | 69 | 253 | 57 | 5 | 119 | 78 | 581 | . 5 | 40 | 29 | 36 | 133 | 77 | 320 | 0 | 0 | 0 | 0 |
| 17:15-17:30 | 64 | 238 | 71 | .5 | 117 | 91 | 586 | 9 | 60 | 38 | 43 | 108 | 65 | 323 | 0 | 0 | 0 | 1 |
| 17:30-17:45 | 55 | 242 | 54 | 2 | 123 | 67 | 543 | 8 | 51 | 30 | 35 | 144 | 35 | 301 | 0 | 0 | 1 | 2 |
| 17:45-18:00 | 49 | 234 | 51 | 1 | 101 | 53 | 489 | 5 | 48 | 33 | 29 | 130 | 68 | 313 | 0 | 0 | 0 | 0 |

| | CALCUL | ATED F | EAK HOUR | WOLUM | ES-AM | ACTION OF THE PARTY OF THE PART | | ADJUST | ED PEAK | HOUR Y | OLUMES- | AM | |
|-----|-----------------|--------|------------|-------|---------|--|---|--------|---------|--------|---------|------|--|
| | | 740 | 701 | 23 | | | | | | | | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | |
| 6 | EL | | | | WR | 225 | | EL | | | | WR | |
| 104 | ET | | 07:15-08:1 | 5 | WT | 620 | | ET | | | | WT | |
| 140 | ER | | | | WL | 220 | | ER | | | | WL. | |
| | | NL | NT | NR | | | | | NL | NT | NR | | |
| | | 170 | 378 | 85 | | | | | | | | | |
| | CALCUL | ATED E | EAK HOUR | YOLUM | ES-NOON | | | ADJUST | ED PEAK | HOUR Y | OLUMES- | NOON | - |
| | | 0 | 0 | 0 | | | | | | | | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | |
| 0 | EL | | | | WR | 0 | - | EL | | | | WR | |
| 0 | ET | | 11:00-12:0 | 0 | WT | 0 | - | ET | | | | WT | |
| 0 | ER | | | | WL | c | | ER | | | | WL | |
| | | NL | NT | NR | | | | | NL | NT | NR | | |
| | THOUSAND AND IN | 0 | 0 | 0 | | | | | | | | | |
| | CALCUL | | EAK HOUR | | ES-PM | | | ADJUST | ED PEAK | HOUR Y | OLUMES. | PM | Contraction of the Contraction o |
| | | 342 | 482 | 21 | | - 19 | | | - | - | | | |
| | | SR | ST | SL | | emonos. | | | SR | ST | SI. | | |
| 24 | EL | | | | WR | 239 | | EL | | | | WR | |
| 194 | ET | | 16:45-17:4 | 5 | WT | 488 | | ET | - 1 | | - 1 | WT | |
| 129 | ER | | | | WL | 152 | - | ER | | | | WL | |
| | | NL | NT | NR | | | | | NL | NT | NR | | |
| | | 254 | 1014 | 241 | | | | | | | | | |

TURNING MOVEMENT COUNT

PROJECT NAME:

Arrowhead Springs Project

PROJECT NO: DATE: ... 22152 05/08/03

| | N-S STR | EET: | Valencia | | | | | E-W STE | EET: | 40th | | | | | | | | |
|-------------|---------|---------|----------|------|----------|-------|-------|---------|---------|-------|------|----------|-------|-------|-----|-------|------|------|
| TIME | NOR | TH BOUN | o l | sou | лтн восл | ND | N-S | EA | ST BOUN | 0 | W | EST BOUR | 10 | E-W | | PED C | DUNT | |
| | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | NL. | SL | EL I | -CWL |
| 07:00-07:15 | 16 | 0 | 3 | 0 | 0 | C | 19 | 0 | 32 | 30 | 14 | 36 | 0 | 112 | 0 | 1 | 0 | /6 |
| 07:15-07:30 | 23 | 0 | 9 | 0 | 0 | 0 | 32 | 0 | 56 | 33 | 31 | 58 | 0 | 178 | 0 | 0 | 0 | |
| 07:30-07:45 | 35 | 0 | 7 | 0 | 0 | 0 | 42 | 0 | 70 | 40 | 22 | 68 | 0 | 200 | 0 | 2 | 0 | - (|
| 07:45-08:00 | 24 | 0 | 6 | 0 | 0 | 0 | 30 | 0 | 63 | 48 | 11 | 59 | 0 | 181 | 0 | 1 | . 0 | - 0 |
| 08:00-08:15 | 16 | 0 | 5 | 0 | 0 | 0 | 21 | 0 | 55 | 26 | 15 | 54 | 0 | 150 | 0 | 1 | 0 | (|
| 08:15-08:30 | 21 | 0 | 6 | 0 | 0 | 0 | 27 | 0 | 52 | 21 | 15 | 48 | 0 | 136 | 0 | 0 | 0 | |
| 08:30-08:45 | 19 | 0 | 3 | 0 | 0 | 0 | 22 | 0 | 53 | 18 | 12 | 58 | 0 | 141 | 0 | 1 | 0 | |
| 08:45-09:00 | 31 | 0 | 6 | 0 | 0 | 0 | 37 | 0 | 59 | 19 | 13 | 42 | 0 | 133 | 0 | 1 | 0 | |
| | | | | | | | | | | | | | | | | | | ý ř |
| 11:00-11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:15-11:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:30-11:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:45-12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:00-12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | 0 | 0 | 0 | 0 | C |
| 12:15-12:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:30-12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C |
| 12:45-13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | | | | | | | | | | 10 | |
| 16:00-16:15 | 35 | 0 | 13 | 0 | 0 | 0 | 48 | 0 | 61 | 19 | 9 | 56 | 0 | 145 | 0 | 2 | 0 | |
| 16:15-16:30 | 43 | 0 | 12 | 0 | 0 | 0 | 55 | 0 | 82 | 27 | 7 | 65 | О | 181 | 0 | 0 | 0 | 1 |
| 16:30-16:45 | 52 | 0 | 14 | 0 | 0 | 0 | 66 | 0 | 6.8 | 20 | 7 | 65 | 0 | 160 | 0 | 0 | 0 | 2 |
| 16:45-17:00 | 53 | 0 | 17 | 0 | 0 | 0 | 70 | 0 | 70 | 24 | 10 | 74 | 0 | 178 | 0 | 2 | 0 | C |
| 17:00-17:15 | 45 | 0 | 21 | 0 | 0 | 0 | 66 | 0 | 67 | 27 | 7 | 66 | 0 | 167 | 0 | 1 | 0 | C |
| 17:15-17:30 | 49 | 0 | 23 | 0 | 0 | 0 | 72 | 0 | 73 | 24 | 13 | 65 | 0 | 175 | 0 | 0 | 0 | |
| 17:30-17:45 | 53 | 0 | 16 | 0 | 0 | 0 | 69 | 0 | 80 | 22 | 7 | 90 | 0 | 199 | 0 | 0 | 0 | 0 |
| 17:45-18:00 | 37 | 0 | 24 | 0 | 0 | 0 | 61 | 0 | 70 | 32 | 5 | 57 | 0 | 164 | 0 | 0 | 0 | 0 |

| | CALCULA | TED PEA | K HOUR VO | LUMES A | M | | Charles Annual Control | ADJUSTE | D PEAK H | OUR YOU | JMES-AM | | | |
|-----|---------|---------|------------|----------|------|-----|------------------------|----------|----------|---------|----------|--------|------|---|
| | | 0 SR | O ST | O SL | | | | | SR | ST | SL | 7 | | |
| 0 | EL | | | | WR | 0 | | EL | | | | WR | 2000 | |
| 244 | ET | | 07:15 08:1 | 5 | WT | 239 | | ET | | | | WT | | |
| 147 | ER | | | | WL | 79 | | ER | | | | WL | | |
| | | NL | NT | NR | | | | | NL | NT | NR | | | |
| | | 98 | 0 | 27 | | | | | | - | | Out to | | |
| | CALCULA | | K HOUR YO | | IQQN | | | ADJUSTE | D PEAK H | OUR YOU | JMES-NOC | M | | |
| | | 0 | 0 | 0 | | | 100 | 100 | - | _ | | | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | | |
| 0 | EL | | | | WR | 0 | | EL | | | | MS | - | |
| 0 | ET | | 11:00-12:0 | 0 | WT | | | ET | | | | WT | | |
| 0 | ER | | | | WL | 0 | | ER | | | | WL | | |
| | | NL | NT | NR | | | | | NL | NT | NR | | | |
| | | 0 | 0 | 0 | | | | | - | _ | | | | _ |
| | CALCULA | | K HOUR YO | | M | | | ADJUSTS | D PEAK H | OUR YOU | UMES-PH | | 1 | |
| | | SR | ST | SL | | | | | SR | | - | | - ' | |
| 0 | | SH | 51 | 20 | WB | 0 | | | 24 | ST | SL | | - | |
| 290 | EL | | 10 10 17 1 | | WT | 295 | - | EL ET | | | | WR | | |
| 97 | ER. | | 16 45 17 4 | ,5 | WL | 37 | | ER | | | | WT | | |
| 97 | EH | NL | NT | . | W | 3/ | | E.H. | 4.0 | NOT | *10 | WL | | |
| | | 0.00 | 102200 | NR 77 | | | | | NL | NT | NR | | | |
| | | 200 | 0 | 17. | | | | | | | | | | |

Prepared by: G.E. Traffic Surveys

PROJECT NAME: Arrowhead Springs

PROJECT NO: x16
DATE: 01/23/03

| | N-S STE | REET: | Harrison | | | | . | E-W ST | REET: | 40th | | | | | | | | |
|---|-------------|-------------|----------|---------------|-------------|-------|-------|-------------|----------|-------------|---------------|-------------|-------|-------|-----------------|-------------|-------------|----|
| TIME | NOR | тн вои | ND | sou | JTH BOU | ND | N-S | EAS | ST BOUN | 0 | WE | ST BOUR | ND | E-W | | PED CO | TAUC | |
| | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | NL | SL | EL | WL |
| 07:00-07:15 | 6 | 0 | 2 | 0 | 0 | 0 | 8 | 0 | 49 | 9 | 4 | 50 | 0 | 112 | 0 | 0 | 0 | - |
| 07:15-07:30 | 17 | 0 | - 1 | 0 | 0 | 0 | 18 | 0 | 52 | 2 | 5 | 64 | 0 | 123 | 0 | 0 | 0 | |
| 07:30-07:45 | 14 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 62 | 7 | 2 | 93 | 0 | 164 | 1 | 0 | 0 | - |
| 07:45-08:00 | 12 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 65 | 12 | 3 | 79 | 0 | 159 | 0 | 0 | 0 | (|
| 08:00-08:15 | 10 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 40 | 7 | 3 | 51 | 0 | 101 | 0 | 2 | 0 | (|
| 08:15-08:30 | 7 | 0 | 1 | 0 | 0 | 0 | 8 | 0 | 41 | 6 | 2 | 47 | 0 | 96 | 0 | 0 | 0 | (|
| 08:30-08:45 | 8 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 43 | 4 | 2 | 60 | 0 | 109 | 0 | 0 | 0 | 0 |
| 08:45-09:00 | 5 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 51 | 5 | 5 | 46 | 0 | 107 | 0 | 2 | 0 | |
| 11:15-11:30 11:30-11:45 11:45-12:00 12:00-12:15 12:15-12:30 12:30-12:45 12:45-13:00 | 0 0 0 0 0 0 | 0 0 0 0 0 0 | 0 | 0 0 0 0 0 0 0 | 0 0 0 0 0 0 | 0 | 0 | 0 0 0 0 0 0 | 0 0 0 | 0 0 0 0 0 0 | 0 0 0 0 0 0 0 | 0 0 0 0 0 0 | - | 0 | 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 | 0 0 0 0 0 0 | |
| 16:00-16:15 16:15-16:30 | 12 | 0 | 2 | 0 | 0 | 0 | 15 | 0 | 76 60 | 9 | 1 3 | 49 53 | 0 | | 0 1 | 0 | 0 | |
| 16:30-16:45 | 22 | 0 | 4 | 0 | 0 | 0 | 26 | 0 | 62 | 5 | 1 | 52 | 0 | 120 | 0 | 0 | 0 | (|
| 16:45-17:00 | 8 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 69 | 9 | 1 | 56 | 0 | 135 | 0 | 0 | 0 | (|
| 7:00-17:15 | 9 | 0 | 1 | 0 | 0 | 0 | 10 | 0 | 86 | 11 | 2 | 68 | 0 | 167 | 1 | 0 | 0 | 1 |
| 7:15-17:30 | 9 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 90 | 13 | 2 | 67 | 0 | 172 | 0 | 0 | 0 | 1 |
| 17:30-17:45 | 20 | 0 | 3 | 0 | 0 | 0 | 23 | 0 | 84 | 12 | 1 | 72 | 0 | 169 | 0 | 2 | 0 | - |
| 7:45-18:00 | 18 | 0 | 2 | 0 | 0 | 0 | 20 | 0 | 81 | 8 | 2 | 50 | 0 | 141 | 0 | 0 | 0 | (|

| | CALCUL | ATED PE | AK HOUR | VOLUME | S-AM | | 100 | ADJUST | EDPEAK | HOUR VO | DLUMES- | A.M. | |
|-----|--------|---------|------------|---------|--------|-----|-----|--------|---------|---------|---------|------|---|
| | | 0 SR | 0 ST | 0 SL | | | | | SR | ST | SL | | |
| 0 | EL | | - | | WR | 0 | | EL | 11.0000 | (1.4%) | | WR | |
| 228 | ET | - 6 | 07:00-08:0 | 0 | WT | 286 | | ET | | | | WT | |
| 30 | ER | | | | WL | 14 | | ER | | | | WL | |
| | | NL | NT | NR | | | | | NL | NT | NR | | |
| | | 49 | 0 | 3 | | | | | | | | | |
| | CALCUL | ATED PE | AK HOUR | VOLUME | S-NOON | | | ADJUST | ED PEAK | HOUR VO | OLUMES- | NOON | |
| | | 0 | 0 | 0 | | | | | | | | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | |
| 0 | EL | | | | WR | 0 | | EL | | | | WR | |
| 0 | ET | | 11:00-12:0 | 0 | WT | 0 | | ET | | | | WT | |
| 0 | ER | | | | WL | 0 | - | ER | | | | WL | |
| | | NL | NT | NR | | | | | NL | NT | NR | | |
| | | 0 | 0 | 0 | | | | | | | | | |
| | CALCUL | ATED PE | AK HOUR | VOLUME | S-PM | | 9 | ADJUST | EDPEAK | HOUR VO | OLUMES- | M | |
| | | 0 | 0 | 0 | | | | | - | | - | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | |
| 0 | EL | | | | WR | 0 | | EL | | | | WR | |
| 341 | ET | | 17:00-18:0 | ю | WT | 257 | - | ET | | | | WT | |
| 44 | ER | | | | WL | 7 | | ER | | | | WL | - |
| | | NL | NT | NR | | | | | NL | NT | NR | | |
| | | 56 | 0 | 6 | | | | | - | | - | | |

TURNING MOVEMENT COUNT .

PROJECT NAME: Arrowhead Springs

PROJECT NO: x27 DATE: 01/23/03

| | N-S STE | REET: | Del Rosa | AV | e | | | E-W ST | REET: | Foothill | DY | | | | | | | 42 1 |
|---|---------|---------|----------|------|---------|-------|-------|--------|---------|----------|------|--------|-------|-------|----|------|------|------|
| TIME | NOR | TH BOUR | O | sou | JTH BOU | ND | H-S | EAS | ST BOUN | 0 | WE | ST BOU | ND | E-W | | PEDC | DUNT | |
| | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | NL | SL | EL | WL |
| 07:00-07:15 | 0 | 22 | 2 | 20 | 37 | 0 | 81 | 0 | 0 | 0 | 15 | 0 | 10 | 25 | 0 | 0 | 0 | . (|
| 07:15-07:30 | 0 | 29 | 3 | 36 | 47 | 0 | 115 | 0 | 0 | 0 | 11 | 0 | 28 | 39 | 0 | 0 | 0 | |
| 07:30-07:45 | 0 | 27 | 1 | 41 | 48 | 0 | 117 | 0 | 0 | 0 | 9 | 0 | 3.5 | 44 | 0 | . 0 | . 0 | |
| 07:45-08:00 | 0 | 33 | 4 | 24 | 29 | 0 | 90 | 0 | 0 | 0 | 12 | 0 | 22 | 34 | 0 | 0 | 0 | |
| 08:00-08:15 | 0 | 26 | 10 | 18 | 27 | 0 | 81 | 0 | 0 | 0 | 7 | 0 | 18 | 25 | 0 | 0 | - 0 | - |
| 08:15-08:30 | 0 | 34 | 8 | 10 | 38 | 0 | 90 | 0 | 0 | 0 | 9 | 0 | 17 | - 26 | 0 | 0 | - 0 | - 0 |
| 08:30-08:45 | 0 | 15 | 8 | 23 | 37 | 0 | 83 | 0 | 0 | 0 | 11 | 0 | 17 | 28 | 0 | 0 | 2 | - |
| 08:45-09:00 | 0 | 21 | 4 | 26 | 28 | 0 | 79 | 0 | 0 | 0 | 9 | 0 | 16 | 25 | 0 | 0 | .0 | |
| 11:00-11:15 11:15-11:30 11:30-11:45 | 0 | 0 | 0 | 0 | 0 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 0 | 0 | (|
| 11:45-12:00 | 0 | 0 | 0 | 0 | 0 | . 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:00-12:15 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - 0 |
| 12:15-12:30 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:30-12:45 | 0 | 0 | 0 | 0 | 0 | 0 | _ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:45-13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 16:00-16:15 | 0 | 38 | 10 | 20 | 33 | 0 | 101 | 0 | 0 | 0 | 8 | 0 | 15 | 23 | 0 | 0 | 0 | - 0 |
| 16:15-16:30 | 0 | 46 | 10 | 17 | 53 | 0 | 126 | 0 | 0 | 0 | 8 | 0 | 33 | 41 | 0 | 0 | 1 | - 0 |
| 16:30-16:45 | 0 | 30 | 10 | 19 | 26 | 0 | 85 | 0 | 0 | 0 | 11 | 0 | 22 | 33 | 0 | 0 | 0 | 0 |
| 16:45-17:00 | 0 | 35 | 23 | 22 | 35 | 0 | 115 | 0 | 0 | 0 | 13 | 0 | 21 | 34 | 0 | 0 | 0 | 0 |
| 17:00-17:15 | 0 | 42 | 12 | 22 | 37 | 0 | 113 | 0 | 0 | 0 | 7 | 0 | 26 | 33 | 0 | 2 | 3 | |
| 17:15-17:30 | 0 | 42 | 8 | 17 | 39 | 0 | 106 | 0 | 0 | 0 | 14 | 0 | 26 | 40 | 0 | 0 | 0 | 0 |
| 17:30-17:45 | 0 | 46 | 13 | 28 | 21 | 0 | 108 | 0 | . 0 | 0 | 18 | 0 | 26 | 44 | 0 | 2 | 3 | 0 |
| 17:45-18:00 | 0 | 42 | 7 | 16 | 24 | 0 | 89 | 0 | 0 | 0 | 9 | 0 | 22 | 31 | 0 | 0 | 0 | |

| | CALCUL | ATEDP | EAK HOUR | VOLUME | S-AM | | | ADJUST | EDPEAK | HOUR VO | LUMES- | AM | |
|---|--------|--------|------------|--------|--------|----|---|--------|---------|---------|---------|------|---|
| | | 0 | 161 | 121 | | | | | | | | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | |
| 0 | EL | | | | WR | 95 | | EL | | | | WR | |
| 0 | ET | | 07:00-08:0 | 0 | WT | 0 | | ET | | | | WT | |
| 0 | ER | | | | WL | 47 | | ER | | | | WL | |
| | | NL | NT | NR | | | | | NL | NT | NR | | |
| | | 0 | 111 | 10 | | | | | | | | | |
| | CALCUL | ATEO P | EAK HOUR | VOLUME | S-NOON | | | ADJUST | EDPEAK | HOURY | LUMES- | ноон | |
| | | 0 | 0 | 0 | | | 1 | | | | | , | |
| | | SR | ST | SL | | | | | SR | ST | SL | | |
| o | EL | | | | WR | 0 | | EL | | | | WR | 2 |
| 0 | ET | | 11.00-12:0 | 0 | WT | 0 | | ET | | | | WT | |
| 0 | ER | | | | WL | 0 | | ER | | | | WL | |
| | | NL | NT | NR | | | | | NL | NT | NR | | |
| | | 0 | 0 | 0 | | | | | | | | | |
| | CALCUL | ATED P | EAK HOUR | VOLUME | S-PM | | | ADJUST | EO PEAK | HOURVO | DLUMES- | PM | |
| | | 0 | 132 | 89 | | | 1 | | | | | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | |
| 0 | EL | | | | WR | 99 | | EL. | | | | WR | |
| 0 | ET | | 16 45-17:4 | 5 | WT | 0 | | ET | | | | WT | |
| 0 | ER | | | | WL | 52 | | ER | | | | WL | |
| | | NL | NT | NR | | | 100000000000000000000000000000000000000 | | NL | NT | NR | | |
| | | 0 | 165 | 5.6 | | | | | | | | | |

PROJECT NAME: Arrowhead Springs

PROJECT NO: x26

01/23/03

| | N-S ST | REET: | Sterling | h | <u> </u> | | | E-W ST | REET: | Foothill | Dr | | | . 1 | | | | + 5.5 |
|------------|--------|--------|----------|------|----------|-------|-------|--------|---------|----------|------|----------|-------|-------|-----|------|--------|-------|
| TIME | NOR | TH BOU | D | 500 | лн вои | ND | N-S | EA | ST BOUN | 0 | W | EST BOUR | O. | E-W | | PEDO | OUIL-T | |
| | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | NL | 8L I | EL | 1 7 |
| 7:00-07:15 | 6 | 1 | 2 | 0 | 0 | 0 | 9 | 0 | 12 | 9 | 3 | 3 | 0 | 27 | 0 | 0 | 0 | _ |
| 7:15-07:30 | 15 | 1 | 1 | 0 | . 0 | 0 | 17 | 0 | 12 | 25 | 4 | 6 | 0 | 47 | 0 | 0 | . 0 | - |
| 7:30-07:45 | 15 | 1 | 1 | 0 | 0 | 1 | 18 | 0 | 22 | 28 | 8 | 12 | 0 | 70 | 0 | 0 | - 0 | _ |
| 7:45-08:00 | 11 | 0 | 4 | 1 | 0 | 0 | 16 | 0 | 11 | 14 | 3 | 14 | 0 | 42 | 0 | - 1 | 0 | - |
| 8:00-08:15 | 9 | 0 | 1 | 0 | 0 | 0 | 10 | 1 | 15 | 8 | 2 | 4 | 0 | 30 | 0 | 0 | 0 | _ |
| 8:15-08:30 | 11 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 5 | 9 | 4 | 9 | | 27 | 0 | 0 | . 0 | _ |
| 8:30-08:45 | 12 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 13 | 9 | 3 | 6 | 0 | 31 | . 0 | 1 | - 1 | _ |
| 8:45-09:00 | 14 | 0 | 1 | 0 | 0 | 0 | 15 | 1 | 18 | 14 | 3 | 12 | 0 | 48 | 0 | . 0 | . 0 | _ |
| | | | | | | | | | | | | | | | | | 1 | 57 |
| 1:00-11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:15-11:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:30-11:45 | 0 | 0 | 0 | 0 | . 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1:45-12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2:00-12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | _ |
| 2:15-12:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | _ |
| 2:30-12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | _ |
| 2:45-13:00 | 0 | c | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | | | | | | | | | | | |
| 5:00-16:15 | 13 | 0 | 3 | 0 | - 1 | 0 | 17 | 0 | 10 | 7 | 2 | 7 | 0 | 26 | 0 | 1 | 0 | |
| 5:15-16:30 | 21 | 0 | 3 | 0 | 0 | 0 | 24 | 0 | 10 | 8 | 3 | 13 | 0 | 34 | 0 | 0 | 0 | |
| 5:30-16:45 | 21 | O | 4 | 0 | 0 | 1 | 26 | 0 | 8 | 10 | 4 | 14 | 0 | 36 | 0 | 0 | 0 | |
| 5:45-17:00 | 14 | 1 | 5 | 0 | 0 | 2 | 22 | 0 | 14 | 15 | - 1 | 8 | 0 | 38 | 0 | 1 | 0 | - 1 |
| 7:00-17:15 | 19 | 0 | 4 | 0 | 0 | 0 | 23 | 0 | 10 | 17 | 6 | 14 | 0 | 47 | 0 | 0 | 1 | - |
| 7:15-17:30 | 20 | o | 9 | 0 | 0 | 3 | 32 | 0 | 10 | 14 | 1 | 12 | 0 | 37 | 0 | 0 | 0 | |
| 7:30-17:45 | 22 | 0 | 5 | 0 | 1 | 2 | 30 | 0 | 7 | 16 | 4 | 12 | 0 | 39 | 0 | 0 | 0 | |
| 7:45-18:00 | 21 | 0 | 9 | 0 | 0 | 0 | 30 | 0 | | 15 | 5 | 8 | 0 | 33 | 0 | 1 | . 0 | 2.50 |

| | CALCUL | ATEOP | EAK HOUR | VOLUME | S-AM | | | ADJUST | ED PEAK | HOUR V | DLUMES- | AM | |
|-----------|--------|--------|------------|--------|---------|----|-------|--------|---------|--------|---------|------|-----|
| | | 1 | 0 | 1 | | | | | | | | | |
| | | SR | ST | SL | | | | | 5R | ST | St | | |
| 1 | EL | | | | WR | 0 | | EL | | | | WR | |
| 60 | ET | | 07:15-08:1 | 5 | WT | 36 | | ET | | ** | 100 | WT | - |
| 75 | ER | | | | WL | 17 | 92.23 | ER | | | | WL | |
| | | NL | NT | NR | | | | | NL | NT | NR | | |
| | | 50 | 2 | 7 | | | | | | | 5388 | | |
| II - II - | CALCUL | ATEOP | EAK HOUR | VOLUME | ES-NOON | | | ADJUST | ED PEAK | HOUR V | DLUMES- | ноон | |
| | | 0 | 0 | 0 | | | | | | | | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | |
| c | EL | | | | WR | 0 | | EL | | | | WR | _ 3 |
| o | ET | | 11:00-12:0 | 10 | WT | 0 | | ET | | | | WT - | 1 |
| 0 | ER | | | | WL | 0 | | ER | | | | WL | |
| | | NL | NT | NR. | | | | | NL | NT | NR | | |
| | | 0 | 0 | 0 | | | | | | _ | | | |
| | CALCUL | ATED P | EAK HOUR | VOLUME | S-PM | | | ADJUST | EDPEAK | HOUR V | DLUMES. | P.M. | |
| | | 5 | 1 | 0 | | | | | | | | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | |
| 0 | EL | | | | WR | 0 | | EL | | | | WR | |
| 3.2 | ET | | 17:00-18:0 | 0 | W/T | 46 | | ET | | | | WT | |
| 62 | ER | | | | WL | 16 | | ER | | | | WL | |
| | | NL | NT | NR | | | 100 | | NL | NT | NR | | |
| | | 82 | 0 | 27 | | | | | | | | | |

PROJECT NAME:

Arrowhead Springs Project

PROJECT NO: 22152 DATE: .: 05/15/03

| | N-S STE | EET: | Valencia | HW | <u></u> | | | E-W STE | REET: | 30th | J | | | | | | | |
|---|-----------|---------|----------|-------------|-------------|---------|-------|---------|---------|------------------|-------------|---------|-------|-------|-----------|---------------|-------|----|
| TIME | NOF | TH BOUN | GV GV | sox | JTH BOU | O. | H-S | EA | ST BOUN | 0 | W | EST BOU | ON | E-W | | PEDC | TAUX | |
| | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | NL | SL | EL | WL |
| 07:00-07:15 | 12 | 12 | 15 | 0 | 42 | 24 | 105 | 11 | 18 | 29 | 17 | 71 | 0 | 146 | 0 | 0 | 0 | - |
| 07:15-07:30 | 20 | 19 | 9 | 1 | 40 | 36 | 125 | 3 | 44 | 38 | 28 | 123 | 0 | 236 | 0 | 0 | 0 | |
| 07:30-07:45 | 21 | 32 | 24 | 3 | 57 | 40 | 177 | 11 | 41 | 35 | 29 | 112 | 1 | 229 | 0 | 0 | 1 | - |
| 07:45-08:00 | 14 | 32 | 13 | 5 | 50 | 23 | 137 | 13 | 53 | 52 | 18 | 93 | 0 | 229 | 0 | 0 | 0 | |
| 08:00-08:15 | 10 | 10 | 10 | 1 | 38 | 23 | 92 | 14 | 37 | 50 | 25 | 60 | 1 | 187 | 0 | 0 | 1 | - |
| 08:15-08:30 | 16 | 18 | 7 | 1 | 28 | 20 | 90 | 14 | 33 | 33 | 11 | 49 | 0 | 140 | 0 | 0 | 0 | |
| 08:30-08:45 | 20 | 20 | 9 | 1 | 41 | 16 | 107 | 9 | 42 | 28 | 17 | 64 | 0 | 160 | 0 | 0 | 1 | - |
| 06:45-09:00 | 21 | . 27 | 18 | 0 | 31 | 14 | 111 | 9 | 38 | 22 | 20 | 76 | 0 | 165 | 0 | 0 | 0 | - |
| 11:00-11:15 11:15-11:30 11:30-11:45 11:45-12:00 12:00-12:15 12:15-12:30 12:30-12:45 | 0 0 0 0 0 | 0 0 0 0 | 0 0 0 | 0 0 0 0 0 0 | 0 0 0 0 0 0 | 0 0 0 0 | 0 0 0 | 0 0 0 | 0 0 0 | 0 0 0 0 | 0 0 0 0 0 0 | 0 0 0 0 | 00000 | 0 0 0 | 0 0 0 0 0 | 0 0 0 0 0 0 0 | 0 0 0 | 0 |
| 12:45-13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | С | 0 | 0 | 0 | 0 | O | 0 | О | 0 | 0 | |
| 16:00-16:15 | 25 | 26 | 25 | 3 | 16 | 8 | 103 | 28 | 67 | 17 | 12 | 40 | 0 | 164 | 0 | 0 | 0 | |
| 16:15-16:30 | 27 | 38 | 28 | 1 | 22 | 6 | 122 | 19 | 76 | 7 | 11 | 52 | 0 | 165 | 1 | 0 | 0 | (|
| 16:30-16:45 | 33 | 42 | 19 | 3 | 25 | 6 | 128 | 21 | 73 | 17 | 9 | 65 | 0 | 185 | 0 | 0 | 1 | - |
| 16:45-17:00 | 28 | 54 | 38 | 3 | 25 | 13 | 161 | 25 | 89 | 9 | 20 | 65 | 0 | 208 | 0 | 0 | 0 | (|
| 17:00-17:15 | 47 | 57 | 18 | 1 | 22 | 8 | 153 | 11 | 87 | 20 | 8 | 54 | 1 | 181 | 0 | 0 | 0 | - |
| 17:15-17:30 | 42 | 51 | 26 | 0 | 22 | 11 | 152 | 30 | 111 | 23 | 11 | 57 | 1 | 233 | 0 | 0 | 0 | - |
| 17:30-17:45 | 38 | 48 | 19 | 5 | 18 | 13 | 141 | 20 | 77 | 17 | 10 | 43 | 0 | 167 | 0 | 0 | 0 | 1 |
| 17:45-18:00 | 25 | 39 | 17 | 1 | 29 | 8 | 119 | 22 | 86 | 16 | 11 | 67 | 0 | 202 | 1 | 0 | 0 | 13 |

| | CALCULA | TED PEA | K HOUR VO | LUMES-A | M | | | ADJUSTE | D PEAK H | QUR YOU | UMES-AM | | |
|---------------|---------|-----------|------------|----------|------|-----|--|---------|----------|---------|---------|--------|-----|
| | | 122 SR | 185 ST | 10 SL | | | | | SR | ST | SL | | |
| 41 | EL | | | | WR | 2 | | EL | | | | WR | |
| 175 | ET | | 07:15 08:1 | 5 | WT | 388 | | ET | | | 8 | WT | |
| 175 | ER | | | | WL | 100 | | ER | | | | WL | |
| | | NL | NT | NR | | | | | NL | NT | NR | | |
| 1 | | 65 | 93 | 56 | | | | | - | _ | - | | |
| - A. A. A. A. | CALCULA | TED PEA | K HOUR YO | LUMES N | OON | | | ADJUSTE | D PEAK H | OUR YOU | UMES NO | M | |
| | | 0 | 0 | 0 | | | | | | - | | | |
| | | SR | ST | \$L | | | | | SR | ST | SL | | |
| 0 | EL | | | | WR | 0 | | EL | | | | WR | - |
| 0 | ET | | 11:00-12:0 | 0 | WT | 0 | | ET | | | 8 | WT | |
| 0 | ER | | | | WL | 0 | | ER | | | | WL. | |
| | | NL | NT | NR. | | | | | NL | NT | NR | | |
| | | 0 | 0 | 0 | | | | | | _ | | | |
| | CALCULA | | K HOUR VO | LUMES P | M | | | ADJUSTE | D PEAK H | OUR YOL | UMES PM | | 1 |
| | | 38 | 94 | 7 | | | | | | - | - | - | .) |
| 73% | 823 | SR | ST | SL | 7002 | 595 | | 52.57 | SR | ST | SL | 555.05 | - |
| 87 | EL | | | | WR | 2 | | EL | | | | WR | - |
| 360 | ET | | 16:30 17.3 | 0 | WT | 241 | | ET | | - | 5 | WT | - |
| 69 | ER | | | | WIL | 48 | | ER | | | | WL | |
| | | NL | NT | NR | | | | | N'L | NT | NR | | |
| | | 150 | 204 | 101 | | | | | | | | | |

TURNING MOVEMENT COUNT

PROJECT NAME: Arrowhead Springs

PROJECT NO:

x12

01/30/03 DATE:

| | N-S STE | REET: | Del Rosa | | | | | E-W ST | REET: | Lynwood | Drive | | | . | | | | |
|--|---------|--------|----------|------|---------|-------|-------|--------|--------|---------|-------|--------|-------|-------|-----|--------|------|-----|
| TIME | NOR | TH BOU | ND | sou | JTH BOU | ND | N-S | EAS | T BOUN | 0 | WE | STBOUN | 10 | E-W | | PED CO | TAUC | |
| | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | NL | SL | EL | WL |
| 07:00-07:15 | 12 | 34 | 29 | 3 | 127 | 4 | 209 | 2 | 16 | 41 | 52 | 26 | 1 | 138 | 0 | 17 | 0 | - |
| 07:15-07:30 | 13 | 50 | 43 | 11 | 117 | 9 | 243 | 3 | 36 | 37 | 48 | 21 | 2 | 147 | 0 | 39 | 5 | |
| 07:30-07:45 | 13 | 77 | 84 | 14 | 165 | 7 | 360 | 4 | 48 | 40 | 60 | 51 | 4 | 207 | 2 | 54 | 0 | |
| 07:45-08:00 | 22 | 72 | 85 | 16 | 114 | 5 | 314 | 5 | 64 | 50 | 47 | 65 | 5 | 236 | 6 | 37 | 4 | . 3 |
| 08:00-08:15 | 17 | 80 | 31 | 5 | 92 | 3 | 228 | 2 | 29 | 36 | 36 | 28 | 6 | 137 | 1 | 13 | 0 | (4) |
| 08:15-08:30 | 25 | 64 | 24 | 4 | 91 | 13 | 221 | 2 | 32 | 25 | 29 | 26 | 6 | 120 | 0 | 3 | 0 | |
| 08:30-08:45 | 27 | 55 | 27 | 7 | 116 | 7 | 239 | 3 | 40 | 38 | 19 | 37 | 3 | 140 | 4 | 5 | 0 | |
| 08:45-09:00 | 24 | 59 | 17 | - 1 | 79 | 6 | 186 | 2 | 31 | 47 | 23 | 30 | 3 | 136 | 0 | 2 | 0 | - |
| 11:30-11:45 11:45-12:00 12:00-12:15 12:15-12:30 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 | 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 | 0 0 | 0 0 | 0 0 | 0 0 | |
| 12:30-12:45 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:45-13:00 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | | | | | | | | | | | |
| 16:00-16:15 | 36 | 115 | 38 | 5 | | _ | | 8 | 26 | 41 | 17 | 54 | 3 | | 0 | 2 | 0 | . 8 |
| 16:15-16:30 | 31 | 123 | 46 | 4 | - 22 | 11 | | 9 | 46 | 32 | 33 | 34 | 4 | 158 | 0 | 4 | 0 | - 1 |
| 16:30-16:45 | 40 | 132 | 44 | 7 | 81 | 4 | | 5 | 51 | 48 | 31 | 55 | 9 | 199 | - 1 | 11 | 2 | |
| 16:45-17:00 | 40 | 138 | 42 | 3 | 86 | 5 | | 7 | 35 | 42 | 25 | 47 | 4 | 160 | 1 | 13 | 0 | 10 |
| 17:00-17:15 | 50 | 138 | 44 | 11 | 100 | 9 | - | 5 | 42 | 43 | 31 | 49 | 6 | 176 | 0 | 6 | 0 | |
| 17:15-17:30 | 44 | 135 | 48 | 7 | 91 | 10 | - | 10 | 50 | 41 | 23 | 46 | 5 | 175 | 0 | 6 | 0 | |
| 17:30-17:45 | 40 | 144 | 50 | 9 | 93 | 5 | 341 | 6 | 43 | 41 | 24 | 43 | 4 | 161 | 4 | 7 | 0 | |
| 17:45-18:00 | 44 | 122 | 50 | 5 | 83 | 9 | 313 | 9 | 40 | 36 | 30 | 46 | 7 | 168 | 0 | 6 | 0 | 1 8 |

| | CALCUL | ATEO P | EAK HOUR | VOLUME | S-AM | | ADJUST | ED PEAK | HOUR VO | DLUMES-A | M | |
|-----|--------|--------|------------|--------|--------|-----|--------|---------|---------|----------|------|---|
| | | 24 | 488 | 46 | | | | | | | | |
| | | SR | ST | SL | | | | SR | ST | SL | | |
| 14 | EL | | | | WR | 17 | EL | | | | WR | _ |
| 177 | ET | | 07:15-08:1 | 5 | WT | 165 | ET | | | | WT | |
| 163 | ER | | | | WL | 191 | ER | | | | WL | |
| | | NL | NT | NR | | | | NL | NT | NR | | |
| | | 65 | 279 | 243 | | | | | | | | |
| | CALCUL | ATED P | EAK HOUR | VOLUME | S-NOON | | ADJUST | ED PEAK | HOUR VO | LUMES-N | NOON | |
| | | 0 | 0 | 0 | | | | | | | | |
| | | SR | ST | SL | | | | SR | ST | SL | | |
| 0 | EL | | | | WR | 0 | EL | | | | WR | |
| 0 | ET | | 11:00-12:0 | 0 | WT | 0 | ET | | | ŝ | WT | |
| 0 | ER | | | | WL | 0 | ER | | | | WL | |
| | | NL | NT | NR | | | | NL | NT | NR | | |
| | | 0 | 0 | 0 | | | | | | | | |
| | CALCUL | ATED P | EAK HOUR | VOLUME | S-PM | | ADJUST | EDPEAK | HOUR V | OLUMES- | M | |
| | | 33 | 367 | 32 | | | | | _ | _ | | |
| | | SR | ST | SL | | | | SR | ST | SL | | |
| 30 | EL | | | | WR | 22 | EL | | | | WR | _ |
| 175 | ET | | 17:00-18:0 | 0 | WT | 184 | ET | | | | WT | |
| 161 | ER | | | | WL | 108 | ER | | | | WL | _ |
| | | NL | NT | NR | | | | NL | NT | NR | | |
| | | 178 | 539 | 192 | | | | | | | | |

PROJECT NAME: Arrowhead Springs

PROJECT NO: x25

DATE: 01/29/03

| | N-S ST | REET: | Sterling | the | | | | E-W ST | REET: | Lynwood | D1 | | | | | | | |
|-------------|--------|---------|----------|------|--------|-------|-------|--------|---------|---------|------|---------|-------|-------|-----|-------|------|----|
| TIME | NOR | TH BOUR | OP | sou | лн вои | D | N-S | EAS | ST BOUN | 0 1 | WE | ST BOUR | 10 | E-W | | PED C | DUNT | |
| | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | NL | SL | EL | WL |
| 07:00-07:15 | 14 | 8 | 0 | 9 | 30 | 8 | 69 | 1 | 17 | 21 | 13 | 23 | 2 | 77 | 3 | 1 | 3 | - |
| 07:15-07:30 | 35 | 19 | 4 | 15 | 5.5 | 6 | 134 | 4 | 31 | 51 | 16 | 27 | 7 | 136 | 1 | 0 | 0 | |
| 07:30-07:45 | 53 | 21 | 8 | 18 | 59 | 8 | 167 | 7 | 24 | 77 | 10 | 42 | 7 | 167 | 2 | 3 | 1 | 4 |
| 07:45-08:00 | 65 | 24 | 5 | 19 | 45 | 4 | 162 | 7 | 40 | 102 | 17 | 34 | 12 | 212 | 5 | 5 | 0 | |
| 08:00-08:15 | 15 | 13 | 7 | 11 | 28 | 2 | 76 | 3 | 20 | 25 | 10 | 27 | 4 | 89 | - 1 | 1 | 6 | |
| 08:15-08:30 | 18 | 18 | 7 | 12 | 52 | 5 | 112 | 2 | 24 | 39 | 12 | 18 | 4 | 99 | 0 | 0 | 3 | |
| 08:30-08:45 | 27 | 31 | 8 | 10 | 48 | 7 | 131 | 1 | 25 | 47 | 15 | 25 | 6 | 119 | 2 | 3 | 3 | |
| 08:45-09:00 | 21 | 22 | 7 | 8 | 42 | 6 | 106 | 2 | 24 | 36 | 11 | 21 | 5 | 99 | 0 | 0 | 2 | |
| 11:00-11:15 | 0 | - 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:00-11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:30-11:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | _ | 0 | 0 | | | _ | _ | _ | |
| 11:45-12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:00-12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:15-12:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | . 0 | 0 | - | 0 | 0 | 0 | 0 | |
| 12:30-12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | |
| 12:45-13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12.40-10.00 | | | | | | | | | | - 4 | | | | | - 0 | - 0 | 0 | |
| 6:00-16:15 | 28 | 34 | 14 | 16 | 30 | 7 | 129 | 10 | 29 | 27 | 8 | 29 | 20 | 123 | 3 | 1 | 1 | |
| 6:15-16:30 | 50 | 48 | 9 | 15 | 23 | 6 | 151 | 4 | 42 | 25 | 4 | 29 | 11 | 115 | 0 | 2 | 1 | |
| 6:30-16:45 | 33 | 42 | 20 | 7 | 35 | 2 | 139 | 8 | 44 | 48 | 10 | 40 | 12 | 162 | 1 | 0 | 2 | |
| 6:45-17:00 | 28 | 49 | 16 | 12 | 32 | 7 | 144 | 11 | 25 | 37 | 11 | 27 | 18 | 129 | 6 | 2 | 1 | |
| 7:00-17:15 | 29 | 65 | 15 | 11 | 37 | 10 | 187 | | 45 | 38 | 12 | 36 | 15 | 151 | 1 | 0 | - 1 | |
| 7:15-17:30 | 33 | 71 | 19 | 9 | 30 | 3 | 165 | 10 | 40 | 31 | 10 | 33 | 18 | 142 | 0 | 1 | 1 | |
| 7:30-17:45 | 30 | 53 | 22 | 15 | 30 | 5 | 155 | 14 | 36 | 21 | 12 | 21 | 14 | 118 | 0 | 1 | 0 | - |
| 7:45-18:00 | 33 | 49 | 23 | 12 | 28 | 6 | 151 | 13 | 39 | 24 | 12 | 23 | 11 | 122 | 0 | 0 | 1 | |

| | CALCUL | ATEDP | EAK HOUR | VOLUME | S-AM | | ADJUSTED PEAK HOUR VOLUMES-AM | | | | | | | |
|-----|--------|--------|------------|--------|--------|-----|---------------------------------|--------|--------|--------|---------|-------|---|--|
| | | 20 | 187 | 63 | | | | | | | | 05000 | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | | |
| 21 | EL | | | | WR | 30 | | EL | | | | WR | | |
| 115 | ET | | 07:15-08:1 | 5 | WT | 130 | | ET | | | | WT | | |
| 255 | ER | | | | WL | 53 | | ER | | | | WL | | |
| | | NL | NT | NR | | | | | NL | NT | NR | | | |
| | | 168 | 77 | 24 | | | | | | 131000 | 1 21 20 | | | |
| | CALCUL | ATEOP | EAK HOUR | VOLUME | S-NOON | | ADJUSTED PEAK HOUR VOLUMES-NOON | | | | | | | |
| | | 0 | 0 | 0 | | | | | | | | | 1 | |
| | | SR | ST | SL | | | | | SR | ST | SL | - | | |
| 0 | EL | | | | WR | 0 | 12 | EL | | | | WR | | |
| 0 | ET | | 11.00-12.0 | 0 | WT | 0 | | ET | | | | WT | | |
| 0 | ER | | | | WL | 0 | | ER | | | | WL | _ | |
| | | NL | NT | NR | | | | | NL | NT | NR | | | |
| | | 0 | 0 | 0 | | | | | | | | | | |
| | CALCUL | ATED P | EAK HOUR | VOLUME | S-PM | | | ADJUST | EDPEAK | HOURY | DLUMES- | PM | | |
| | | 22 | 134 | 39 | | | | | | | | | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | | |
| 34 | EL | | | | WR | 63 | | EL | | | | WR | _ | |
| 154 | ET | | 16 30-17.3 | 0 | WT | 135 | | ET | | | | WT | | |
| 154 | ER | | | | WL | 43 | | ER | | | | WL | | |
| | | NL | NT | NR | | | | | NL | NT | NR | | | |
| | | 123 | 227 | 70 | | | | | | | | | | |

 PROJECT NAME:
 Arrowhead Springs

 PROJECT NO:
 28

 DATE:
 01/30/03

| TIME | N-S ST | N-S STREET: 30th Street | | | | | | | | E-W STREET: Lyrwood 6 | | | | | | | | | |
|-------------|--------|-------------------------|-------|------|-------------|-------|-------|------------|------|-----------------------|------------|------|-------|-------|-----|-----------|------|------|--|
| | NOR | NORTH BOUND | | | SOUTH BOUND | | | EAST BOUND | | | WEST BOUND | | | E-W | | PED COUNT | | | |
| | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | LEFT | THRU | RIGHT | TOTAL | NL | SL | EL I | WL | |
| 07:00-07:15 | 0 | 0 | 28 | 0 | 0 | 0 | 28 | 0 | 13 | 0 | 84 | 20 | 0 | 117 | . 0 | 0 | 0 | | |
| 07:15-07:30 | 0 | 0 | 39 | 0 | 0 | 0 | 39 | 0 | 17 | 0 | 146 | 14 | 0 | 177 | 0 | 0 | 0 | 1 30 | |
| 07:30-07:45 | 0 | 0 | 61 | 0 | 0 | 0 | 61 | 0 | 17 | 0 | 148 | 27 | 0 | 192 | 0 | 0 | 1 | - | |
| 07:45-08:00 | 0 | 0 | 73 | 0 | 0 | 0 | 73 | 0 | 40 | 0 | 125 | 25 | 0 | 190 | 0 | 0 | 0 | | |
| 08:00-08:15 | 0 | 0 | 48 | 0 | 0 | 0 | 48 | 0 | 20 | 0 | 73 | 21 | 0 | 114 | 0 | - 0 | 1 | | |
| 08:15-08:30 | 0 | 0 | 47 | 0 | 0 | 0 | 47 | 0 | 14 | 0 | 66 | 17 | 0 | 97 | '0 | 0 | 1 | | |
| 08:30-08:45 | 0 | 0 | 51 | 0 | 0 | 0 | 51 | 0 | 28 | 0 | 90 | 28 | 0 | 148 | 0 | 0 | 0 | - | |
| 08:45-09:00 | 0 | 0 | 48 | 0 | 0 | 0 | 48 | 0 | 26 | 0 | 8.8 | 31 | 0 | 145 | 0 | . 0 | 0 | | |
| | | | | | | | | | | | | | - | | - | | | | |
| 11:00-11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | |
| 11:15-11:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 11:30-11:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 11:45-12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 12:00-12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 12:15-12:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 12:30-12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 12:45-13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 16 00-16 15 | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 109 | 0 | 0 | 0 | 110 | 0 | 9 | 0 | 83 | 24 | 0 | 116 | 0 | 0 | 0 | | |
| 16:15-16:30 | 0 | 0 | 104 | 0 | 0 | 0 | 104 | 0 | 24 | 0 | 55 | 19 | 0 | 98 | 0 | 1 | 0 | | |
| 16:30-16:45 | 0 | 0 | 112 | 0 | 0 | 0 | 112 | 0 | 15 | 0 | 63 | 37 | 0 | 115 | 0 | 1 | 0 | | |
| 16:45-17:00 | 0 | 0 | 113 | 0 | 0 | 0 | 113 | 0 | 22 | 0 | 75 | 36 | 0 | 133 | 0 | 0 | 0 | - | |
| 17:00-17:15 | 0 | 0 | 122 | 0 | 0 | 0 | 122 | 0 | 17 | 0 | 6.5 | 37 | 0 | 119 | 0 | - 10 | 0 | | |
| 17:15-17:30 | 0 | 0 | 153 | 0 | 0 | 0 | 153 | 0 | 16 | 0 | 69 | 27 | 0 | 112 | 0 | 0 | 0 | | |
| 17:30-17:45 | 0 | 0 | 101 | 0 | 0 | 0 | 101 | 0 | 18 | 0 | 80 | 26 | 0 | 124 | 0 | . 0 | 0 | | |
| 17:45-18:00 | 0 | 0 | 113 | 0 | 0 | 0 | 113 | 0 | 21 | 0 | 77 | 38 | 0 | 136 | 0 | 0 | 0 | | |

| | CALCUL | ATEO P | EAK HOUR | VOLUME | S-AM | | | ADJUST | EO PEAK | HOURY | LUMES- | AM | | |
|----|--------|--------|------------|--------|--------|-----|---------------------------------|--------|---------|--------|---------|------|----|--|
| | | 0 | 0 | 0 | | | | | | | | | | |
| | | SR | ST | SL | | | | | SR | ST | SL | | | |
| 0 | EL | | 9 | | WR | 0 | | EL | | | | WR | _ | |
| 94 | ET | | 07:15-08:1 | 15 | WT | 87 | _ | ET | | | | WT | | |
| 0 | ER | | | | WL | 492 | | ER. | | | | WL | | |
| | | NL | NT | NR | | | | | NL | NT | NR | | | |
| | | 0 | 0 | 221 | | | | | | | | | | |
| | CALCUL | ATEO P | EAK HOUR | VOLUME | S-NOON | | ADJUSTED PEAK HOUR VOLUMES-NOON | | | | | | | |
| | | 0 | 0 | 0 | | | | | | | | | 3. | |
| | | SR | ST | SL | | | | | SR | ST | SL | - | 1 | |
| 0 | EL | | | | WR | 0 | - | EL | | | | WR _ | | |
| 0 | ET | | 11.00-12:0 | 00 | WT | 0 | | ET | | | | WIT | | |
| 0 | ER | | | | WL | 0 | | ER | | | | WL | | |
| | | NL | NT | NR | | | | | NL | NT | NR | | | |
| | | 0 | 0 | 0 | | | | | | | | | | |
| | CALCUL | ATEOP | EAK HOUR | VOLUME | S-PM | | | ADJUST | EO PEAK | HOUR V | DLUMES- | PM | | |
| | | 0 | 0 | 0 | | | | | | | | | | |
| | | SR | ST | SL | | | 1 | | SR | ST | SL | | | |
| 0 | EL | | | | WR | 0 | | EL | | | | WR | | |
| 72 | ET | | 17.00-18.0 | 00 | WT | 128 | | ET | | | | V/T | | |
| 0 | ER | | | | WL | 291 | | ER | | | | WL | | |
| | | NL | NT | NR | | | | | NL | NT | NR | | | |
| | | 0 | 0 | 489 | | | | | | | | | / | |