SERENA PARK

FINAL ENVIRONMENTAL IMPACT REPORT

(SCH # 2014121075)

City of Palm Springs

Case # 5.1327

Prepared for:

City of Palm Springs
3200 E. Tahquitz Canyon Way
Palm Springs, CA 92262
(760) 323-8299

Prepared by:

MSA Consulting Inc.
32400 Bob Hope Drive
Rancho Mirage, CA 92270
(760) 320-9811

OCTOBER 2015

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0.1 INTRODUCTION

1.1 CEQA REQUIREMENTS

The City of Palm Springs is the Lead Agency responsible for the preparation of the Environmental Impact Report (EIR), as defined by Section 15050 of the California Environmental Quality Act. The City directed the preparation of this document in fulfillment of its environmental review requirements pursuant to provisions of the *California Environmental Quality Act (CEQA) (Public Resource Code Section 21000-2117,) CEQA Guidelines* and the Lead Agency's local CEQA implementation requirements, all as amended.

Per CEQA Guidelines §15132 the Final EIR shall consist of the following:

a) The draft EIR or revision of the draft.
b) Comments and recommendations received on the draft EIR either verbatim or in summary.
c) A list of persons, organizations, and public agencies commenting on the draft EIR.
d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
e) Any other information added by the Lead Agency.

In accordance with Section 15063 of the CEQA Guidelines, the City of Palm Springs conducted an Initial Study and determined that the project raised potentially significant concerns. A Draft EIR was prepared to assure adequate review of potential impacts associated with the approval and implementation of the proposed project.

1.2 ENVIRONMENTAL BACKGROUND

In accordance with Section 15063 of the CEQA Guidelines, the City of Palm Springs conducted an Initial Study and determined that the project raised potentially significant concerns. A Draft EIR was prepared to assure adequate review of potential impacts associated with the approval and implementation of the proposed project.

On December 23, 2015, the City of Palm Springs prepared and distributed the Initial Study and Notice of Preparation (NOP) to public agencies, including responsible and trustee agencies, members of the public, and the California office of Planning and Research, State Clearinghouse. In accordance with CEQA requirements, this began the 30-day public review period which ended on January 21, 2015. In addition to the NOP, the City held a public scoping session on January 8, 2015 to provide an overview of the project and discuss the scope of the EIR analysis.

The scoping session also provided an additional opportunity for public comments and concerns they would like to see addressed in the EIR.

On June 29, 2015, the City of Palm Springs (Lead Agency) released for public review a Draft Environmental Impact Report (Draft EIR) for the Serena Park project (Case 5.1327). The 45-day public review and comment period on the Draft EIR began on June 29, 2015 and closed at 6:00 p.m. on August 12, 2015. A total of six (6) written comments were received during the review period and are found in Section 0.2 of this document.

The City of Palm Springs as Lead Agency is required to evaluate comments received on environmental issues from parties who reviewed the Draft EIR. In conformance with requirements of State CEQA Guidelines, Section 15088, the Lead Agency shall respond to written comments on the Draft EIR. These responses are incorporated into Section 0.2 of the Final EIR. The comments do not identify new significant impacts or a substantial increase in the severity in any of the significant impacts identified in the Draft EIR. No new mitigation measures have been identified that are substantially different from those identified in the Draft EIR.

Project revisions proposed by the Lead Agency and in response to the environmental review process, were incorporated by the project applicant. These revisions are discussed within the Final EIR to demonstrate the effectiveness of the CEQA process in this particular instance.

Section 15088.5 of the CEQA Guidelines requires the recirculation of a Draft EIR if significant information is added to the EIR after it is circulated for public review but before circulation. Significant information may include information showing new significant impacts not identified in the Draft EIR, new feasible mitigation measures different from those previously analyzed, or, a substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted to reduce the impact.

Minor revisions or corrections to the text of the Draft EIR are included in response to the comments received from the Lead Agency, none of which change the conclusions concerning significant impacts in the Draft EIR. Therefore, recirculation if the EIR for additional public review is not required by CEQA as a result of the information included in the Final EIR.

1.3 ORGANIZATION OF THE FINAL EIR

The Final EIR contains the elements requires by Section 15132 of the CEQA Guidelines.

Section 0.1 Introduction
This section provides an introduction of the environmental process.

Section 0.2 Comment letters & Response to Comments
This section provides copies of comment letters received during the 45-day review period and responses to individual letters received.

Section 0.3 Errata to the Final EIR
This section provides clarification and correct information in the Final EIR.

Section 0.4 Mitigation Monitoring and Reporting Program
This section includes the Mitigation Monitoring and Reporting Program (MMRP) which identifies the mitigation measures, timing and responsibility for implementation of the measures.

Section 0.5 Appendix
This section includes reports not included in the DEIR circulation period.

0.2 COMMENT LETTERS AND RESPONSE TO COMMENTS

Section 0.2 contains all six comment letters received on the Serena Park Draft EIR during the 45-day circulation period ending August 12, 2015. The comments received address aspects of the DEIR, relating to clarification of information and adequacy of analysis. The response to comments following each comment letter has been prepared by MSA Consulting, Inc. to address issues raised in the agency/parties comments. All comments are lettered to correspond with the responses following each letter.

Letter	Agency	Letter Dated
A	Agua Caliente Band of Cahuilla Indians – THPO Office	July 14, 2015
B	Riverside County Flood Control	August 5, 2015
C	Agua Caliente Band of Cahuilla Indians – Planning Department	August 4, 2015
D	William & Alinda Bowden	August 9, 2015
E	Soboba Band of Luiseño Indians	August 5, 2015
F	California Department of Fish and Wildlife	August 17, 2015

Comment Letter A

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION

03-004-2014-050

July 14, 2015

[VIA EMAIL TO:david.newell@palmsprings-ca.gov]
Palm Springs
Mr. David A. Newell
3200 E Tahquitz Canyon Way
Palm Springs, CA 92262

Re: Draft Environmental Impact Report

Dear Mr. David A. Newell,

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the Case No. 5.1327 project. We have reviewed the documents and have the following requests:

A-1 *A cultural resources inventory of the project area by a qualified archaeologist prior to any development activities in this area.

A-2 * Conditions should be included to address curation of artifacts that may be found on site.

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760)699-6907. You may also email me at acbci-thpo@aguacaliente.net.

Cordially,

Pattie Garcia
Director
Tribal Historic Preservation Office
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

[redacted]

Agua Caliente Band of Cahuilla Indians – THPO Office

Response to Letter A

July 14, 2015

Comment No. A-1

Request that a cultural resource inventory of the project area by a qualified archaeologist prior to any development in this area.

Response No. A-1

Mitigation Measure MM 4.4-1 shall be added to the Mitigation Monitoring Report found in Section 2.0, page 2-9 of the DEIR to require a cultural resource inventory by a qualified archaeologist prior to any development in this area.

Comment No. A-2

Conditions should be included to address curation of artifacts that may be found onsite.

Response No. A-2

Standard condition SC 4.4-1 found in Section 2.0, page 2-9 of the DEIR, will be revised to include curation of artifacts. This standard condition now reads as follows: "Approved Native American cultural resource monitor(s) as well as archaeological monitors shall be present during all ground disturbing activities. *"Monitoring shall also include curation coordination methodologies for any artifacts that may be found".* Should buried cultural deposits be encountered, the monitor may request that destructive construction halt and the monitor shall notify a qualified archaeologist (Secretary of the Interior's Standards and Guidelines) to investigate and, if necessary, prepare a mitigation plan for submission to the City and the Agua Caliente Tribal Historic Preservation Office". See Errata on page 0.3-3 of the FEIR.

Comment Letter B

WARREN D. WILLIAMS
General Manager-Chief Engineer

1995 MARKET STREET
RIVERSIDE, CA 92501
951.955.1200
FAX 951.788.9965
www.rcflood.org

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

August 5, 2015

SENT VIA EMAIL TO: david.newell@palmsprings-ca.gov

Mr. David Newell
City of Palm Springs
Department of Planning and Building
3200 E. Tahquitz Canyon Way
Palm Springs, CA 92262

Dear Mr. Newell: Re: Comments on the Serena Park DEIR

The District appreciates the opportunity to comment on the Serena Park DEIR.

As stated in our comment letter submitted during the Notice of Preparation for Serena Park (TTM 36691), the District does not normally recommend conditions for land divisions or other land use cases in incorporated cities. The District also does not plan check City land use cases, or provide State Division of Real Estate letters or other flood hazard reports for such cases. District comments/recommendations for such cases are normally limited to items of specific interest to the District including District Master Drainage Plan facilities, other regional flood control and drainage facilities, which could be considered a logical component or extension of a master plan system, and District Area Drainage Plan fees (development mitigation fees).

B-1 However, the purpose of this letter is for the District to provide information and to clarify some issues related to the analyses as described in the Serena Park DEIR.

During large storm events, the vacant area proposed for development has experienced a backwater effect from the Whitewater River. Therefore, the grading and drainage for the tract should be designed accordingly to address the backwater effect.

B-2 The Whitewater River West Bank Levee is not a "certified" levee through FEMA. In fact, as stated on the FIRM, the project area is designated as a "Provisionally Accredited Levee" or PAL, which means that the levee has not satisfied all FEMA conditions for levee accreditation. A PAL designation does not indicate that the levee system does not provide the designed level of risk reduction. Alternately, nor does it indicate that the FIRM should show the levee system as providing 1-percent-annual-chance flood risk reduction. FEMA created the PAL designation to facilitate the certification and accreditation process for communities with levee systems that are "reasonably expected to continue to provide 1-percent-annual-chance flood risk reduction."[1] Therefore, due to the levee's provisional status, stating in the EIR that the project site is within the 100-year flood hazard area is not completely accurate.

[1] Clarified procedures for PALs are documented in FEMA Procedure Memorandum No. 43 (PM 43) *Guidelines for Identifying Provisionally Accredited Levees*, dated March 16, 2007.

That being said, the District is actively working with FEMA to certify the levee. However, due to potential levee deficiencies, it may take several years before the levee is certified by FEMA, and the District cannot guarantee that it will ever become certified. If FEMA certifies the levee, the area, including the proposed Serena Park project site, will be officially designated on the FEMA Flood Insurance Rate Map as being protected from the 1-percent-annual-chance or greater flood hazard "protected by a levee system".

B-3 It is important to note that neither levee certification nor accreditation guarantees protection from a given flood event, and whether or not the levee becomes certified, overtopping or failure of the levee system is always a possibility. Therefore, to mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures.

B-4 An encroachment permit must be obtained for any construction related activities occurring within District right of way or facilities. For further information, contact the District's Encroachment Permit Section at 951.955.1266.

If you have any questions or concerns regarding this information, please contact Deborah de Chambeau at 951.955.1265 or me at 951.955.8581.

Very truly yours,

KRIS FLANIGAN
Engineering Project Manager

c: Riverside County Planning Department
Attn: Kristi Lovelady
ec: Mekbib Degaga
Deborah de Chambeau
Henry Olivo
Joan Valle

JMV:mcv
P8\171858

Riverside County Flood Control

Response to Letter B

August 5, 2015

Comment No. B-1

The purpose of this letter is for the District to provide information and to clarify some issues related to the analyses as described in the Serena Park DEIR.

During large storm events, the vacant area proposed for development has experienced a backwater effect from the Whitewater River. Therefore, the grading and drainage for the tract should be designed accordingly to address the backwater effect.

Response No. B-1

Comment noted.

Comment No. B-2

The Whitewater River West Bank Levee is not a "certified" levee through FEMA. In fact, as stated on the FIRM, the project area is designated as a "Provisionally Accredited Levee" or PAL, which means that the levee has not satisfied all FEMA conditions for levee accreditation. A PAL designation does not indicate that the levee system does not provide the designed level of risk reduction. Alternately, nor does it indicate that the FIRM should show the levee system as providing 1-percent-annual-change-flood risk reduction. FEMA created the PAL designation to facilitate the certification and accreditation process for communities with levee systems that are "reasonably expected to continue to provide 1-percent-annual-chance flood risk reduction". Therefore, due to the levee's provisional status, stating in the EIR that the project site is within the 100-year flood hazard area is not completely accurate.

Response No. B-2

Comment noted. The EIR will be revised reflect the current designation of the Whitewater River West Bank levee defined by FEMA as a "PAL" meaning the levee is not yet certified or accredited but "reasonably expected to continue to provide 1% annual chance flood risk reduction". See Errata, Section 4.8, specifically, pages 4.8-14, 4.8-19, 4.8-37, 4.8-38, 39 and 40 for text update. It should be noted that flood risks have been extensively analyzed in the DEIR and flood analysis can also be found in the aforementioned pages in addition to page 4.8-7 & 8 4.8-22 and the Hydrology Report found in Appendix N.

Comment No. B-3

It is important to note that neither levee certification nor accreditation guarantees protection from a given flood event, and whether or not the levee becomes certified, overtopping or failure of the levee system is always a possibility. Therefore, to mitigate flood risk in residual areas, property owners and residents are encouraged to consider flood insurance and flood proofing or other protective measures.

Response No. B-3

Comment noted. Refer to section *"4.8 Hydrology and Water Quality"* pages 4.8-7 thru 4.8-9 for FEMA flood risk discussion.

Comment No. B-4

An encroachment permit must be obtained for any construction related activities occurring within the District right of way or facilities.

Response No. B-4

Comment noted. The project is not designed to encroach in the District right of way or facilities. In the event the design of the project changes and encroachment occurs, the project applicant will obtain the necessary permits to complete the design as proposed.

Comment Letter C

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL PLANNING & DEVELOPMENT

RECEIVED
AUG 06 2015
PLANNING SERVICES
DEPARTMENT

August 4, 2015

David A. Newell, Associate Planner
City of Palm Springs
3200 E. Tahquitz Canyon Way
Palm Springs, CA 92262

RE: Palm Springs Case Nos. 5.1327, PD-366, ZC, GPA, and TTM 36691 (Serena Project)

Dear Mr. Newell:

Thank you for providing the Tribe the opportunity to review and comment on Draft Environmental Impact Report (EIR) prepared for the above referenced project. Tribal staff have reviewed the EIR and have the following comments:

C-1 1. Existing drainage conditions has the overflow from the golf course and the existing development exiting the golf course at the southeastern corner into the White Water River Channel. The proposed overflow from the retention facility appears to be into White Water Club Drive which changes the possible stormwater impacts to the Reservation. Please address how the overflow will be accommodated by White Water Club Drive and any potential impacts to neighboring properties.

C-2 2. The proposed retention basin per the Preliminary Hydrology Report will need to accommodate 267,000 cubic feet of runoff. The sizing of this facility will need to address the overflow from the facility and the length of time that there will be retention within the basin.

If you have any questions please contact me at 760-883-1945.

Very truly yours,

Dan Malcolm, AICP
Planning Manager
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

5401 DINAH SHORE DRIVE, PALM SPRINGS, CA 92264
T 760/699/6800 F 760/699/6823 WWW.AGUACALIENTE-NSN.GOV

Agua Caliente Band of Cahuilla Indians – Planning Department

Response to Letter C

August 4, 2015

Comment No. C-1

Existing drainage conditions has the overflow from the golf course and the existing development exiting the golf course at the southeastern corner into the White Water River Channel. The proposed overflow from the retention facility appears to be in White Water Club Drive which changes the possible stormwater impacts to the Reservation. Please address how the overflow will be accommodated by White Water Club Drive and any potential impacts to neighboring properties.

Response No. C-1

Existing storm water runoff from the golf course and existing development currently flows toward the southeast corner of the property and does not enter the Whitewater River Channel because it is separated by an existing levee which has no openings along the project boundary. As a result, drainage continues to flow to the southeast, parallel to the levee, and ultimately terminates at the intersection of Gene Autry Trail and Via Escuela.

Overflow from the Retention Basin is handled by an emergency outlet for flows in excess of the 100-year design storm. The overflow outlet releases flows to the southeast of the property via sheet flow in a manner similar to existing conditions and conforming with California Drainage Law. Whitewater Club Drive is not proposed to convey overflows from the retention basin.

Comment No. C-2

The proposed retention basin per the Preliminary Hydrology Report will need to accommodate 267,000 cubic feet of runoff. The sizing of this facility will need to address the overflow from the facility and the length of time that there will be retention within the basin.

Response No. C-2

Per the Master Drainage Plan for the City of Palm Springs, the incremental increase in storm water volume for the 100-year storm is required to be retained onsite and street and associated storm drain systems are required to be sized to convey the 100-year peak flow. The proposed onsite basins have been oversized to retain the entire storm water volume during a 100-year storm and preliminary hydrologic calculations show that the proposed basins will dewater in less than the required 72 hours. If the proposed basin volume is exceeded due to excess flows, storm water will ultimately exit the site to the southeast via sheet flow in a manner similar to existing conditions and conforming with California Drainage Law.

Comment Letter D

David Newell

From: Bill Bowden <billbowden760@gmail.com>
Sent: Sunday, August 09, 2015 8:10 PM
To: David Newell
Subject: request to add letter
Attachments: EIR Report PS Golf & CC.pdf

Dear Mr. Newell,
I am requesting your office include the enclosed residential input as to EIR report relating to rezoning of the Palm Springs Golf and Country Club into residential lots under the name of Serena Park.
Please advise if your office received has received this email and attached letter so it may be presented as part of the EIR report that our wishes are to substantially increasing the current parkland dedication relating to the rezoning of the Palm Springs Country Club.
Yours truly,
William and Alinda Bowden
2629 North Whitewater Club Drive
Palm Springs Ca 92262

1

RECEIVED
AUG 10 2015
PLANNING SERVICES
DEPARTMENT

William T. Bowden
2629 North Whitewater Club Drive
Palm Springs, CA 92262

City of Palm Springs

Attn: David A. Newell

3200 E. Tahquitz Canyon Way

Palm Springs, CA

re: Redevelopment of Palm Springs Country Club to residential lots (Environmental Impact Report)

Dear Mr. Newell and to whom it may concern,

I would appreciate if this letter be retained with the environmental Impact Report for Palm Springs Golf and Country Club (Serena Park).

My parents purchased 2629 North Whitewater Club Drive in June of 1993 and my own family has retained ownership of the same property.

The golf course, club house and tennis courts played a large part in why our residence was purchased and because of the open space of the golf course surrounding Palm Springs Country Club. Sadly when the golf course failed to continue due to poorly arranged financing we were fortunate that we still had the views and open spaces surrounding the course however poorly maintained as it was.

D-1 Our family is in favour of redevelopment for the sake of getting this land back into good use. Under section 2.4 (Summary of Alternatives) I would like to see far more park set aside for local residents including the possibility of having the current course land that surrounds Palm Springs Country Club continue as park for future generations to retain the same open spaces and views that we all have had since Palm springs Country Club was first developed.

The boomerang street concept as planned will maximize lots around the Palm Springs Country Club golf course but we expect that when developed we will all become aware of numerous automobile lights at any given night trying to boomerang their way in and out of this new subdivision.

We hope this environmental Impact Report will look at a much larger dedication of parkland to the City of Palm Springs otherwise Palm Springs Country Club may well end up as currently planned a walled and closed off subdivision with limited access to any parkland, walkways or the existing open concept views.

Yours truly,

W. T. Bowden

William and Alinda Bowden

Response to Letter D

August 9, 2015

Comment No. D-1

Our family is in favor of redevelopment for the sake of getting this land back into good use. Under Section 2.4 (Summary of Alternatives) I would like to see far more park space set aside for local residents including the possibility of having the current course land that surrounds Palm Springs County Club continue as park for future generations to retain the same open spaces and views that we all have had since Palm Springs Country Club was first developed.

Response No. D-1

Comment noted. Currently there are no public park facilities or recreational amenities nor is the property shown as "Public Park" in the City of Palm Springs General Plan. The Serena Park project is adding usable open space and recreation to the community through the proposed 5-acre public-park and approximately 43.4 acres of private open space with public access.

Comment Letter E

SOBOBA BAND OF LUISEÑO INDIANS
EST. JUNE 19, 1883

August 5, 2015

Attn: David A. Newell
City of Palm Springs
3200 East Tahquitz Canyon Way
Palm Springs, CA 92262

Re: Serena Park, Location: North Sunrise Way and East San Rafael Drive, APN No's: 669-480-027, 669-590-066

The Soboba Band of Luiseño Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project(s) has been assessed through our Cultural Resource Department, where it was concluded that although it is outside the existing reservation, the project area does fall within the bounds of our Tribal Traditional Use Areas. At this time the Soboba Band does not have any specific concerns regarding known cultural resources in the specified areas that the project encompasses, but does request that the appropriate consultation continue to take place between the tribes, project proponents, and government agencies.

Also, working in and around traditional use areas intensifies the possibility of encountering cultural resources during any future construction/excavation phases that may take place. For this reason the Soboba Band of Luiseño Indians requests that approved Native American Monitor(s) be present during any future ground disturbing proceedings, including surveys and archaeological testing, associated with this project. The Soboba Band recommends that you contact the Agua Caliente Band of Cahuilla Indians and other tribes that are closer to the project area. In the event that future monitoring does become necessary and a monitor from the Agua Caliente Band of Cahuilla Indians is not able to be retained, cultural monitors from the Soboba Band of Luiseño Indians will be available. E-1

Sincerely,

Joseph Ontiveros
Cultural Resource Director
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581
Phone (951) 654-5544 ext. 4137
Cell (951) 663-5279
jontiveros@soboba-nsn.gov

Soboba Band of Luiseño Indians

Response to Letter E

August 5, 2015

Comment No. E-1

The Soboba Band recommends that you contact the Agua Caliente Band of Cahuilla Indians and other tribes that are closer to the project area. In the event that future monitoring does become necessary and a monitor from the Agua Caliente Band of Cahuilla Indians is not able to be retained, cultural monitors from the Soboba Band of Luiseño Indians will be available.

Response No. E-1

Comment noted. The Agua Caliente Band of Cahuilla Indians has reviewed the DEIR. The Serena Park project includes standard conditions for the presence of approved Native American Monitors as well as archaeological monitors during all ground disturbing activities. (Section 4.4 Cultural Resources, SC 4.4-1). You may refer to Appendix B of the DEIR for the NOP comment letter received from Agua Caliente Band of Cahuilla Indians, dated December 23, 2014.

Comment Letter F

State of California -The Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
78-078 Country Club Drive, Ste. 109
Bermuda Dunes, CA 92203
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

August 17, 2015

David A. Newell
City of Palm Springs
3200 E. Tahquitz Canyon Way
Palm Springs, CA 92262

Subject: Draft Environmental Impact Report Serena Park Project SCH# 2014121075

Dear Mr. Newell:

The California Department of Fish and Wildlife (Department) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) or the Serna Park Project (Project). The Department is responding to the DEIR as a Trustee Agency for fish and wildlife resources (California Fish and Game Code Sections 711.7 and 1802, and the California Environmental Quality Act [CEQA] Guidelines Section 15386), and as a Responsible Agency regarding any discretionary actions (CEQA Guidelines Section 15381), such as the issuance of a Lake or Streambed Alteration Agreement (California Fish and Game Code Sections 1600 et seq.) and/or a California Endangered Species Act (CESA) Permit for Incidental Take of Endangered, Threatened, and/or Candidate species (California Fish and Game Code Sections 2080 and 2080.1).

The Project proposes to redevelop the former golf course with approximately 429 residential units and a five-acre public park. These will consist of 137 single story, attached residences in the northern portion (Attached Residential Subarea) and 292 detached single-family residences on the southern portion (Single Family Subarea). Housing will include a mix of market rate and senior housing. The three on-site wells historically utilized for golf course irrigation will be retained to irrigate project and public park landscaping via a mutual water company. The proposed project site is located just east of North Sunrise Way in the City of Palm Springs, Riverside County, California. Specifically, the project site is contained within the southwestern quarter of Section 36, Range 4 East, Township 4 South and the northeastern quarter of Section 1, Range 4 East, Township 4 South; San Bernardino Baseline and Meridian.

Biological Resources and Impacts

The CEQA document should contain sufficient, specific, and current biological information on the existing habitat and species at the Project site; measures to minimize and avoid sensitive biological resources; and mitigation measures to offset the loss of native flora and fauna and State waters. The CEQA document should not defer impact analysis and mitigation measures to future regulatory discretionary actions, such as a Lake or Streambed Alteration Agreement.

Conserving California's Wildlife Since 1870

If state or federal endangered or threatened species have the potential to occur on the Project, site species specific surveys should be conducted using methods approved by the Department or assume the presence of the species throughout the project site. The CEQA document should include recent survey data (CEQA Guidelines Section 15125(a)). The CEQA document should also address species of special concern and federal critical habitat. To assist with review, an accompanying map showing the areas of impact should be included in the subsequent CEQA document. Additional maps detailing the location of endangered, threatened, or special of special concern should also be included in the subsequent CEQA document.

Natural Community Conservation Program (NCCP) and California Endangered Species Act (CESA)

The Department is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the CESA, and administers the Natural Community Conservation Plan Program (NCCP Program). Within the Inland Deserts Region, the Department issued Natural Community Conservation Plan Approval and Take Authorization for the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) per Section 2800, et seq., of the California Fish and Game Code on June 22, 2004. The MSHCP establishes a multiple species conservation program to minimize and mitigate habitat loss and provides for the incidental take of covered species in association with activities covered under the permit.

Compliance with approved habitat plans, such as the MSHCP, is discussed in CEQA. Specifically, Section 15125(d) of the CEQA Guidelines requires that the CEQA document discuss any inconsistencies between a proposed Project and applicable general plans and regional plans, including habitat conservation plans and natural community conservation plans. An assessment of the impacts to the MSHCP as a result of this Project is necessary to address CEQA requirements. To obtain additional information regarding the MSHCP please go to: http://www.rctlma.org/mshcp/.

The Project area is located adjacent to the Whitewater Floodplain Conservation Area within the CVMSHCP. The Conservation Area description indicates that ephemeral sand fields habitat, Coachella Valley Fringe-toed Lizard, Palm Springs Pocket Mouse, Coachella Valley Round-tailed Ground Squirrel, Coachella Valley Milkvetch, Coachella Valley Giant Sand-treader Cricket, Le Conte's Thrasher and the Burrowing Owl may be found within the offsite wash areas near the Project.

Western Burrowing Owls

The proposed Project site is located in potential habitat for the Western Burrowing Owl (*Athene cunicularia)*. This species is designated a California Species of Special

Concern. Section 15380 of the California Environmental Quality Act (CEQA) requires the lead agency to treat sensitive species as though they were listed, if the species meets the criteria for listing described in the section. The Department believes that the proposed project could further the decline of the above sensitive species. This species must be treated as though it were listed and appropriate avoidance, mitigation, and compensation for impacts need to be identified. Unavoidable impacts to the Western Burrowing Owl should be mitigated through acquisition and protection, in perpetuity, of high quality biological habitat. In addition, surveys and mitigation should be consistent with the 2012 Department Staff Report on Burrowing Owl Mitigation (link: http://www.dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf).

Lake and Streambed Alteration Program

Although the proposed Project is within the CVMSHCP, a Notification of Lake or Streambed Alteration is still required by the Department, should the site contain jurisdictional waters. Additionally, the Department's criteria for determining the presence of jurisdictional waters are more comprehensive than the MSHCP criteria in Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools). The Department is responsible for assessing and evaluating impacts to jurisdictional waters; typically accomplished through reviewing jurisdictional delineation (JD) reports, supporting information, and conducting site visits. Following review of a JD, the Department may request changes to the JD. The Department may also recommend that additional project avoidance and/or minimization measures be incorporated, or request additional mitigation for project-related impacts to jurisdictional areas.

The Department recommends submitting a notification early in the project planning process, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to http://www.dfg.ca.gov/habcon/1600/forms.html.

The Department opposes the elimination of ephemeral, intermittent, and perennial streams, channels, lakes, and their associated habitats. The Department recommends avoiding stream and riparian habitat to the greatest extent possible. The CEQA document should include measures to avoid or minimize project impacts. Where adverse impacts cannot be avoided or minimized, the CEQA document should describe compensatory mitigation, for example, the creation and/or restoration of in-kind habitat either on- or off-site. Additional mitigation requirements through the Department's Lake and Streambed Alteration Agreement process may be required, depending on the quality of habitat impacted, proposed compensatory mitigation, project design, and other factors.

The following information will be required for the processing of a Notification of Lake or Streambed Alteration and the Department recommends incorporating this information into the CEQA document to avoid subsequent documentation and project delays:

1) Delineation of lakes, streams, and associated habitat that will be temporarily and/or permanently impacted by the proposed project (include an estimate of impact to each habitat type);
2) Discussion of avoidance and minimization measures to reduce project impacts; and,
3) Discussion of potential mitigation measures required to reduce the project impacts to a level of insignificance. Please refer to section 15370 of the CEQA Guidelines for the definition of mitigation.

In the absence of specific mitigation measures in the CEQA document, the Department believes that it cannot fulfill its obligations as a Trustee and Responsible Agency for fish and wildlife resources. Permit negotiations conducted after and outside of the CEQA process are not CEQA-compliant because they deprive the public and agencies of their right to know what project impacts are and how they are being mitigated (CEQA Guidelines Section 15002).

Cumulative Impacts

The Project is proposed in a densely populated region of southern California. The regional scarcity of biological resources may increase the cumulative significance of Project activities. Cumulative effects analysis should be developed as described under CEQA Guidelines Section 15130. Please include all potential direct and indirect project related impacts to riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis.

Alternatives Analysis

The CEQA document should analyze a range of fully considered and evaluated alternatives to the Project (CEQA Guidelines Section 15126.6). The analysis should include a range of alternatives which avoid or otherwise minimize impacts to sensitive biological resources. The Department considers Rare Natural Communities as threatened habitats, having both local and regional significance. Thus, these communities should be fully avoided and otherwise protected from Project-related impacts. The CEQA document should include an evaluation of specific alternative locations with lower resource sensitivity where appropriate. Off-site compensation for unavoidable impacts through acquisition and protection of high-quality habitat should be addressed.

Please note that the Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Department studies have shown that these efforts are experimental in nature and largely unsuccessful.

Department Recommendations

The Department has the following concerns about the Project, and requests that these concerns be addressed in the CEQA document:

F-1 1. The CEQA document should quantify impacts to habitats and species as per the informational requirements of CEQA. An accompanying map showing the areas of impact should also be included.

F-2 2. The CEQA document should include recent biological surveys for fauna and flora (CEQA Guidelines Section 15125(a)). The Department recommends that the Lead Agency contact the Department's California Natural Diversity Database (CNDDB) in Sacramento, (916) 327-5960, to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the California Fish and Game Code. If state or federal threatened or endangered species may occur within the project area, species specific surveys, conducted at the appropriate time of year and time of day, should be included with the CEQA document. Acceptable species specific surveys have been developed by the Department, and by the U.S. Fish and Wildlife Service, and are accessible through each agencies websites. Assessments for rare plants and rare plant natural communities should follow the Department's 2009 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. If the Department's 2009 guidelines were not used, surveys conducted after the issuance of the 2009 guidance should be updated following the 2009 guidelines. The guidance document is available here: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/protocols_for_surveying_and_evaluating_impacts.pdf

F-3 3. The CEQA document should provide an analysis of habitat conservation plans and natural community conservation plans, including the MSHCP. The CEQA document should include a discussion of how the project will affect reserve assembly; how the Project will affect the goals and objectives of the NCCP; the applicable policies and procedures that pertain to the Project; a discussion of survey requirements; and a list of proposed mitigation measures required by the NCCP. A copy of any documents required by the NCCP (e.g., Determination of Biologically Equivalent or Superior Preservation) should be included with the CEQA document.

F-4 4. The analysis in the CEQA document should satisfy the requirements of the Department's Lake and Streambed Alteration Program and CESA (if deemed necessary).

F-5 5. The Department recommends that a CESA ITP be obtained if the Project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction or over the life of the Project,

and the applicant chooses not to process the Project through the NCCP. CESA ITPs are issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats. The Department encourages early consultation, as significant modification to the proposed project and mitigation measures may be required in order to obtain a CESA ITP. Revisions to the California Fish and Game Code, effective January 1998, require that the Department issue a separate CEQA document for the issuance of a CESA ITP unless the Project CEQA document addresses all Project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of a CESA permit.

F-6 6. The CEQA document should provide a thorough analysis of direct, indirect, and cumulative impacts and identify specific measures to offset such impacts.

F-7 7. The CEQA document should analyze a range of fully considered and evaluated alternatives to the Project (CEQA Guidelines Section 15126.6).

In summary, the Department requests that the CEQA document include current information regarding biological resources, adequately address whether the project will be processed through the MSHCP, provide a thorough analysis of cumulative impacts, and provide an alternatives analysis. If you should have any questions pertaining to these comments, please contact Mr. James Sheridan, Environmental Scientist, either via email at James.Sheridan@wildlife.ca.gov or via phone at (760) 200-.9419.

Sincerely,

for

Leslie MacNair
Regional Manager
Inland Deserts Region

ec: Michael Flores, Senior Environmental Scientist, CDFW

California Department of Fish and Wildlife

Response to Letter F

August 17, 2015

Comment No. F-1

The CEQA document should quantify impacts to habitats and species as per the informational requirements of CEQA. An accompanying map showing the areas of impact should also be included.

Response No. F-1

Comment noted. The biological discussion and exhibits in section *"4.3 Biological Resources"* of the DEIR (Pages 4.3-1 thru 4.3-16) covers impacts to habitats and species per CEQA requirements and impacts were identified as less than significant.

Comment No. F-2

The CEQA document should include recent biological surveys for fauna and flora (CEQA Guidelines Section 15125 (a)). The Department recommends that the Lead Agency contact the Department's California Natural Diversity Database (CNDDB) in Sacramento, (916) 327-5960, to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the California Fish and Game code. If state or federal threatened or endangered species may occur within the project area, species specific surveys, conducted at the appropriate time of year and time of day, should be included with the CEQA document. Acceptable species specific surveys have been developed by the Department, and by the U.S. Fish and Wildlife Service, and are accessible through each agencies website. Assessments for rare plants and rare plant natural communities should follow the Department's 2009 protocols for surveying and evaluating impacts to special status native plant populations and natural communities. If the Department's 2009 guidelines were not used, survey's conducted after the issuance of the 2009 guidance should be updated following the 2009 guidelines.

Response No. F-2

Comment noted. A Biological Assessment and Impact Analysis was prepared by James W. Cornett, Ecological Consultants and is labeled as *"Appendix D"* as part of the Technical Appendices for the DEIR.

Comment No. F-3

The CEQA document should provide an analysis of habitat conservation plans and natural community conservation plans, including the MSHCP. The CEQA document should include a discussion of how the project will affect reserve assembly; how the Project will affect the goals and objectives of the NCCP; the applicable policies and procedures that pertain to the Projects;

a discussion of survey requirements; and a list of proposed mitigation measures required by the NCCP. A copy of the documents required by the NCCP (e.g.), Determination of Biologically Equivalent or Superior Preservation) should be included with the CEQA document.

Response No. F-3

Comment noted. This is covered under the biological assessment found in section *"4.3 Biological Resources"* of the DEIR, specifically pages 4.3-4, 4.3-14 and 4.3-8 thru 4.3-13.

Comment No. F-4

The analysis in the CEQA document should satisfy the requirements of the Department's Lake and Streambed Alteration Program and CESA (If deemed necessary).

Response No. F-4

Comment noted. Per the project specific Biological Assessment and Impact Analysis prepared by James W. Cornett, Ecological Consultants, there are no naturally occurring springs or permanent aquatic habitats on or adjacent to the project site. Discussion of this topic can be found in section "*4.3 Biological Assessment*" page 4.3-6 of the DEIR.

Comment No. F-5

The Department recommends that a CESA ITP be obtained if the Project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction of over the life of the Project, and the applicant chooses not to process the Project through the NCCP, CESA ITPs are issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats. The Department encourages early consultation, as significant modification to the proposed project and mitigation measures may be required in order to obtain a CESA ITP unless the project CEQA document addresses all project impacts to the listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of a CESA permit.

Response No. F-5

Comment noted. In accordance with CEQA, this analysis is discussed in section "*4.3 Biological Resources"* of the Serena Park DEIR (section 4.3, pages 4.3-1 thru 4.3-16 also see Appendix D of the DEIR for Biological Report).

Comment No. F-6

The CEQA document should provide a thorough analysis of direct, indirect, and cumulative impacts and identify specific measures to offset such impacts.

Response No. F-6

Comment noted. Cumulative impacts are discussed in section "5.0 *Growth Inducing and Cumulative Impacts"* under topic "*5.3 Cumulative Impacts by Relevant CEQA Topics*".

Comment No. F-7

The CEQA document should analyze a range of fully considered and evaluates alternatives to the Project (CEQA Guidelines Section 15126.6).

Response No. F-7

Comment noted. Per CEQA Guidelines 15126.6, alternatives are discussed in section *"2.0 Summary"* and again in greater detail in section "*7.0 Alternative Summary".*

0.3 ERRATA TO FINAL EIR

Introduction

The City of Palm Springs has prepared this Errata sheet to clarify and correct information in the Final Environmental Impact Report (FEIR or Final EIR) for the Serena Park project. The information provided in Section 0.3 is in response to comments received during the Draft EIR circulation period regarding revisions to the project. All of the information added to the Final EIR merely clarifies, or makes insignificant modifications in the Draft EIR. New information added to the Final EIR is not "significant", and recirculation of the Draft EIR is not required (see Guidelines Section 15088.5). The City has reviewed the information in this Errata and has determined that it does not change the findings or conclusions of the Final EIR and does not constitute "significant new information" pursuant to CEQA Guidelines Section 15088.5. Additionally, the minor edits to the Final EIR for the project and subsequent revisions herein do not contain significant new information that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect on the project or a feasible way to mitigate or avoid such an effect. Furthermore, information clarified in the FEIR does not present a feasible project alternative or mitigation measure considerably different from others previously analyzed in the Draft EIR.

In conformance with Section 15121 of the State CEQA Guidelines, the Final EIR, technical appendices and reports thereof, together with the Errata, are intended to serve as documents that will generally inform the decision-makers and the public of environmental effects of the project. This Errata, combined with the Mitigation Monitoring Program, and Response to Comments, comprise the Final EIR. All modifications are denoted in *red italics.*

TABLE OF CONTENTS

PAGE VI, LIST OF EXHIBITS

PAGE VIII, LIST OF APPENDICES

SECTION 2.0 SUMMARY OF THE DRAFT EIR

Page 2-9, Table 2.0-1 Summary of Project Impacts and Mitigation Measures

Mitigation Measures	Level of Significance After Mitigation
4.4 Cultural Resources	
MM 4.4-1: *A resource cultural inventory shall be prepared by a qualified archaeologist prior to project development.*	*Less than significant*
SC 4.4-1: Approved Native American cultural resource monitor(s) as well as archaeological monitors shall be present during all ground disturbing activities. *Monitoring shall also include curation coordination methodologies for any artifacts that may be found.* Should buried cultural	Less than significant

deposits be encountered, the monitor may request that destructive construction halt and the monitor shall notify a Qualified Archaeologist (Secretary of the Interior's Standards and Guidelines) to investigate and, if necessary, prepare a mitigation plan for submission to the City and the Agua Caliente Tribal Historic Preservation Office.	

MASTER PLAN OF DRAINAGE (MDP) LINE 3

Modifications and Clarifications

Subsequent to the end of the Public Review period for the Serena Park Draft EIR, City staff suggested the Draft EIR analyze the application of the Palm Springs Master Plan of Drainage (MDP), particularly the issue of timing of construction of Line 3, a major feature of the MDP that will traverse the property in an east-west direction. This line is the major conduit of storm flows from the northern area of Palm Springs into the Whitewater Channel, and to date no part of the of the storm drain facility has been constructed. It is uncertain when the storm drain facility will be constructed. Minor edits and additions have been made to the following sections to address the MDP Line 3. Sections 4.3, 4.8 and 4.15 are provided in their entirety to provide context, however text changes have only been made to specific pages as indicated below and new text is identified in *red Italics*:

Section 3.0 – Project Description (Added language to Page 3-2 / 1st Paragraph)

Section 4.3 – Biological Resources (Revised Pages 4.3-7 & 8 and 4.3-15)

Section 4.8 – Hydrology & Water Quality (Revised Pages 4.8-6 & 7, 4.8-18, 4.8-20 & 21, 4.8-24 & 25; 4.8-35 & 36) (Added Exhibits 4.8-2, 4.8-4, 4.8-5, 4.8-6, 4.8-8, and 4.8-9)

Section 4.15 – Utilities and Service System (Revised Pages, 4.15-2 & 3, and 4.15-12)

These technical corrections and clarifications to the referenced sections are within the scope of the analysis presented in the Draft and Final EIR and no new impacts are presented and no additional mitigation measures have been added. The analysis and overall significance conclusions identified within the Draft and Final EIR will not be materially altered nor will the severity of a potential impact increase with the implementation of the MDP Line 3.

SECTION 3.0 PROJECT DESCRIPTION

Page 3-2 / 1st Paragraph

D. Constraints

The project site is constrained by existing development including single family residential lots along its perimeter and residential inholdings as noted above. The property is further constrained by a flood control levee that protects developable land from the Whitewater River Flood Plain. *Additionally, the City of Palm Springs Master Plan of Drainage (MDP) Line 3 is a major feature of the drainage plan and will traverse the Serena Park property in an east-west direction. This line is proposed to be the major conduit of storm flows from the northern area of Palm Springs into the Whitewater Channel. To date, no part of this storm drain line has been constructed and it is unknown when construction would begin.*

The overall site planning for Serena Park incorporated an open space corridor (minimum width 45') through the site that would be part of the open space system maintained by the HOA. This corridor is designed to be dedicated on the Final Tract Map for the purpose of reserving the area in which Line 3 could eventually be constructed at such time that Line 3 was to become a priority. The last segment connecting Line 3 into the Whitewater Channel would be located within the 200' easement controlled by RCFC that covers the levee along the Whitewater Channel.

Section 4.3 – Biological Resources

This Section is included in its entirety for context. However, new language has only been added to pages 4.3-7 & 8 and 4.3-15.

4.3 BIOLOGICAL RESOURCES

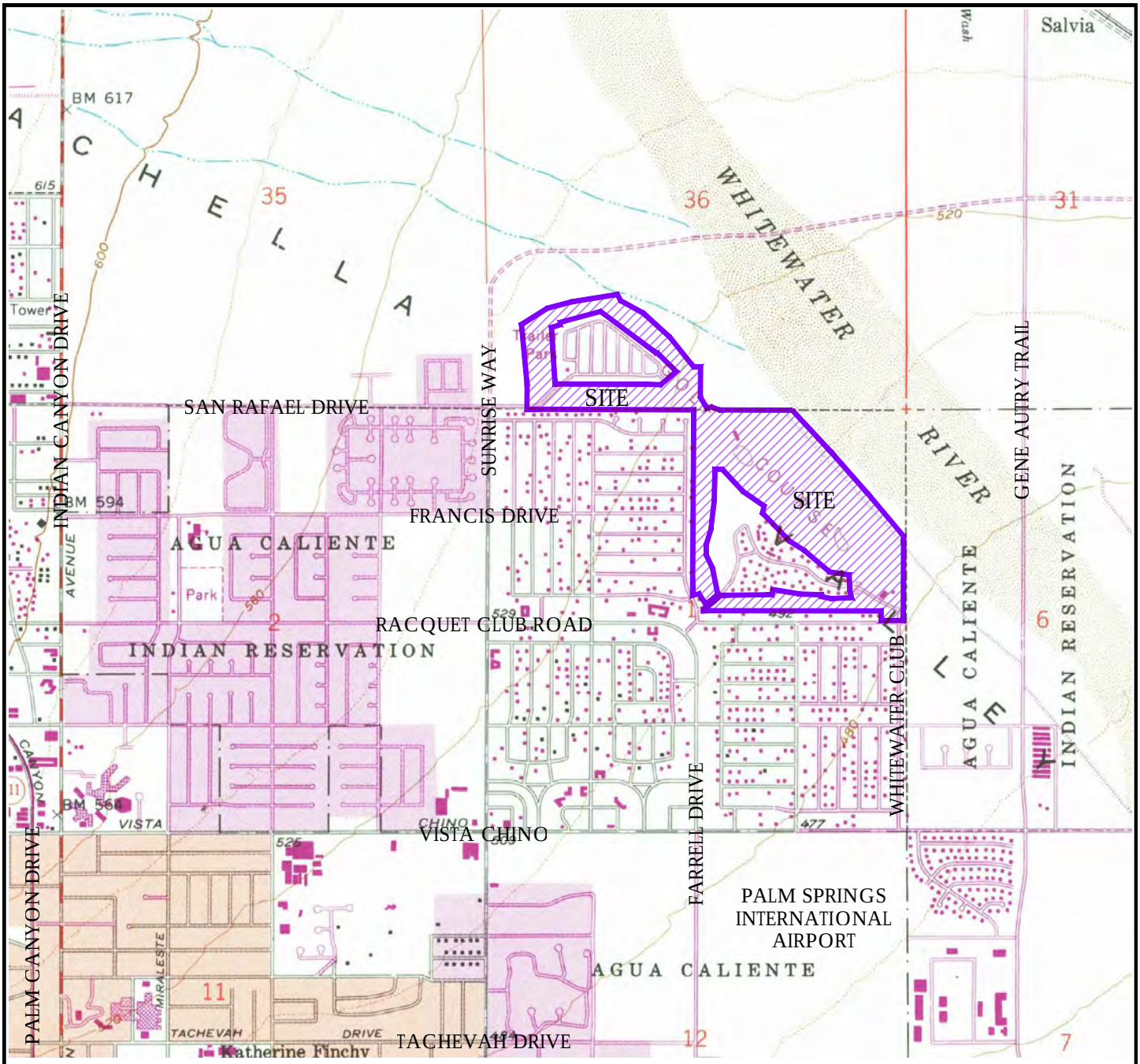
The discussion within this section is based on a variety of information sources. These sources include the Biological Assessment and Impact Analysis of the Proposed Palm Springs Country Club Development (May 2013,) the Biological element from the 2007 City of Palm Springs General Plan and General Plan EIR (October, 2007.),

Document review also includes the Riverside County Integrated Project General Plan Final Program Environmental Impact Report Volume 1 (October 2003), Tribal Habitat Conservation Plan for the Agua Caliente Indian Reservation (August 2010), and the Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan (2008).

A. Regional Setting

The Proposed Serena Park project site is located in the northwest portion of the Coachella Valley, in Riverside County in southern California. Both the Santa Rosa Mountains to the southeast, and the San Jacinto Mountains to the west, dominate the landscape. The project area lies within the confines of a geographical region known as the Colorado Desert, a subdivision of the Sonoran Desert. As is typical of this subdivision, annual rainfall averages approximately five inches. Most precipitation falls during winter and spring with occasional summer thundershowers that account for nearly one-fifth the annual total. Winter days are mild, averaging 70 degrees Fahrenheit. Winter nights occasionally drop to near freezing. The month of July brings the hottest temperatures with daytime highs averaging 108 degrees Fahrenheit.

The City and its spheres of influence are located primarily on the valley floor in the Sonoran Desert Environment. The extensive alluvial plains formed by drainage from the surrounding mountains shape the valley. The physical quality of the area is extensively influenced by the San Andreas Fault Zone, which passes through the region. Physical conditions that characterize the Coachella Valley include the following: the Salton Sea which is located at the southeastern end of the valley and has a surface elevation of about 228 feet below mean sea level; and the San Jacinto and San Bernardino Mountains which are found at the northwestern end of the valley and have peaks ranging in heights up to 11,000 feet above mean sea level.



Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1955. Advance field check 1957

Polyconic projection
10,000-foot grid based on California coordinate system, zone 6
1000-meter Universal Transverse Mercator grid ticks,
zone 11, shown in blue 1927 North American Datum
To place on the predicted North American Datum 1983 move
the projection lines 80 meters east as shown by dashed
corner ticks

Red tint indicates areas in which only landmark buildings are shown

There may be private inholdings within the boundaries
of the National or State reservations shown on this map

CONTOUR INTERVAL 40 FEET
DOTTED LINES REPRESENT 20-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Revisions shown in purple and woodland compiled from aerial photographs taken 1984 and other source data. Partial field check by U.S. Forest Service. Map edited 1988

NORTH

N.T.S.

ROAD CLASSIFICATION

Heavy-duty
Medium-duty
Light-duty
Unimproved dirt
State Route

PALM SPRINGS, CALIF.
SE/4 PALM SPRINGS 15' QUADRANGLE
33116-G5-TF-024

1957
PHOTOREVISED 1988
DMA 2651 I SE-SERIES V895

MSA CONSULTING, INC.
PLANNING ■ CIVIL ENGINEERING ■ LAND SURVEYING
34200 BOB HOPE DRIVE ■ RANCHO MIRAGE ■ CA 92270
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U.S. Geological Survey

Urbanization in the Coachella Valley has taken place primarily along the toe of the slopes of the Santa Rosa and San Jacinto Mountains. It originated largely within the City of Palm Springs and spread progressively east. The Coachella Valley region is noted for prime agricultural lands in the eastern valley areas, and for exclusive resort residential and world-class tourist developments primarily in the western portions of the valley. In the central valley areas, agriculture developed (primarily dates and citrus) early in the last century and has given way to resort, residential and commercial development.

The area's natural assets, including mountain vistas, diverse wildlife and good air quality, have become progressively important to the local economy and environment, and enhance the region's character and appeal.

According to the City of Palm Springs General Plan EIR, the City contains a variety of habitats associated with natural vegetation communities. These vegetation communities are typically associated with either the valley floor or the mountains and canyons. Five general habitats are commonly found within these two areas and include the following: 1) Sonoran Desert Scrub Habitat, 2) Chaparral Habitat, 3) Riparian Forest and Woodland Habitat, 4) Desert Interior Dune Habitats and, 5) Juniper Woodland Habitat.

These communities reflect the varied physical conditions and constraints that occur in different regions of the planning area, and they are largely distinguished by the dominant types of vegetation and animal species that occur within them.

Sonoran creosote bush scrub is the most widespread vegetation type in the Colorado Desert. This community is dominated by creosote bush (*Larrea tridentate.*) This plant type is 1.5 – 10 feet tall with a broad spacing of shrubs. The co-dominate species in the community is burro bush or white bursage (*Ambrosia dumosa,*) a much shorter shrub varying from 8 to 24 inches. Brittlebush (*Encilia farinosa*) and desert brickel bush (*Brickellia desertorum*) may also occur in this vegetation community.

Creosote bush scrub is the common plant community occurring in the desert dunes and sand fields of the valley floor. The blowsand habitats of the valley floor are comprised of shifting, wind-blown sand supporting sparse vegetation within a Sonoran creosote bush scrub matrix.

Other species associated with portions of this community include Coachella Valley milk-vetch (*Astragalus lentiginosus var. coachellae*) and triple-ribbed milk vetch (*Astragalus tricarinatus).* Wild life supported by this vegetation include Peninsular Bighorn Sheep (PBS) (*Ovis Canadensis*), Palm Springs ground squirrel (*Spermophilus tereticaudus chlorus*), Palm Springs pocket mouse (Perognathus longimembris bangsi), desert tortoise (*Goperus agassizii*), burrowing owl (*Athene cunicularia*), Coachella giant sand treader cricked (*Macrobaenetes valgum*), Coachella Valley grasshopper (*Spaniacris deserticola*), and Casey's June Beetle (*Dinacoma caseyi*.)

The GP EIR further states that within Palm Springs, creosote bush scrub (in varying conditions of disturbance) is found on many of the vacant parcels located throughout the developed portions of the City. Creosote bush scrub is found on three somewhat different substrates including areas on the alluvial fan that emanate from San Jacinto mountain canyons, on the rocky hillsides of the Santa Rosa Mountains and on the edge of the alluvial plain emanating from Palm Canyon Wash.

The Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) has been developed for the entire Coachella Valley and surrounding mountains to address current and potential future State and Federal Endangered Species Act issues in the plan area. After 12 years of development, the Plan became effective on October 2, 2008. The Plan is proposed to meet the intent of the Natural Community Conservation Planning Act as well as the California Endangered Species Act (CESA) and the Federal Endangered Species Act (FESA.) Additionally it is intended to comply with the Natural Community Conservation Plan (NCCP) as specified in Fish and Game Code Section 2810.

The CVMSHCP provides regulations for addressing listed species.

The Coachella Valley is home to many specialized and sensitive plant and animal species, some of which have been listed as threatened or endangered by the federal and state governments. Among these are the Coachella Valley Fringe-toed Lizard, desert tortoise, Peninsular Bighorn Sheep and Coachella Valley milk-vetch. Other special-status species include the flat-tailed horned lizard and the flat-seeded spurge.

The Desert Tortoise is currently listed as a threatened species by both the state and federal governments. The species is also covered by the Coachella Valley MSHCP and by the Tribal Habitat Conservation Plan. Desert Tortoise can generally be expected to be found within the Sonoran Creosote Community. Peninsular Bighorn Sheep are not found on the Valley Floor.

The project area is located within the CVMSHCP but is not located within a Conservation Area. This HCP indicates that the property is intended to contain urban uses. The project is indirectly affected by one Conservation Area within the CVMSHCP, the Whitewater Floodplain Conservation Area. This area includes the Whitewater wash north and east of the developable portion of the property. The Conservation Area description indicates that ephemeral sand fields habitat, Coachella Valley Fringe-toed Lizard, Palm Springs Pocket Mouse, Coachella Valley Round-tailed Ground Squirrel, Coachella Valley Milkvetch, Coachella Valley Giant Sand-treader Cricket, Le Conte's Thrasher and the Burrowing Owl may be found within the offsite wash areas near the project.

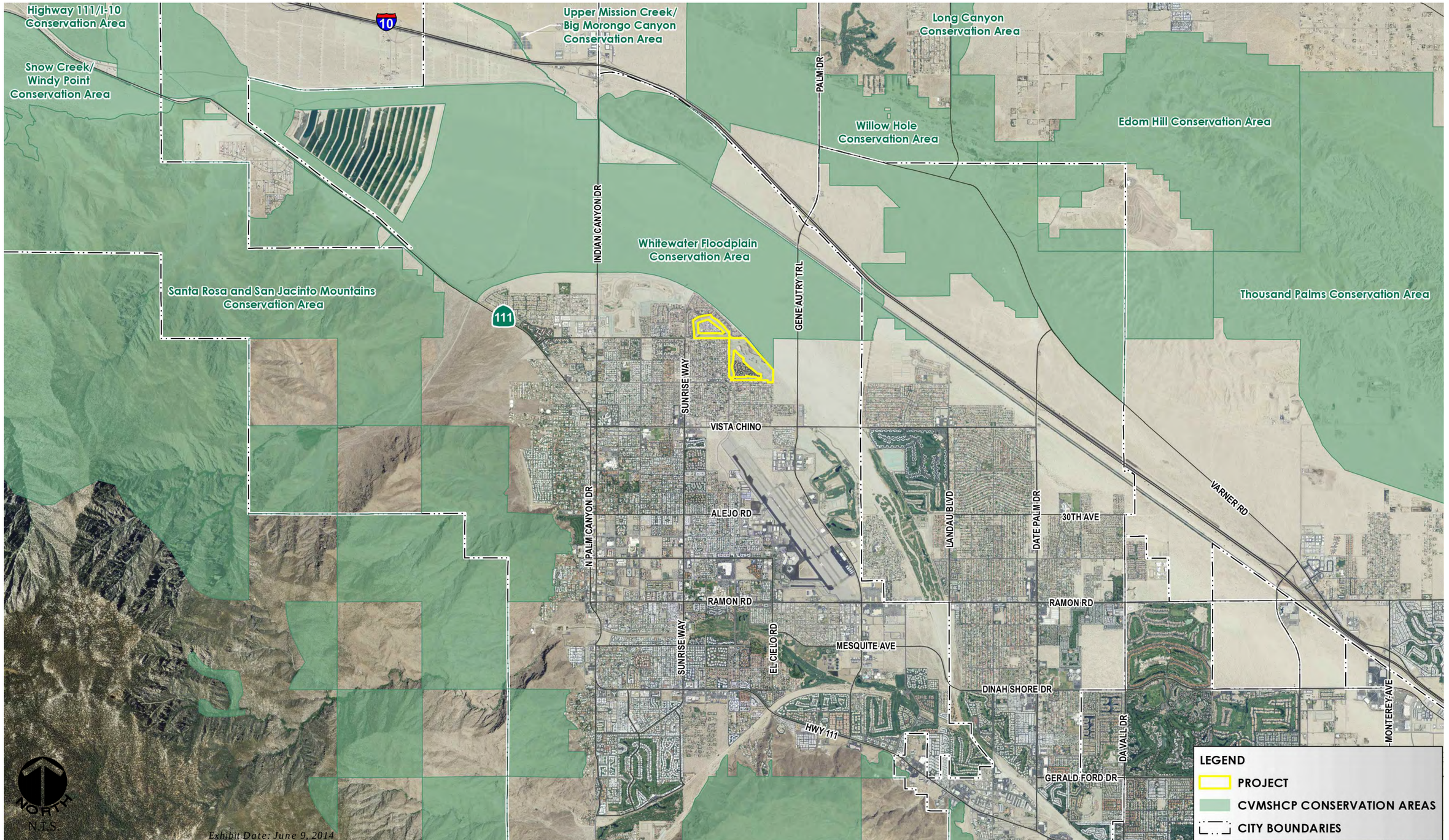


Exhibit Date: June 9, 2014

MSA Consulting, Inc.
Planning ■ Civil Engineering ■ Land Surveying
34200 Bob Hope Drive ■ Rancho Mirage ■ CA 92270
Telephone (760) 320-9811 ■ Fax (760) 323-7893

Conservation Areas

Environmental Impact Report for Tentative Tract Map No. 36691

A small portion of the subject property at the southeast corner is adjacent to tribal properties. These offsite areas are covered by the Tribal Habitat Conservation Plan (THCP) for the Agua Caliente Indian Band of Cahuilla Indians. The purpose of the THCP is to continue sensible land use management by establishing a consistent and efficient development process on Tribal Lands.

The THCP addresses land development along with other activities taking place within the Reservation; which includes Tribal Trust Land, Allotted Trust Land, and Fee Land. The plan provides the means to protect and conserve federally listed species and others deemed by the Tribe and USFWS to be sensitive and potentially in need of listing in the future (collectively Covered Species); and authorizes the incidental take of these species where appropriate. The THCP was adopted by the Tribal Council in 2010 but did not receive final approval from the U.S. Fish and Wildlife Service of the plan which would also include a Section 10a permit for all covered species and activities.

B. Existing Conditions

The proposed project is found in the northeastern portion of the City of Palm Springs. This general area is designated for urban land uses. The Palm Springs General Plan and Zoning Ordinance indicate that the developable portions of the subject property (North Village and South Village) are designated as Open Space – Parks/Recreation. Adjacent property to the east of the South Village is located within the wash and is considered a "Biological Sensitivity Area" and is designated as Open Space – Water and Ephemeral Sand Fields. This sensitivity area is separated from the developable portion by an existing Flood Control Levee. All other surrounding property is composed of existing residential communities designated as Very Low, Low and Medium Density Residential. The subject property is located on land designated as Urban in the GP EIR.

The project site occurs within the boundaries of a long-abandoned golf course. It is composed of approximately 120 acres and is currently vacant.

The Biological assessment indicates that the site is located on an alluvial plain created from runoff waters emanating from the San Jacinto and San Bernardino mountains to the west. The onsite elevations range from 520 to 484 feet above sea level. The site is best described as flat and gently sloping form the northwest to the southeast.

There are no naturally occurring springs or permanent aquatic habitats on or adjacent to the project site. There is a blue-line stream course, as depicted on U.S. Geological Survey maps, immediately north of the area of disturbance for the project site. However the project does not extend north or east of the Whitewater River Levee that separates the project and the Whitewater Wash. Accordingly, per the Biological Analysis; there are no Waters of the U.S. or streambeds that will be impacted by this project. Jurisdictional permits for either the federal, state or regional agencies should not be required.

A CVWD draft Jurisdictional Determination for channel maintenance indicates that Non-wetland USACE and CDFW jurisdiction is located offsite and directly adjacent to the eastern slope of the flood control levee within this section of the Whitewater River. Non-wetland jurisdictions are based primarily on physical rather than biological characteristics. Additionally Designated Wetland Jurisdiction is located offsite and within the open channel that discharges runoff from the Four Seasons project to the north of Village 2. Jurisdictional permits from federal, state or regional agencies will be required east of the levee based on the determination of necessity of MPD Line 3.

The Biological Study states that the historic use of the property as a golf course impacted nearly the entire project. The course was completely turfed leaving no areas of natural vegetation. Some of the fairway trees remain. When the course was abandoned, the irrigation ceased and the turf expired. The project was stabilized using a soil polymer. A small patch of native vegetation exists at the northeastern boundary of the South Village in an area of approximately 14 acres.

The property is currently fenced however evidence remains of the presence of unleashed dogs, vehicular travel and illegal dumping.

Master Plan of Drainage (MDP) Line 3

The City of Palm Springs Master Plan of Drainage (MDP) Line 3 is indicated on the MPD Map along the northern boundary of Village 2. This line is planned to discharge urban runoff from its projected tributary into the Whitewater River and the CVMSHCP Whitewater Floodplain Conservation Area. The Environmental Assessment Initial Study prepared for the Revised Master Drainage Plan by RCFC indicated that there were no rare or endangered species or plant life or habitat; food source, water source, nesting place or breeding place for rare or endangered wildlife species identified within the Sections (sec 36, T4S, R4E and Sec 1, T3S, R4E) that contain the project.

The Palm Springs Country Club Biological Assessment indicated that there were no riparian habitats found within the project boundary or within the 100 foot buffer outside of the boundary that were surveyed (limited by private property.)

According The ICF International 2012 Jurisdictional Delineation Report, Whitewater River and Coachella Valley Stormwater Channels, Riverside County California, Prepared for Coachella Valley Water District, the property is located adjacent to the southern sub-reach of Reach I. The majority of the wash area adjacent to the levee that separates the property from the Whitewater River includes Non-wetland designated waters for both Federal and State Jurisdictions. Reach I contains 1,108 acres of Non-Wetland Waters and 1 acre of Wetlands. It further states that Reach 1 contains 1,956 acres of CDFW Un-vegetated Streambed.

It can be assumed that physical and hydrological characteristics rather than biological or habitat characteristics are used to define the limits of Jurisdictional areas. Designated Wetland Jurisdiction is located within the open channel that discharges runoff from the Four Seasons project to the north of Village 2 boundary. The Project description includes onsite design features that satisfy its Stormwater requirements. Line 3 will not be utilized by the project for Stormwater discharge. However, a proposed easement is included on the project site plan to the City of Palm Springs to accommodate the possibility of future construction of this line based on determination of necessity. Additionally any regulatory requirements associated with the proposed easement shall be satisfied by the applicant. No flows from the project will discharge into the Whitewater River. See section 4.8 Hydrology and Water Quality for further discussion of the MPD and its proposed implementation.

If Line 3 is constructed at some time in the future the final outlet design and location will be determined. Consultation with the U.S. Army Corps of Engineers, Colorado River Regional Water Quality Control Board and the California Department of Fish and Game will be required to determine if the construction of an outlet in the existing concrete levee will impact jurisdictional waters. Impacts can be defined as temporary or permanent. Construction measures such as conducting work so that heavy equipment remains outside of the river bed will help to limit both temporary and permanent impacts.

C. Biological Impacts

Threshold Criteria

Thresholds of significance were derived from criteria in the CEQA Guidelines and the standard CEQA Environmental Assessment Form. The following questions are relevant to determining whether a project could have a significant impact on the environment from a biological resources perspective. Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

According to the Biological Assessment prepared for the project (Cornett, 2013), field surveys were initiated on April 26, 2013. Dates of biological surveys were April 26, 27, and 28, and May 1, 2 and 3. Night surveys were conducted on the evenings of 26 and 27. Survey dates coincided with the most favorable times of year to find plants in bloom (or in fruit) and animals during their active seasons.

Surveys were conducted by walking parallel transects at 10-yard intervals throughout the project site and extending to a buffer area of 100 yards beyond project boundaries unless impeded by private residences or posted private property. The intensity of the surveys followed the state and federal guidelines for desert tortoise and burrowing owl surveys, two special-status species known to occur in Palm Springs and the Coachella Valley and possibly within the project site boundaries.

Plant surveys were conducted simultaneously with animal surveys. Night surveys included black light trap surveys for insects and other arthropods. In addition, 25 live-animal traps (which capture animals unharmed) for large and small mammals were set within the project boundary for twenty-four hour periods.

Plant Survey Results

A single native plant association was found within the project boundaries: the Sonoran Creosote Bush Scrub community. This community, as mentioned previously, occupies approximately 14 acres of the project disturbance area in the northeast section of the South Village of the project. It is represented onsite by the burrobush *(Ambrosia dumosa),* encelia *(Enceliafarinosa),* wingscale *(Atriplex canescens)* and creosote bush *(Larrea tridentata).* This is also the pervasive plant community throughout the Colorado Desert of southeastern California.

Approximately 106 acres of the site is found in the abandoned golf course. This portion of the property is stabilized by a soil polymer and mulch. Vegetation is characterized by scattered native and exotic weed species including Sahara mustard *(Brassica tournefortii),* Russian thistle *(Sasola kali)* and Schismus grass *(Schismus barbatus).* Some of the originally planted

tree species have survived including tamarisk *(Tamarix aphylla),* Mexican fan palm *(Washingtonia* robusta*)* and olive tree *(Olea europaea).*

The *Inventory of Rare and Endangered Plants of California*, published by the California Native Plant Society (2001) lists six sensitive plant species that have been found in the region and are known to occur in habitats similar to those found on the project site. Their common names are the Coachella Valley milk vetch, flat-seeded spurge, ribbed cryptantha, glandular ditaxis, California ditaxis and Thurber's pilostyles.

No individuals of special-status plant species were found within or immediately adjacent to the project site and none are expected. The following discussion is a summary of the Biological Analysis of special-status plant surveys.

1. The Coachella Valley milk vetch (*Astragalus lentiginosus coachellae)* has been listed as an endangered species by the federal government. This subspecies is confined to the Coachella Valley in areas of loose, windblown sand. No evidence of this species was found on site and the stabilized sands of the project site are considered unsuitable habitat for this subspecies of milk vetch. It was concluded that the Coachella Valley milk vetch did not occur on the project site.

2. The flat-seeded spurge (Chamaeyce platysperma) is an annual herb belonging to the Spurge family. It is confined to areas of loose, windblown sand in the Sonoran Desert. No evidence of this species was found and the stabilized sands that characterize the project site are considered unsuitable habitat for this species. It was concluded that the flat-seed spurge did not occur on the project site. The flat-seeded spurge is not given special status by the federal government. The California Native Plant Society considers it a rare species.

3. The ribbed cryptantha, (*Cryptantha costata),* is an annual herb belonging to the Borage Family. It is generally associated with areas of loose, fine sand within the eastern Mojave Desert and Sonoran Desert. No evidence of this species was found on site and the stabilized sands of the project site are considered unsuitable habitat for this species. It was concluded that it did not occur within the project boundaries. The ribbed cryptantha is not given special status by the federal government but is considered rare by the California Native Plant Society.

4. The glandular ditaxis, (*Ditaxis clariana),* is a perennial herb belonging to the Spurge Family. It is generally found below 500 feet on sandy flats within the Coachella Valley. No evidence of this species was found. It was concluded that it did not occur on site. The glandular ditaxis is not given special status by the federal government but is considered rare by the California Native Plant Society.

5. The California ditaxis *(Ditaxis californica)* is a perennial herb belonging to the Spurge Family. It is believed to occur between elevations of 400 to 3,000 feet on coarse soils within the Creosote Scrub Community of the Colorado Desert. It could thus occur within the project area though no individuals were found. It is not given special status by the federal government but the California Native Plant Society considers it a rare species.

6. Thurber's pilostyles, (*Pilostyles thurberi),* is a parasitic perennial herb belonging to the Rafflesia Family. It is generally found parasitizing members of the genus *Psorothamnus* at elevations below 1,000 feet. It could thus occur in the project area though no evidence of it was found. Thurber's pilostyles is not given special status by the federal government though the California Native Plant Society considers it a rare species.

A complete list of vascular plant species found within the project boundaries can be found in Table 1 of the Biological Assessment (Appendix D). Species utilized for ornamental landscaping are not included in this list.

Animal Survey Results

The project site is composed of species typical of the impacted and disturbed land in the Colorado Desert subdivision of the Sonoran Desert.

Invertebrates

Encountered invertebrates included the giant hairy scorpion *(Hadrurus arizonensis),* eleodes beetle *(Eleodes armata),* harvester ant *(Pogonomyrmex californicus)* and walking stick *(Parabacillus hesperus).*

Two insect species known to occur within the Coachella Valley have been placed on the California Department of Fish and Game's *Special Animals* list. They are the Coachella giant sand treader cricket (*Macrobaenetes valgum*) and Coachella Valley Jerusalem cricket (*Stenopelmatus cahuilaensis*).

1. The Coachella giant sand treader cricket was not found on the property and is not expected to occur onsite due to compacted site conditions.

2. The Coachella Valley Jerusalem cricket was also not found on the subject property. The Biological Analysis states that inability to locate these species almost certainly reflects the lack of suitable habitat, commonly characterized by windblown sand deposits rather than the compacted sand and disturbed environment of the project site.

3. Casey's June Beetle, (Dinacoma caseyi), is designated endangered by the United States Fish and Wildlife Service. This invertebrate is not covered under the CVMSHCP. Night surveys utilizing black light trapping did not yield any individuals of the species within the project boundaries.

Reptiles

Reptiles that were encountered or detected included the side-blotched lizard (*Uta stansburiana*), western whiptail (*Cnemidophorus tigris*), desert iguana (*Dipsosaurus dorsalis*) and sidewinder rattle snake *(Crotalus cerastes).*

Many reptile and amphibian species are particularly susceptible to impacts resulting from development because they are dependent on blowsand and other sensitive habitat that is limited in distribution.

Two lizard species of special concern to state and federal government agencies are known to occur within the Coachella Valley.

1. The Coachella Valley fringe-toed lizard, (*Uma inornata),* was not detected onsite and is not expected to occur. Site conditions are not ideal for this species.

2. The flat-tailed horned lizard *(Phrynosoma mcalli),* was also not detected. This likely reflects the fact, mentioned previously, that the soils of the project site are too compacted. Both species prefer areas of very loose windblown sand.

3. A concerted effort was made to locate sign of the officially listed desert tortoise (*Goperhus agassizi*) following official protocol established by the U.S Fish and Wildlife Service. However, no evidence of the desert tortoise was found within the zone of disturbance and the "buffer area".

   The desert tortoise is known to occur on the alluvial fan and bajada associated with Chino Canyon which is located approximately three miles west of the project site. As discussed, the site is highly impacted by historic uses. This is likely the reason for the absence of the tortoise species on or near the project.

   The desert tortoise is a covered species under the CVMSHCP, however clearance surveys for this species are required prior to the disturbance of a project site. The lack of any evidence of tortoise presence on this site negates the need for a clearance survey in this instance.

The Coachella Valley fringe-toed lizard, flat-tailed horned lizard, and occasionally the desert tortoise, may inhabit sand dunes and fields such as those found in CVMSHCP Whitewater River Conservation Area. As discussed, the developable portion of the subject property is not located within a Conservation Area as defined by the HCP.

As expected, no amphibians were found during the surveys.

Birds

Observed birds within the project area included the mourning dove (*Zenaida macroura,*) house finch (*Carpodacus mexicanus,*) common raven (*Corvus corax,*) black -throated sparrow *(Amphispizabilineata) and* Say's phoebe *(Sayornis* saya).

Three special-status avian species are considered to be possible residents on or near the project site. They are the burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), and LeConte's thrasher (*Toxostoma lecontei*).

None of these species were observed or detected on or immediately adjacent to the project site.

1. The burrowing owl was not found onsite. The absence of this species is unexplained as it is often found in highly disturbed areas where native vegetation has been removed. Burrowing owls are known to be resident species within the city limits of Palm Springs, meaning that they could arrive and inhabit the abandoned golf course at any time. Although the CVMSHCP appears to treat the burrowing owl as a covered species, technically and functionally it is not covered because the Plan permit from the U.S. Fish and Wildlife does not authorize take of a non-listed migratory species (such as the burrowing owl.) The permit portion of the plan states :

   "For other birds protected by the Migratory Bird Treaty Act (MBTA) and not listed under the Act, no take is authorized under MBTA (including killing and wounding of such any birds, or take of eggs and active nests.) Prior to authorized ground disturbing activities, Permittees shall provide information to affect landowners regarding their responsibilities under the Migratory Bird Treat Act.

   The burrowing owl is considered a sensitive species by the California Department of Fish and Wildlife. It is protected from any kind of harm or harassment by the Migratory Bird Treaty Act of 1918 in the United States. The subject property is considered potential habitat for this species.

2. The loggerhead shrike is also not covered under the CVMSHCP. As mentioned, this species was not observed within the property boundaries. This species is not officially listed as threatened or endangered however it a Species of Special Concern in the State of California.

3. LeConte's thrasher is a special-status species that is covered under the CVMSHCP. This species was also not identified onsite.

Mammals

Mammals recorded onsite included the black-tailed jackrabbit (*Lepus californicus,)* Beechey ground squirrel (*Spermophilus beecheyi,)* deer mouse (*Peromyscus maniculatus)* and coyote (*Canis latrans*).

The City of Palm Springs General Plan and the site specific Biological Analysis identify two mammals of special concern that may occur on the subject property and within the City limits. The two species are the Palm Springs pocket mouse, (*Perognathus longimembris bangsi)* and Coachella Valley ground squirrel *(Spermophilus tereticaudus chlorus).* Both are covered under the CVMSHCP.

1. No individuals of the Palm Springs pocket mouse were live-trapped. The California Department of Fish & Wildlife considered this subspecies of the little pocket mouse a species of special concern.

2. Four observations of the Coachella Valley ground squirrel were recorded. It is considered a Species of Special Concern by the California Department of Fish and Wildlife. In the past this subspecies of the round-tailed ground squirrel has been considered as a candidate species for federal listing by the U.S Fish and Wildlife.

As mentioned, Coachella Valley ground squirrel is a covered species under the CVMSHCP. As a covered species, no additional mitigation is required or recommended for this subspecies.

As noted throughout this discussion, four sensitive species are known to occur in the Palm Springs area that are not fully covered or not covered at all under the CVMSHP. The species that are not fully covered are Burrowing Owl, the desert tortoise. Pre-construction surveys are required for both. The species that are not covered are the loggerhead shrike and Casey's June beetle.

In accordance with CEQA, these species have been included in the analysis.

- **Based on the results of the biological investigation and survey, no plants, reptiles, birds, or mammals that are identified as a candidate or sensitive by any local, state, or government agency, were encountered or showed substantial evidence of occupied habitat on the proposed project site. Less than significant impacts are anticipated related to this issue.**

The proposed project can be expected to result in the elimination of approximately 14 acres of creosote scrub habitat including any native plant and animal species that may currently live on the project site. Creosote scrub habitat is widespread in the desert regions of California.

Therefore, the loss of this habitat on the project site cannot be said to constitute a significant adverse impact to the continued existence of the plant community.

- **Less than significant impacts are anticipated**

There are no federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) on the developable portions (North or South Village) of the proposed site, as well as no riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.

As mentioned previously a CVWD draft Jurisdictional Determination for channel maintenance indicates Designated Wetland Jurisdiction is located offsite and within the open channel that discharges runoff from the Four Seasons project to the north of Village 2. The proposed project will not impact this offsite area.

- **Less than significant impacts are anticipated**

The project specific Hydrology Analysis illustrates that onsite storm flows across the developable plan area sheet flow and infiltrate over a wide spread area and are not concentrated in a defined channel or wash.

- **Less than significant impacts are anticipated**

There are no blue-line stream courses, as depicted on the United States Geological Survey map on either the North or South Village.

- **No impacts are anticipated related to blueline streams.**

D. Potentially Significant Impacts

Mitigation for impacts to species covered under the CVMSHCP is carried out through the payment of a fee at the time designated by the lead planning agency. Fees vary depending upon the use to which the land is put, acreage and density. The Coachella Valley Association of Governments is responsible for the determination of current basic fee amounts.

The project will not conflict with any local policies or ordinances protecting biological resources. The project will not result in a conflict with any tree preservation ordinance, Natural Community Conservation Plan or with the CVMSHCP. It will be required to pay mitigation fees as determined by the CVMSHCP, therefore less than significant impacts are expected relative to this resource.

The project site abuts the Whitewater Floodplain Conservation Area of the CVMSHCP. Therefore, the project is subject to Plan requirements and restrictions regarding projects that lie adjacent to Conservation Areas. These requirements are located in the Appendix at the end of the Biological report and have been taken directly from the Plan. It is the responsibility of the City of Palm Springs to implement the relevant Plan requirements. The Coachella Valley Association of Governments (CVAG) may be contacted should questions arise as the interpretation and applications of the Guidelines.

This study has been unable to document any significant indirect impacts to sensitive species or unique habitats beyond the boundaries of the project site.

The remaining species are those partially covered under the CVMSHCP (Burrowing Owl and the Desert Tortoise.)

The Desert Tortoise is a partially covered species under the CVMSHCP and take is authorized. Additionally, however, the USFWS has reserved the right to require a clearance survey leading to the removal of any tortoises on or immediate adjacent to a project site within the Plan area.

Desert Tortoise

The desert tortoise was not detected on the subject property. The tortoise is known to occur in the Coachella Valley but it is not known to be present on the valley floor. The species has primarily been observed on upper bajadas surrounding the valley floor. The U.S. Fish and Wildlife Service have the right to conduct or require tortoise clearance surveys prior to site development.

These clearance surveys are intended to protect the species based on the possibility that a desert tortoise may wander onto the site and be injured or killed during construction activities. No further recommendations are provided due to the minimal probability that the desert tortoise resides in the project area. Considering the findings of the Biological Study, less than significant impacts are expected relative to the desert tortoise.

Burrowing Owl

The burrowing owl was not identified within the developable project area. The habitat is considered suitable. The species commonly enlarges rodent burrows and utilizes them for nesting. The federal Migratory Bird Act prohibits harming the owl. At present time the Service approves of the mitigation provided in the "Staff Report on Burrowing Owl Mitigation" prepared by the California Department of Fish and Game on March 7, 2012.

Mitigation approved by the U.S. Fish and Wildlife Service is required to reduce potential impacts to less than significant levels. These Mitigation Measures are provided in the following section.

E. Standard Conditions (SC) and Mitigation Measures (MM)

SC 4.3-1: The project proponent shall pay the associated CVMSHCP for each phase of development prior to issuance of Building Permits. The fee amount will be based on the density or disturbed surface area per the City's authorization and aligned with the fees that are enforced at the time in which development occurs.

MM 4.3-1: The project proponent shall ensure that a burrowing owl preconstruction survey takes place at least 30 days prior to site disturbance. If an active burrow is found during the clearance survey, a biological monitor should be placed onsite during ground disturbance.

MM 4.3-2: The project proponent shall incorporate all relevant adjacency guidelines found in the CVMSHCP Section 4.5 during design and construction activities for the South Village.

F. Level of Significance after Mitigation

Upon the execution of these recommended mitigation measures, it is not anticipated that the project will have a significant adverse impact upon Biological Resources.

G. Resources

Biological Assessment and Impact Analysis of the Palm Springs Country Club Residential Development, James W. Cornett, Ecological Consultants, May 2013.

Biological Element of the Palm Springs General Plan Draft Environmental Impact Report, The Planning Center, October 2007.

Tribal Habitat Conservation Plan for the Agua Caliente Indian Reservation, Helix Environmental Planning Inc., August 2010.

Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan, Coachella Valley Mountains Conservancy, October 2008.

Riverside County Integrated Project (RCIP) General Plan Final Program Environmental Impact Report Volume 1, County of Riverside Transportation and Land Management Agency (October 2003).

Coachella Valley Multiple Species Habitat Conservation Plan: Local Development Mitigation Fee Schedule, http://www.cvmshcp.org/Fees/LDMF%20Fee%20Schedule%20FY%202011-12.pdf

Section 4.8 – Hydrology & Water Quality

This Section is included in its entirety for context. However, new language has only been added to pages 4.8-6 & 7, 4.8-18, 4.8-20 & 21, 4.8-24 & 25; 4.8-35 & 36. This section also includes new exhibits, identified as Exhibit 4.8-2, Exhibit 4.8-4, Exhibit 4.8-5, Exhibit 4.8-6, Exhibit 4.8-8, and Exhibit 4.8-9.

4.8 HYDROLOGY AND WATER QUALITY

The discussion within this section is based on a variety of information sources. These include the Coachella Valley Water District 2010 Urban Water Management Plan Final Report (July 2011), the City of Palm Springs General Plan Update (March 2007) and its corresponding Environmental Impact Report (EIR) (March 2007), the current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), effective on August 28, 2008 for the project area, and the Riverside County Integrated Project General Plan Final Program Environmental Impact Report Volume 1 (October 2003). Also referenced were the Whitewater River Watershed Municipal Separate Storm Sewer System (MS4) (Order No. R7-2013-0011, NPDES No. CAS617002) and the Whitewater River Region Water Quality Management Plan (WQMP) for Urban Runoff (January 2011). Studies and reports prepared for this project include include a Preliminary and Final Water Quality Management Plan (WQMP) and Preliminary and Final Hydrology Report, prepared by MSA Consulting, Inc. (January 2014).

A. Regional Setting

The high mountains flanking the Coachella Valley, particularly the San Jacinto range, have a powerful effect on the climatic and hydrologic conditions in the region. Capturing precipitation from strong Pacific storms that pass through, the mountains separate the semi-arid environment to the west from the dry, desert regions to the east. Most of the precipitation occurs during the winter months, primarily between November and March. However, high intensity, short duration tropical storms emanating from the south can occur during the summer months of July through September.

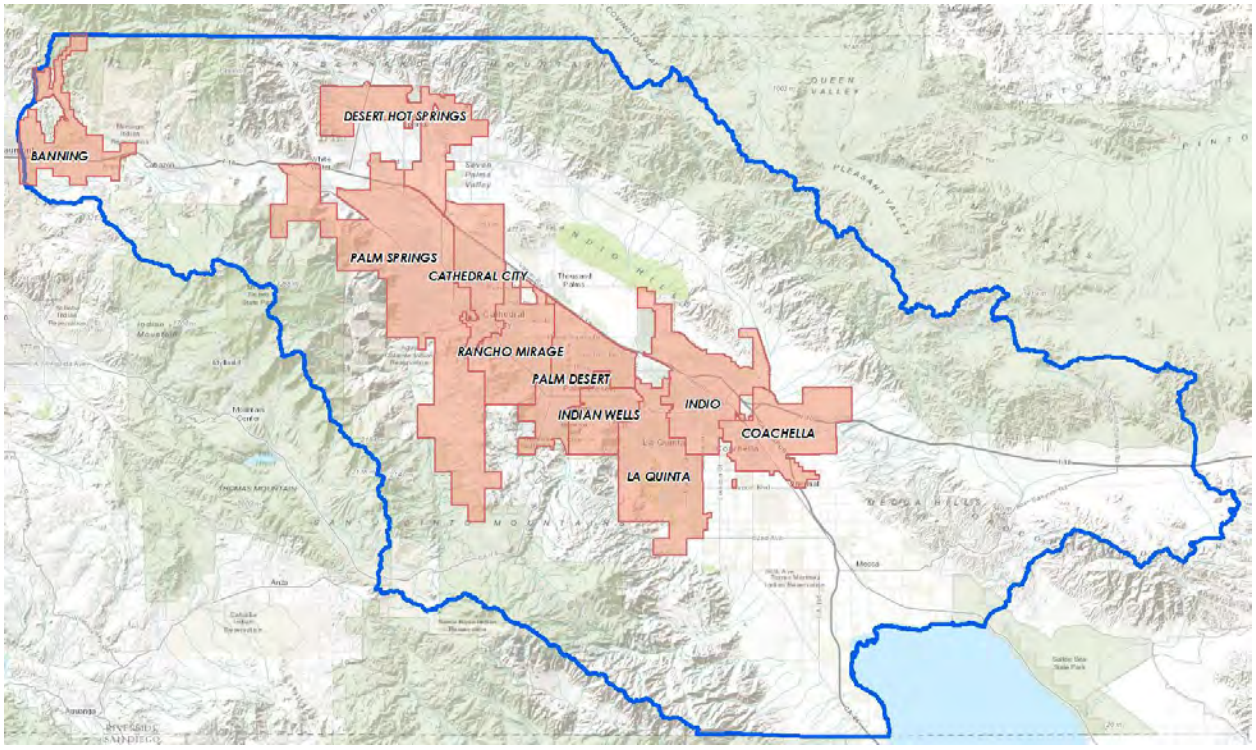
The physical geography of the Coachella Valley has resulted in various drainage modes from the higher elevations around the Valley that co-exist with urban development in the Desert Cities region. As a result, most of the washes, drainage courses, and some of their surrounding floodplains are still undeveloped and can be considered as existing open space, and are utilized as water collection channels in a serious storm event. The general course of drainage within the Valley runs from the northwest to southeast, ultimately leading to the Salton Sea.

Stormwater

This geographic area, within which the City of Palm Springs and project are located, is recognized as the Whitewater River Watershed, which is under the jurisdiction of the California Regional Water Quality Control Board (RWQCB,) Colorado River Basin Region (Region 7) of the State Water Resources Control Board (SWRCB). A watershed is a geographic area that drains into a specified point on a watercourse, usually a confluence of streams or rivers. Watersheds are also referred to as drainage areas, catchments or river basins.

Watersheds are usually bordered and separated from other watersheds by mountain ridges or other natural elevated areas. The Whitewater River watershed boundaries to the north and northwest are the rugged mountain ranges of the Colorado Desert, the San Bernardino Mountains, Little San Bernardino Mountains, and Indio Hills. The watershed boundaries to the east and south are the Mecca Hills, the Orocopia Mountains, the Salton Sea, and Santa Rosa Mountains. The western boundary is generally defined by the San Jacinto Mountains. This boundary encompasses the watershed that encloses all surface drainage emptying into the north end of the Salton Sea.

Exhibit 4.8-1
Whitewater River Watershed Overview



Groundwater

According to the Coachella Valley Water Management Plan (CVWMP) 2010 Update, groundwater is the principal source of municipal water supply in the Coachella Valley. The Coachella Valley's primary groundwater basin, the Whitewater River Subbasin of the Coachella Valley groundwater basin, extends from Whitewater in the northwest to the Salton Sea in southeast.

The Coachella Valley is geographically separated into a western and eastern portion. This separation is delineated roughly by Washington Street extended south of Highway 111 and Jefferson Street extended north of Highway 111. A portion of the east/west connection between these two streets is approximately located at Whitewater River. Palm Springs, Cathedral City, Rancho Mirage, Indian Wells and Palm Desert are located in the West Valley. Water placed on the ground surface in the West Valley percolates through the sands and gravels directly into the groundwater aquifer. In the East Valley, however, several impervious clay layers lie between the ground surface and the main groundwater aquifer. Water applied to the surface in the East Valley does not readily reach the lower groundwater aquifers due to these impervious clay layers. The only outlets for groundwater in the Coachella Valley are through subsurface outflow under the Salton Sea or through collection in drains and transport to the Salton Sea via the Coachella Valley Storm Channel (CVSC).

The following is a list of the subbasins and associated subareas for the Coachella Valley groundwater basin, based on the California Department of Water Resources (DWR) and United States Geological Survey (USGS) designations. The proposed project is found within the Palm Springs subarea of the Whitewater River Subbasin.

- Mission Creek subbasin
- Desert Hot Springs subbasin
- Garnet Hill subbasin
- Whitewater River subbasin (also known as the Indio subbasin)
    - Palm Springs subarea
    - Thousand Palms subarea
    - Oasis subarea
    - Thermal subarea

The Coachella Valley Water District (CVWD) obtains groundwater from both Whitewater River and the Mission Creek subbasins of the Whitewater River Basin. This basin is a common groundwater source, which is shared by CVWD, Desert Water Agency (DWA), Myoma Dunes Mutual Water Company, the cities of Indio and Coachella, and numerous private groundwater producers. CVWD divides the Whitewater River subbasin into the Upper and Lower Whitewater River Areas of Benefit. Myoma Dunes and the cities of Indio and Coachella obtain water from the Lower Whitewater River Area of Benefit.

Both CVWD and DWA have legal authority (under the 1992 CVWD-DWA Water Management Agreement) to manage the groundwater basins within their respective service areas. Each agency may levy an assessment on groundwater pumping to finance the acquisition of imported and recycled water supplies and to recharge the groundwater basins, in accordance with legal requirements.

Groundwater Management

Domestic water services to the City of Palm Springs are provided by the Coachella Valley Water District (CVWD), Desert Water Agency (DWA) and Mission Springs Water District (MSWD). Local groundwater basins are the primary source of water for the said agencies. The Palm Springs area is generally served by the Whitewater River

The Palm Springs area is generally served by the following groundwater subbasins: Whitewater River, Mission Creek, and Indio. Other sources of domestic water supply include the surface run-off from the local mountains, and imported water from the Colorado River aqueduct and the State Water Project (SWP). The SWP water supply is limited to groundwater replenishment purposes only.

The Coachella Valley Stormwater District was formed in 1915 followed by formation of CVWD in January 1918. CVWD's first directors subsequently filed paperwork to secure rights to all unclaimed Whitewater River Water, an important source for aquifer recharge. In 1918, contracts were awarded for construction of water spreading and recharge facilities in the Whitewater River northwest of Palm Springs.

In 1934, negotiations with the federal government were completed, and plans were in place for the construction of the Coachella Branch of the All American Canal to obtain Colorado River water. Imported Colorado River water was provided to East Valley growers in 1949. The impact of imported water on the Valley was almost immediate. By the early 1960s, water levels in the East Valley had returned to their historical high levels.

Water levels in the West Valley continued to decline as growth occurred. DWA was formed in 1961 to import State Water Project (SWP) water into the Palm Springs and Desert Hot Springs areas. In 1962 and 1963 respectively, DWA and CVWD entered into contracts with the State of California for 61,200 Acre Feet per Year (AFY) of SWP water. To avoid the then estimated $150 million cost of constructing an aqueduct to bring SWP water directly to the Valley, CVWD and DWA entered into an agreement with the Metropolitan Water District of Southern California (Metropolitan) to exchange SWP water for Colorado River water.

Starting in 1973, the CVWD and DWA began exchanging their annual SWP allocation with Metropolitan for Colorado River water to recharge West Valley groundwater at the Whitewater River Recharge Facility. CVWD, DWA and Metropolitan also signed an

advance delivery agreement in 1984 that allows Metropolitan to store additional water in the Valley. Since 1973, the spreading facility had percolated in excess of 2.2 million acre-feet (AF) of Colorado River water exchanged for SWP water.

By the 1980s, groundwater demand in the East Valley had again exceeded supplies, resulting in significant groundwater level decreases in some parts of the East Valley. In October 2009, the Thomas E. Levy Groundwater Replenishment Facility (Levy Facility, formerly Dike 4) was dedicated. It has a current recharge capacity of 32,000 AFY, upgradeable to 40,000 AFY.

The 2002 CVWMP identified the need for CVWD and DWA to acquire additional water supplies to manage current and future groundwater overdraft. Supplies identified included the Colorado River, State Water Project, other transfers, recycled water and desalinated drain water.

In 2003, CVWD, the Imperial Irrigation District (IID) and metropolitan, along with the State of California and Bureau of Reclamation (Reclamation), successfully completed negotiation of the Quantification Settlement Agreement (QSA). The QSA quantified the Colorado River water allocations of California's agricultural water contractors for 75 years provided for the transfer of water between agencies. Under the QSA, CVWD has a base allocation of 330,000 AFY. In accordance with the QSA, CVWD has entered into water transfer agreements with Metropolitan and IID that increase CVWD supplies by an additional 159,000 AFY.

As of 2010, CVWD can receive 368,000 AFY of Colorado River water deliveries under the QSA. This includes the base allocation of 330,000 AFY, the Metropolitan /IID transfer of 20,000 AFY, 12,000 AFY of the IID/CVWD first transfer, and 35,000 AFY of Metropolitan /SWP transfer. CVWD's allocation will increase to 459,000 AFY of Colorado River water by 2026.

Majority of the Palm Springs area, including the Serena Park project site, are within the service boundary of the Desert Water Agency (DWA). DWA extracts groundwater from the Whitewater River subbasin which has been in a state of overdraft. A groundwater basin is considered in overdraft condition when the amount of water extracted exceeds the amount of water replenishing the basin over a period of time. (CVWD Urban Water Management Plan, 2005). In general, increased urbanization and groundwater pumping in the Coachella Valley have largely contributed to the decline of water levels in the Whitewater subbasin. The Department of Water Resources (DWR) indicates that the Whitewater subbasin has a total groundwater capacity of 29,800,000 acre-feet, based on 1935-1936 groundwater levels and utilizing a maximum depth below surface of 1,000 feet.

DWR also indicates that according to Tyley (1974), groundwater in storage in the Whitewater subbasin is approximately 10,200,000 acre feet in the first 700 ft of saturated deposits. (Value excludes 1,520,000 acre feet of groundwater in storage for the Garnet Hill area) Tyley (1974) estimates that based on water level changes, groundwater stored in the Whitewater

subbasin is being depleted at the average rate of 33,000 acre feet annually from 1953 to 1967. Current annual average decrease of groundwater storage is suspected to be higher, given the increased population and development in the Coachella Valley. DWA and CVWD continue to actively participate in the implementation of management actions that reduces groundwater basin overdraft and restoring the Coachella Valley groundwater basins to a long-term balance state. According to the 2005 CVWD Urban Water Management Plan, with the recent acquisition of additional SWP water, overdraft in the upper Whitewater River subbasin is expected to be eliminated by 2015.

The project site is not currently receiving domestic water services. Two existing private wells on the site were historically used to irrigate the golf course facilities. These wells are capped and inactive and will not be utilized as part of the project. Consequently, there are no existing water lines on the project site. Existing 8-inch, 12-inch, 18-inch, and 30-inch water mains with related water accessories currently serve the residences north, south, west, and surrounded by the project site. The project proposes to connect to existing lines at Verona Road and East View Road, Whitewater Club Drive, and San Rafael Drive. Project implementation will require the installation of water lines throughout the project to serve the individual dwelling units.

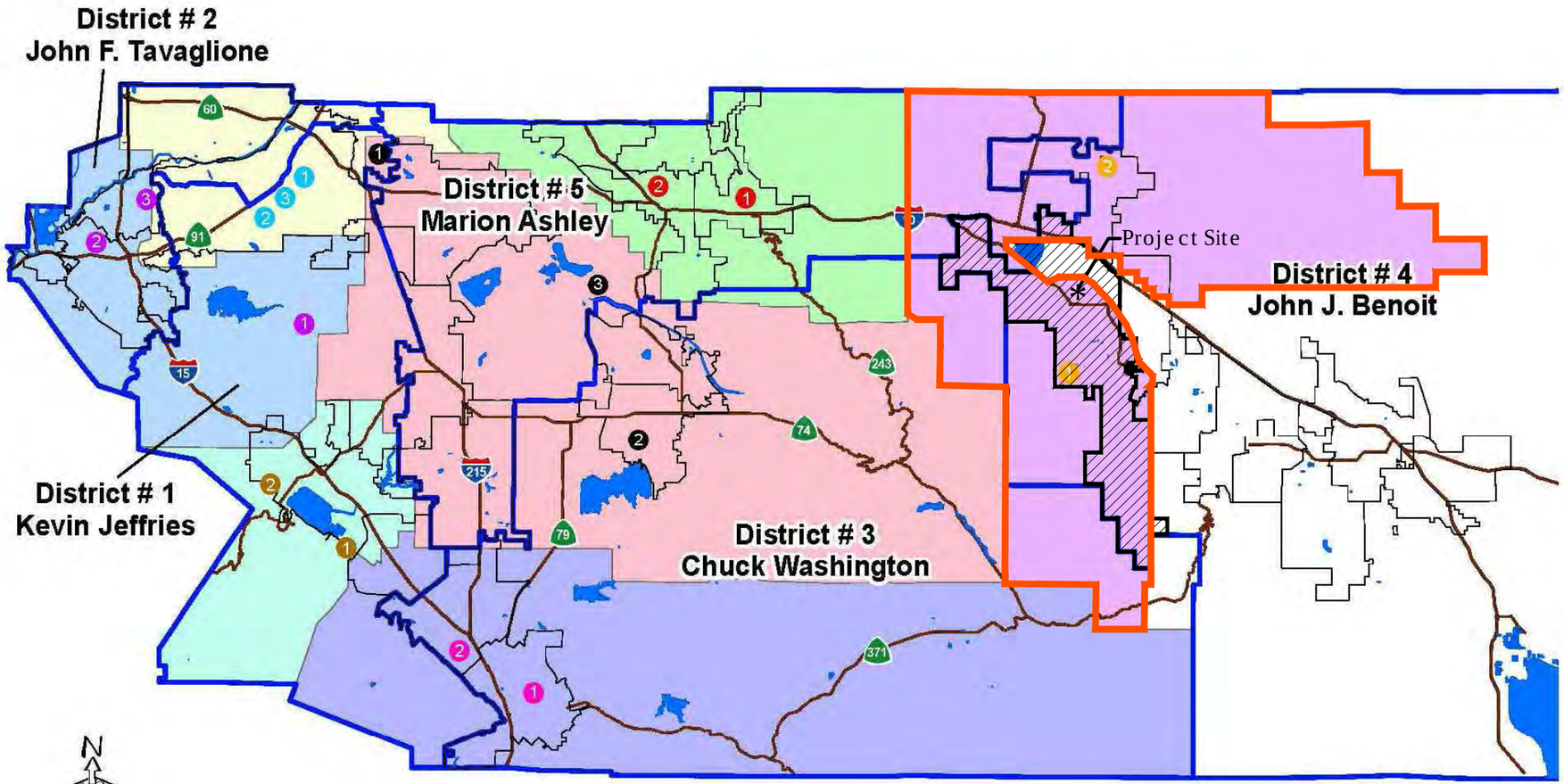
City of Palm Springs Master Drainage Plan

The City of Palm Springs is located in Zone 6 of the Riverside County Flood Control Jurisdiction. Zone 6 covers the western portion of the Coachella Valley and the eastern portion of the pass area; including Banning, Palm Springs, Desert Hot Springs and portions of Cathedral City and the unincorporated County. The Master Plan of Drainage for the Palm Springs Area was originally proposed by the Riverside County Flood Control and Water Conservation District (RCFC) in October of 1966. The RCFC Zone structure is shown in Exhibit 4.8-2. There was no formal action on the part of the City to approve or begin implementing the plan until 1979 when the City asked the District to reevaluate and update the original plan. The impetus of the City's action at that time was to allow continued growth while dealing with the effects of increased storm water run-off from new development.

The District responded by updating the overall Master Plan of Drainage and also assisted the City with calculation of appropriate acreage drainage fees to fund the construction of the various facilities proposed in the plan. Palm Springs was broken down into several fee areas (see Exhibit 4.8-3) with Acreage Drainage Fees based on the proposed improvements in each fee area. The Plan was adopted in 1982 along with expanded acreage drainage fees imposed on new development to fund improvements (see Appendix O for RCFC Design and Construction Projects for 2014). In addition, the City and the District formulated a ballot measure that was passed by the voters in Zone 6 (Palm Springs portion only) which imposed surtax on developed and undeveloped properties within Palm Springs to further assist in funding the implementation of the plan.

The Flood Tax was imposed for a 15 year period and then sunsetted. The City and the District initially focused on the older, developed areas where storm related flooding was well documented. In the North Drainage Area the only facility constructed thus far is Line 6 in Vista Chino Road from approximately Via Miraleste to the outlet into the Whitewater Channel easterly of Gene Autry Trail. Exhibits 4.8-4 and 4.8-5 depict the North Drainage Area. Exhibit 4.8-4 also shows the plan with the background aerial photo from 1979, which was the general timeframe for the updating of the plan. Exhibit 4.8-5 shows the Drainage Plan against a current aerial background.

Riverside County Flood Control and Water Conservation District



Riverside County Supervisors
RCFC Cities
Major Hydrology
Freeways

Zone 1
Zone 2
Zone 3
Zone 4
Zone 5
Zone 6
Zone 7

Zone Commissioners

1 Don Harriger
2 Jeremy Goldman
3 Charles Krieger

1 Serena Burnett, CHR.
2 Baxter Miller
3 Richard MacGregor

1 Richard Heil, CHR.
2 Chris Hyland

1 Roy Bleckert, CHR.
2 Bobby Hicks
3 Brad Scott

1 Tom Linton, CHR.
2 Paul St. Martin

1 Bill Byrne
2 John Furbee

1 Steven Beswick
2 Vincent Michael Scarpino

The graphical and tabular information shown on this document may be derived from a variety of public agency and/or private commercial sources such as Riverside County Transportation and Land Management Agency, Thomas Brothers Mapping, the Stephen P. Teale Data Center, GIS Technology Center, State of California, the United States Geologic Survey and the United States National Atlas. These sources may possess varying levels of accuracy and precision and this product is meant only as a guide to the relative position and scale of the depicted features. This GIS document is in no case to be interpreted as fundamental or decisive for purposes of land surveying, field engineering, plan drafting, code enforcement, land boundary determination and/or land acquisition.

NORTH
N.T.S.

(Revised January 2015) Alma Hidalgo, GIS Supervisor Analyst
Z:/Alma/Maps/ArcMap/ZoneCommissioner_March2015.mxd

Exhibit Date: August 17, 2015

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RCFC & Water Conservation Map

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City of Palm Springs Tributary Areas

Environmental Impact Report for Tentative Tract Map No. 36691

Exhibit 4.8-3

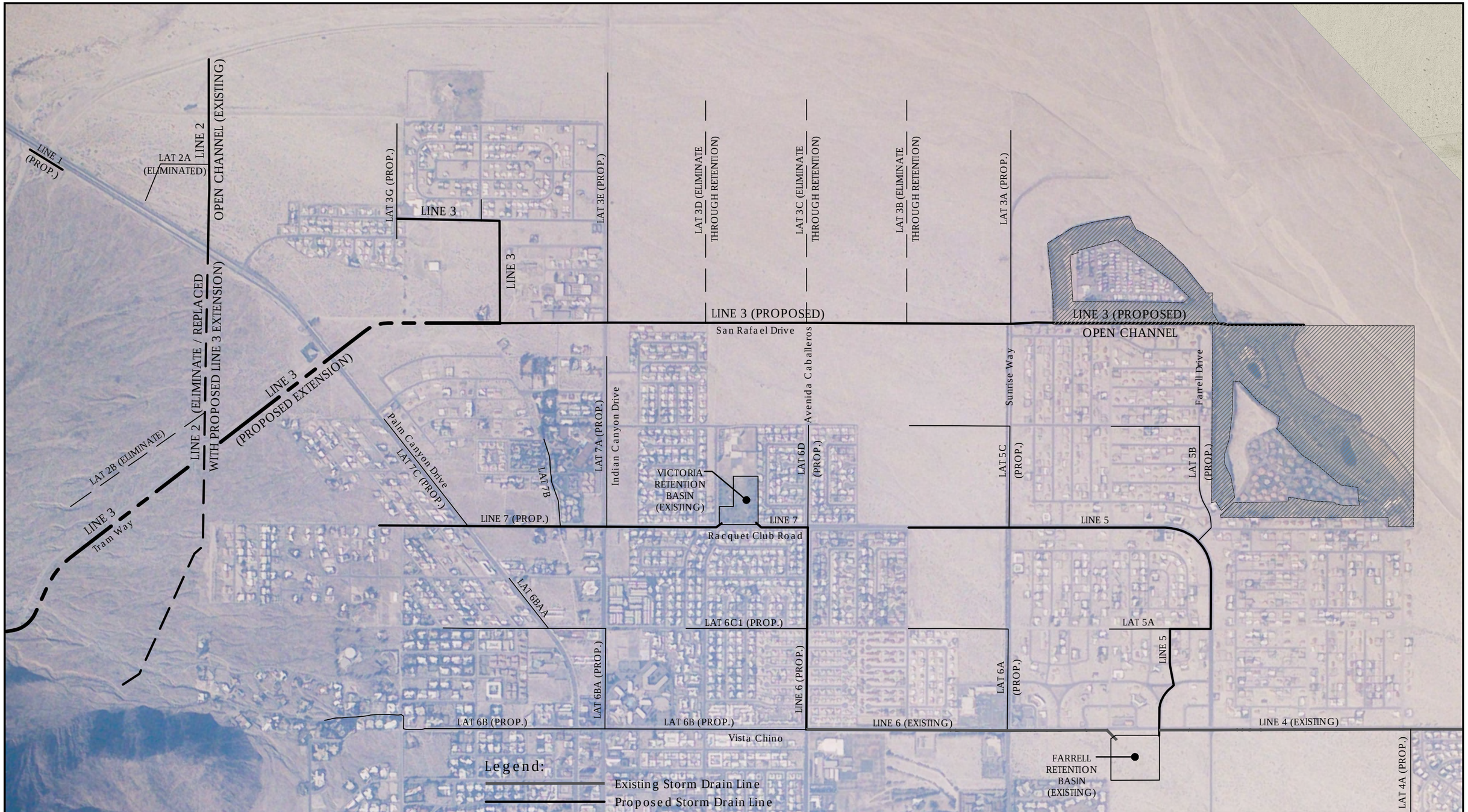

Exhibit Date: August 17, 2015

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Storm Drain Master Plan (North Area) with 1979 U.S.G.S Aerial Photograph

Environmental Impact Report for Tentative Tract Map No. 36691

Exhibit 4.8-4

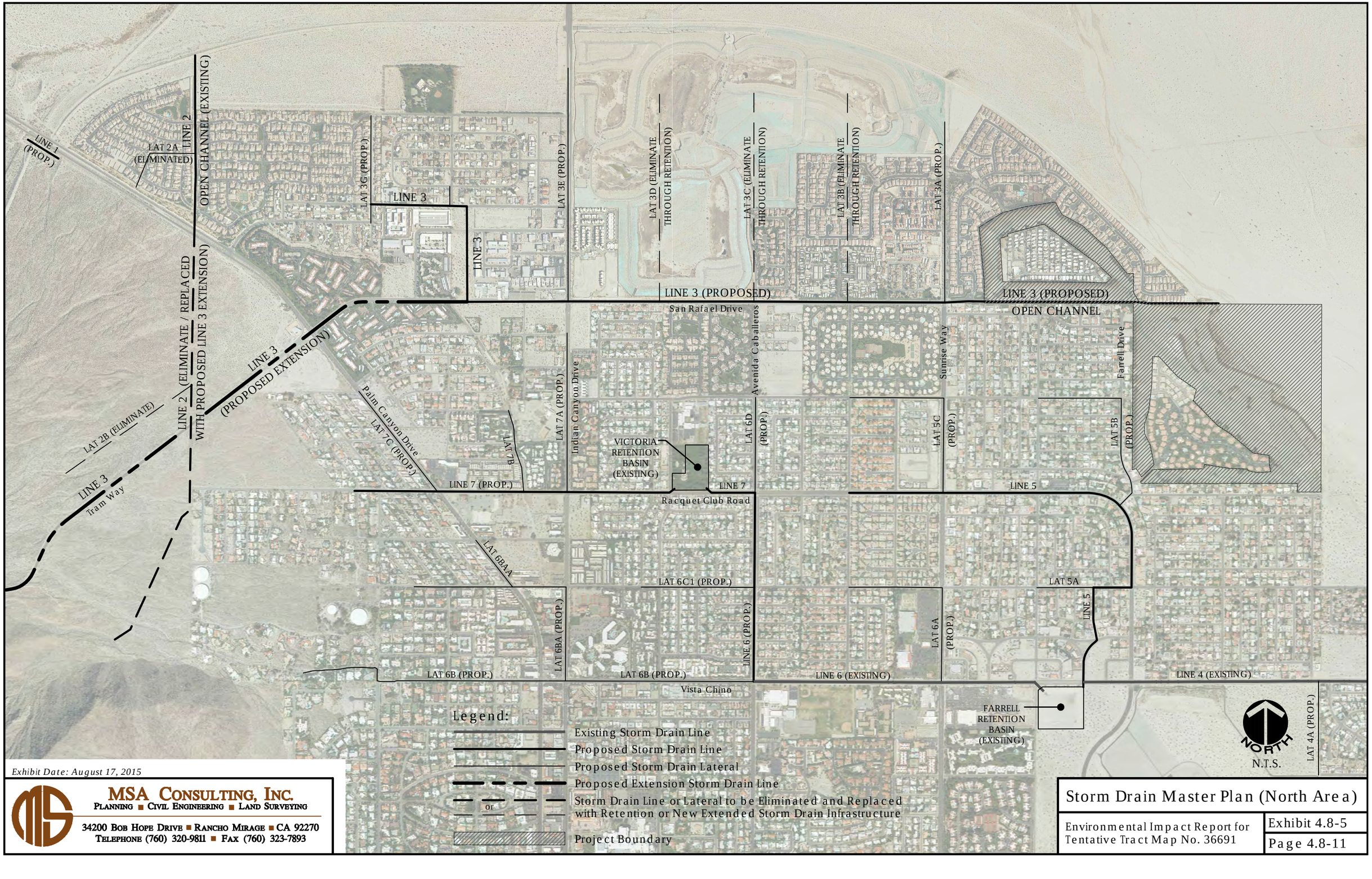

Exhibit Date: August 17, 2015

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Storm Drain Master Plan (North Area)

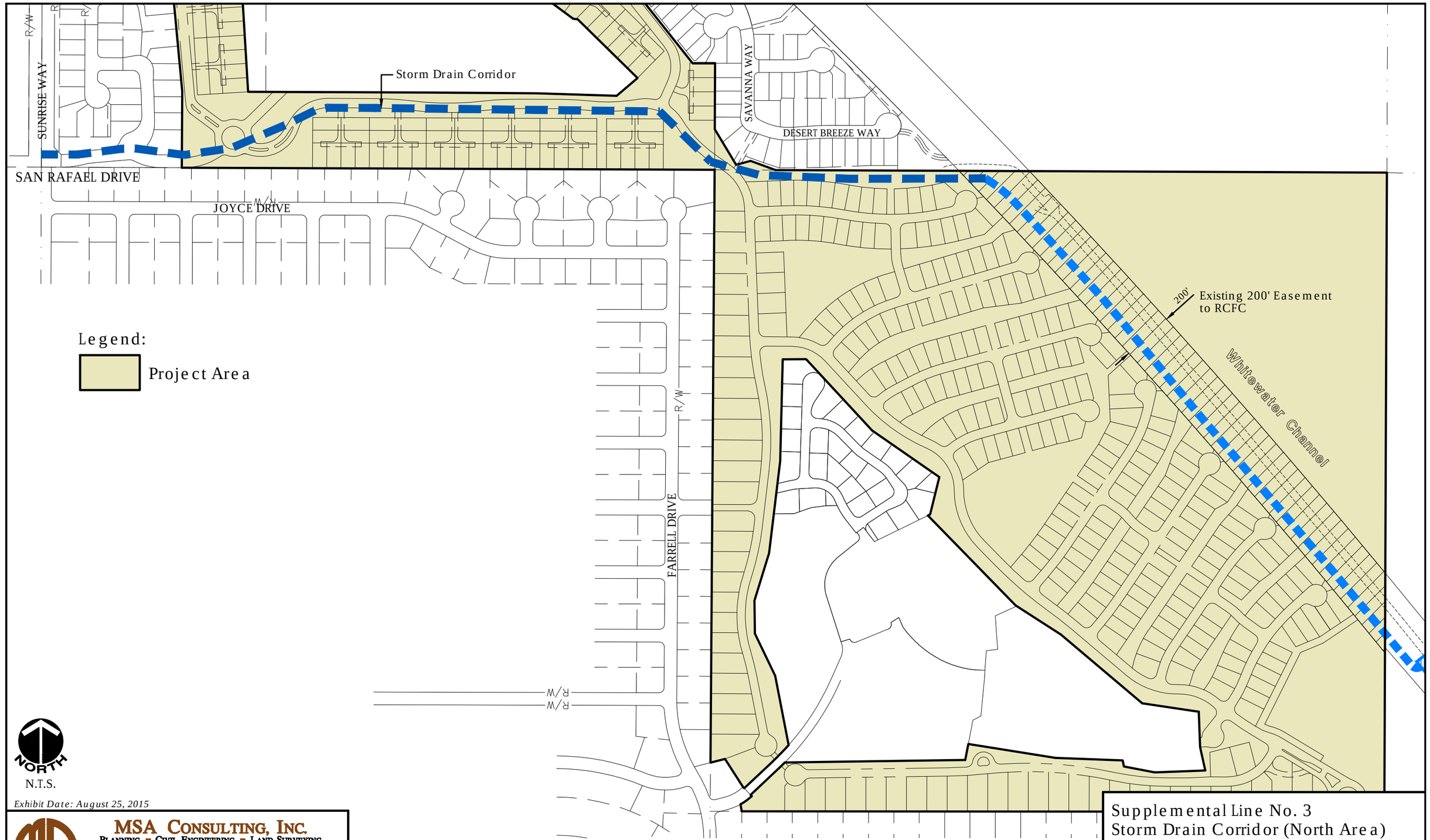

Exhibit Date: August 25, 2015

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Supplemental Line No. 3
Storm Drain Corridor (North Area)

Future Water Demands

According to the 2010 WMP, Water use by new development is expected to be more efficient due to plumbing code requirements and design standards such as those included in CVWD's Landscape Ordinance. Consequently, water demands are expected to be less than projected in the 2002 WMP. Water demand in 2045 is projected to reach about 886,300 AFY. If the growth projection in the 2002 WMP, with assumed water conservation measures, were projected to 2045, the projected demand would be approximately 950,000 AFY. The reduction in projected demand results primarily from the conversion of agricultural lands to urban use and increased water conservation factored into the 2010 WMP Update.

Groundwater overdraft is a significant problem in the Coachella Valley. The 2002 Water Management Plan was developed to identify and guide the long term implementation of measures to eliminate groundwater overdraft in the Valley. Since completion of the 2002 Water Management Plan, much has been accomplished by Valley water agencies and agricultural, municipal/residential, and golf course water users to reduce overdraft. Water conservation efforts have expanded, out-of-basin water supplies have increased, surface water and recycled water use is being used in lieu of groundwater. New groundwater recharge facilities are online and an additional facility is being developed. However, changing future demands and water supply uncertainties require additional actions to eliminate groundwater overdraft in the future, which are identified in the 2010 WMP Update. Continued implementation of the Water Management Plan will result in unavoidable costs for water users and water agencies alike. Each agency, including DWA, will consider costs, available resources, funding mechanisms and priorities to eliminate overdraft in a timely manner. The success of the Plan to date indicates broad support for eliminating overdraft and the threats to the economy and quality of life in the Coachella Valley.

Regional Regulatory Background

Riverside County Flood Control District and Water Conservation District (RCFC) and CVWD are responsible for the management of regional drainage in the City of Palm Springs, including the rivers, major streams, areas of significant sheet flooding and other flood control facilities. RCFC establishes requirements for surface drainage and flood protection for projects which fall under their jurisdiction, which in the City of Palm Springs encompass areas west of the Whitewater River Flood Plain. Project applicants are required to meet the floodplain management ordinance, which ensures that any new construction within a floodplain area is done in a matter that reduces damage to public and private property. RCFC is designated to administer the flood management in western portions of the Coachella Valley, including Desert Hot Springs and a majority of Palm Springs. The general definition of floodplain management refers to the operation of a program of corrective and preventative measures

for mitigating flood damage, including, but not limited to, emergency preparedness plans, flood-control works, and floodplain management regulations.

Federal Regulatory Background

The Federal Emergency Management Agency (FEMA) evaluates flood hazards, including areas of significant potential flooding for the City and its planning area. The FEMA Flood Insurance Rate Maps (FIRMs) serve as the basis for determining the need for and availability of federal flood insurance. According to FIRM panel 06065C1557G, effective August 28, 2008, the majority of the project lies within Zone X Shaded, an area described as having a reduced flood risk due to levee. *However, the Whitewater River West Bank Levee is not a certified levee through FEMA. As stated on the FIRM, the levee is identified as a "Provisionally Accredited Levee" or PAL. A PAL designation identifies the levee as not yet certified or accredited but reasonably expected to continue to provide 1% annual chance flood risk reduction*. A southwestern portion of the project occurs in a Zone X while a small portion of the project is situated within Zone AE. The three flood zone designations are described as follows.

Zone X Shaded: This zone applies to areas protected from the 1-percent-annual-chance flood by a levee, areas within the 0.2-percent-annual-chance floodplain, areas of the 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile. No Base Flood Elevations or depths are shown within this zone.

Zone X: Zone X corresponds to areas outside of the 1-percent and .2-percent-annual-chance floodplains. No Base Flood Elevations are shown within these zones.

Zone AE: This designation applies to areas subject to inundation by the 1-percent chance flood event determine by detailed methods. Base Flood Elevations are shown. Mandatory insurance purchase requirements and floodplain management standards apply.
The 100-year flood has a 1-percent chance of being equaled or exceeded in any given year; also known as the base flood. The 1-percent annual chance flood, which is the standard used by most Federal and state agencies, is used by the National Flood Insurance Program (NFIP) as the standard for floodplain management and to determine the need for flood insurance. A structure located within a special flood hazard area shown on an NFIP map has a 26 percent chance of suffering flood damage during the term of a 30-year mortgage. The 100-year flood pain is the boundary of the flood that has a 1-percent chance of being equaled or exceeded in any given year. It is officially termed the 1-percent annual chance floodplain.

National Flood Insurance Program (NFIP) maps are based on exiting, rather than proposed, conditions. Because flood insurance is a financial protection mechanism for real-property owners and lending institutions against existing hazards, flood insurance ratings must be made accordingly. However, communities, developers, and property owners often undertake

projects that may alter or mitigate flood hazards and would like FEMA's comment before constructing them.

According to the Flood Hazards map (Figure 6-5) in the Safety Element of the City of Palm Springs General Plan, the project is subject to three flood zones consistent with the FEMA designations, as described below:

- Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to the 100-year flooding with average depths of less than one (1) foot or where the contributing drainage area is less than on square mile (Zone X Shaded).

- The remaining southwest portion of the property is mapped as being outside of the 500-year flood (Zone X).

- Areas of the 100-year flood; base flood elevations and flood hazard factors determined (Zone AE).

Exhibit Date: May 12, 2015

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FEMA Flood Zone Map

Domestic Water

The Desert Water Agency (DWA) provides domestic water to the City of Palm Springs and is the water purveyor for the project area. In general, the Coachella Valley has demonstrated a high level of water quality, indicated by the compliance with all government water quality standards. According to the Environmental Protection Agency Safe Drinking Water Violation report, none of the Coachella Valley water agencies, including DWA, have been subject to health, monitoring or reporting violations. Furthermore, the Coachella Valley Master Environmental Assessment (1979) has stated that the native quality of groundwater in the Valley – with little exception – is suitable for any beneficial use.

National Pollution Discharge Elimination System (NPDES)

In 1972, the National Pollution Discharge Elimination System (NPDES) was established under Section 402 of the Clean Water Act to control the discharge of pollutants to waters of the United. It does so by establishing a variety of measures designed to reduce pollutant discharges through a permitting program. This program is managed nationally by the United States Environmental Protection Agency (US EPA). In the State of California, the State Water Resources Control Board (SWRCB) and nine California Regional Water Quality Control Boards (RWQCBs) administer the regulation, protection and administration of water quality. The Project and the entire City of Palm Springs is located within the Colorado River Region (Region 7), which administers the permit program for regulating storm water from construction activities for projects greater than one acre in size in the project areas under the State's General permit approach.

While urban development and activities in general have the potential to impact the quality and quantity of runoff to proximate receiving waters, these potential construction-related impacts are mitigated by complying with the Construction General Permit (State Water Resources Control Board Order No. 2009-0009-DWQ) under the NPDES. Permit coverage and regulations apply to construction activities disturbing one acre or greater. To address post-construction runoff impacts, projects are regulated under the Municipal Separate Storm Sewer System (MS4) within the Whitewater River Watershed, otherwise known as the MS4 Permit (Order No. R7-2013-0011 and NPDES No. CAS617002).

The City of Palm Springs is a co-permittee and the local enforcing agency for the NPDES, which requires the development, adoption, and implementation of plans and programs for stormwater management to prohibit non-stormwater runoff into storm drains while seeking to reduce and eliminate the discharge of pollutants to local groundwater and nearby bodies of water.

A strategy source control, site design and treatment control Best Management Practices (BMPs) applied specifically to new development projects work to ensure that the proximate

receiving waters, including the Whitewater River and Coachella Valley Stormwater Channel, are not adversely impacted by project pollutants. CVWD, RCFC and the City of Palm Springs are included within the list of Owner/Operators responsible for implementation of the MS4 Permit.

Refer to the Regional Setting discussion within Section 4.7 (Hazards and Hazardous Materials) for more discussion on non-point source pollution and the enforcement of NPDES in the City of Palm Springs.

Regulatory Hydrology Changes

In the 30 plus years since the adoption of the City's Master Plan of Drainage, a number of key storm drain and channelization facilities have been installed around the City but funding from the Acreage Drainage Fees, the Surtax, and other funding sources available to the city or RCFC have not been sufficient to construct the entire system. One significant measure that was not included in the Master Plan but became City policy in the early 1990's was the imposition of On-Site Retention as a requirement on new development that could not directly drain into an approved drainage carrier or otherwise demonstrate that discharged storm water from the development would not adversely impact downstream properties. This policy allowed the continuation of new development by insuring that such development did not increase storm water flows in city streets.

This significantly reduced any new flows that were calculated as needing to be handled in each storm drain or open channel particularly in the less developed portions of the plan area. This requirement essentially helped maintain the status quo and reduced the pressure to install the entire system and allowed the City and the District to focus on priority areas where flooding was an identified problem. Conversely, there have been changes in rainfall calculation protocol that have increased anticipated rain fall amounts. These two changes are foremost among the reasons that suggest an updating of the Master Plan is needed. The Master Plan has not been updated nor have the fees been adjusted since the early 1980's. The Assistant City Manager/City Engineer researched increases in the construction cost index from 1983 to 2015 which showed an increase of 300% in the index over that period of time.

B. Existing Conditions

As previously described, the project site is located in north Palm Springs east of Sunrise Way, north of Racquet Club Drive and west of the Whitewater River Floodplain. The property was previously developed as the Palm Springs Country Club in the 1950's. The property was also known as the Whitewater Country Club and consisted of an 18-hole golf course, a driving range, a golf clubhouse, tennis courts and associated parking. Today, the site remains vacant with minimal vegetation and palm trees and has been stabilized with soil polymer. The property configuration is based largely on the fairway alignment of an abandoned golf course

and has two distinct subareas: a northern portion and a southern portion. These subareas surround two existing residential enclaves, a mobile home park on the north and a condominium development on the south. Contiguous property to the east that contains the Whitewater River floodplain is also owned by the proponent but is not a part of the project.

The Project is screened from surrounding residential uses by a combination of existing walls, fences, and vegetation. It is also separated by a flood control levee from the Whitewater River floodplain, designated as a "Conservation Area" by the Coachella Valley Multi Species Habitat Conservation Plan (CVMSHCP) in 2008. The project site is constrained by existing single family residential lots and two inholdings of medium density residential development, including a 1950's era mobile home park on the north and a condominium community on the south. The property is further constrained by a *Provisionally Accredited Levee (PAL)* ~~flood control levee~~ that *is reasonably expected to continue to provide 1% annual chance flood risk protection of* developable land from the Whitewater River Flood Plain.

The existing Four Seasons at Palm Springs development, which borders the northerly parcel, conventionally drains away from the project site with storm water runoff being conveyed by a storm drain system which outlets into the Whitewater Storm Channel via an outflow structure adjacent to the project site boundary. The Golden Sands Mobile Home Park, which is surrounded by the northerly parcel of the project site, generally drains from the northwest to the southeast. Because the site is surrounded by a block wall, storm water sheet flows toward the southeast corner, outlets through an opening in the block wall and converge with the project site.

The existing Whitewater Estates and Alexander Country Club Estates, which are surrounded by the southerly parcel of the project site, also generally drain from the northwest to the southeast. The Alexander Country Club Estates flow into a storm drain system which outlets into an existing retention basin on the easterly site boundary and a drywell system which borders the Whitewater Estates. The retention basin is sized to accept the incremental increase storm volume with excess flows overflowing onto the project site while the drywell is also sized to accept the incremental increase storm flow with excess flows sheet flowing into the adjacent Whitewater Estates to the south. The Whitewater Estates sheet flow from the northwest to the southeast and outlet the site via Whitewater Club Drive. Portions of the Whitewater Estates were found to drain directly toward the project site as indicated by the tributary drainage areas. The remaining development surrounding the subject site generally drains away from the site onto existing offsite street sections.

The topography of the project site is relatively flat and slightly undulating from its previous use as a golf course. The surface of the former golf course is comprised primarily of sandy soil and has been treated with a dust control suppressant. Historically, storm water runoff would flow from the northwest corner of the project to the southeast corner and ultimately outlet

the site via Whitewater Club Drive. The southerly parcel is bounded to the east by an existing levee and separates the southerly parcel from the Whitewater Storm Channel.

Existing Implemented Master Plan of Drainage

The incremental implementation of the Master Plan of Drainage to date has been accomplished by the City of Palm Springs in partnership with RCFC based on a highest priority basis. Individual development projects have typically not been required to install adjacent segments of the system but since 1982 have been required to pay the adopted Acreage Drainage fees in lieu of construction. Even in the few cases where a property might be at the end of a particular storm drain line, construction of the storm drain has not been a mandated requirement of development but rather something that the City and RCFC partner to implement. One end-of-the-line example is the development of Escena in the East Fee Area. Since there was a golf course involved, the approved drainage solution involved accepting off site flows from the northern airport environs and constructing storm drains that will eventually accept off-site storm drain and conducting them through the golf course and then outletting into Whitewater Channel. This obviated the need for the construction of Lines 30, 31, and 32 with the exception of the outlet structures.

Currently, the Drainage Fund has approximately $1,000,000 on hand (derived from developments in all drainage areas).

Existing Relationship of Master Plan of Drainage (MDP) Line #3 with Serena Park Planning

At the time of the preparation of the 1966 Master Plan of Drainage and again at the time of the updated plan in 1982, a major storm drain facility (Line 3) was shown on the plan that traversed the then Palm Springs Country Club property from west to east. This line was designed to collect runoff from properties northerly of San Rafael Drive up to the Whitewater Channel levee and ran within the San Rafael street right of way from McCarthy Road west of Indian Canyon Drive (then Indian Avenue) and continued easterly through an existing golf course to eventually exit into the Whitewater Channel near what is now Gene Autry Trail. The portion of Line 3 proposed prior to entering the existing golf course, was proposed as a subsurface storm drain system, but approximately 600 feet easterly of Sunrise Way, the MPD proposed an at-grade, open trapezoidal channel solution that may have been problematic with the golf course play.

The approved text of the Master Plan of Drainage did not include any text specific to the Palm Springs Country Club area but in 1982 the golf course was still an active business. It is unknown as to whether the cost of acquiring a right-of-way through the golf course was included in the costing estimates prepared by RCFC for Line 3. A number of properties tributary to Line 3 have been built in the subject North fee area since the adoption of the Master Plan with nearly all developments incorporating on-site retention. The major examples include

Palermo, Avalon, and Four Seasons. None of these developments implemented any portion of Line 3 (including laterals 3A, 3B, 3C, 3D, and 3E). The Four Seasons development did build a non-master plan outlet into the Whitewater Channel adjacent to the northeast corner of Serena Park as the overflow segment of its drainage plan thus no increase over existing storm flow conditions is directed toward Line 3.

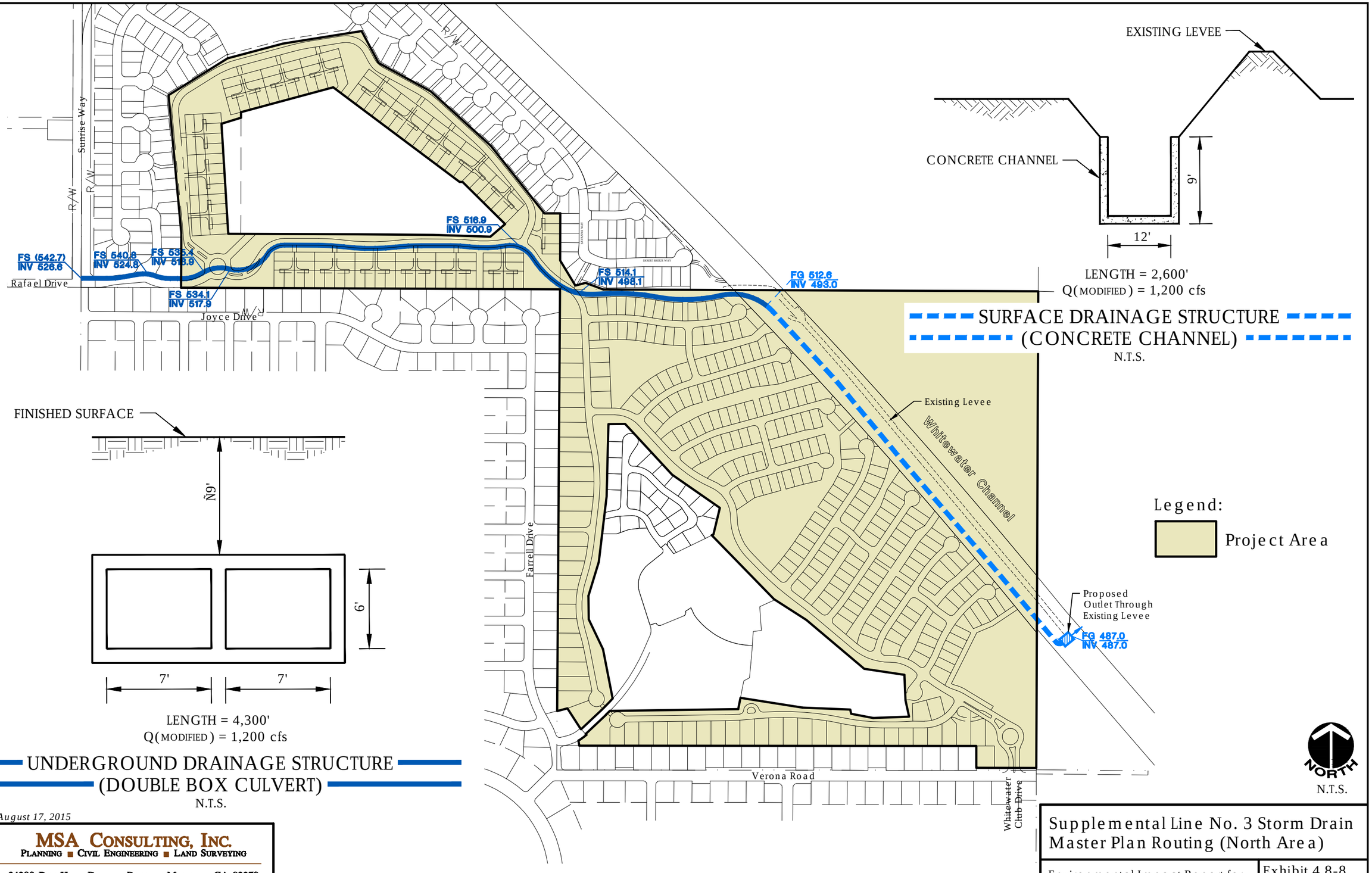

Exhibit Date: August 17, 2015

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Supplemental Line No. 3 Storm Drain Master Plan Routing (North Area)

SEE SECTION A-A BELOW

SEE SECTION B-B BELOW

FS (542.7)
INV 526.6

FS 540.8
INV 524.8

FS 535.4
INV 518.9

FS 534.1
INV 517.9

FS 516.9
INV 500.9

FS 514.1
INV 498.1

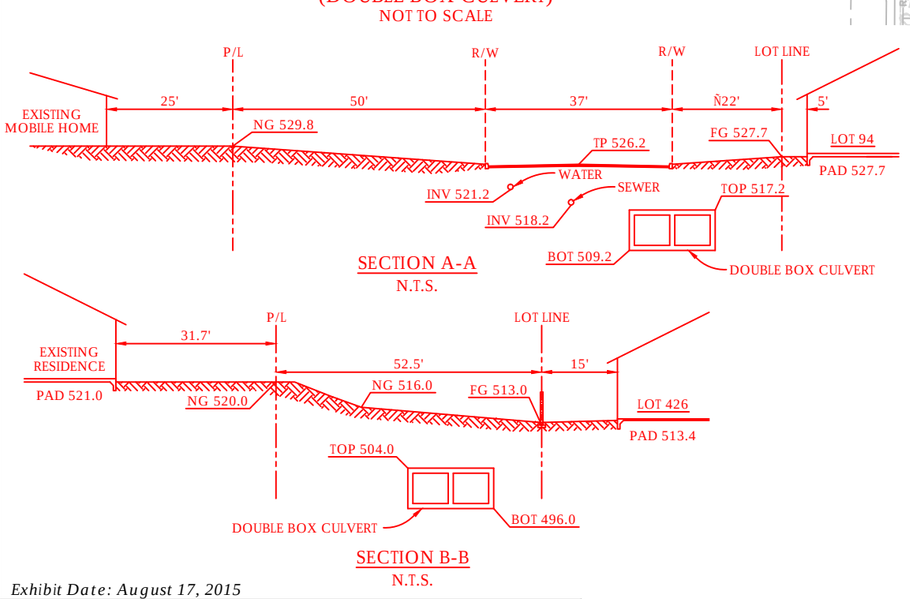
FG 512.6
INV 493.0

CVWD WHITE WATER RIVER CHANNEL

FG 487.0
INV 487.0

OUTLET THROUGH
EXISTING LEVEE

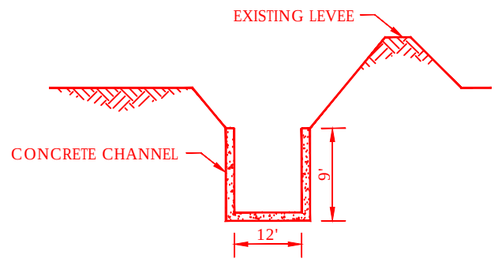
UNDERGROUND DRAINAGE STRUCTURE
(DOUBLE BOX CULVERT)
NOT TO SCALE



SECTION A-A
N.T.S.

SECTION B-B
N.T.S.

SURFACE DRAINAGE STRUCTURE
(CONCRETE CHANNEL)
NOT TO SCALE



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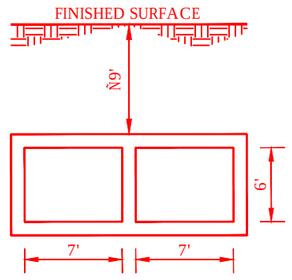

LENGTH = 4,300'
Q(MODIFIED) = 1,200 cfs

NORTH
N.T.S.

Exhibit Date: August 17, 2015

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Preliminary Master Drainage Plan Study for TR No. 36691

Existing Acreage Drainage Funding/Financing

The North Drainage Area in Palm Springs is everything north of Vista Chino and south of the Chino Creek/Whitewater Channel levees. The only expenditures to date in this portion of the MPD have been for a major portion of Line 6 (Vista Chino easterly of Via Miraleste to the outlet in the Whitewater Channel) along with the Farrell Drive Retention Basin.

The City has been collecting Acreage Drainage Fees for all new developments since 1983 and has been working in partnership with RCFC in implementing the MPD on a priority basis. In addition to the Acreage Drainage Fees and the property surtax, RCFC also collects a percentage of the property tax for flood control purposes. As previously mentioned the District is divided into seven geographical zones with each zone being taxed separately. Pursuant to state law, each of the District's seven zones receives a share of the ad valorem property tax. Monies raised in one zone must be spent in only that zone. District Zone 6 which includes Palm Springs receives 8.6% of the share received by the District.

Existing Current Use of RCFC Funds

In fiscal year 2014/2015, the District received approximately $3,300,000 in total property tax revenues for Zone 6. This revenue helps pay for ongoing maintenance of current Zone 6 facilities (and design and construction of future facilities) which protect properties in that zone from regional flood hazards. Such facilities include the District's Whitewater River, Chino Canyon and Palm Canyon Wash levee. This revenue also funds maintenance and construction of dams, open channels and underground storm drains that protect the Palm Springs area from flood and debris hazard emanating from other watersheds draining the steep eastern slopes of the San Jacinto Mountains.

Approximately $1,900,000 of the District's Zone 6 annual revenue is dedicated to maintenance of District facilities within the Zone. This leaves approximately $1.4 million annually to fund other activities including capital improvement projects.

The District maintains regional flood control Master Drainage Plans within Zone 6 to facilitate orderly development and to help inform the District's annual Budget Hearings. During the Budget Hearings, the District's Zone Commissioners accept written comments and testimony from local agencies and the public regarding the prioritization of the District's limited resources towards specific projects for construction. The District then holds Budget Workshops with the Zone Commissioners where they assist District staff in development of a Capital Improvement Plan (CIP) that document the projects committed to for the next five years.

Proposed Alternatives for Funding

Alternative 1

As part of the current 2015 CIP, the District is in the process of completing significant facilities in the Cathedral City (e.g. Eagle Canyon Dam and its outlet Palm Springs Line 43 and 43a). The District has currently programmed $9.5 million for construction of Palm Springs Line 41 and the repair of existing facilities such as the Palm Canyon Wash Levee within the next several years. This represents a commitment of approximately 7 years of available zone revenues. Future budget cycles are likely to focus resources to proposed projects in Desert Hot Springs (including Desert Hot Springs Line E and Pearson Dam), the pass and unincorporated areas. At this time, Line 3 in Palm Springs is not on the District's or City's CIP.

Alternative 2

Another potential funding source available to Palm Springs is funding from Measure J. Measure J is a voter approved one percent sales tax increase approved in 2011 and which went into effect in 2012. Last year Measure J raised $12M. These are funds that the City can use for Special Projects anywhere in the City. Those funds are controlled by the City Council which relies on input from the Measure J Oversight Commission. The Commission invites the nomination of candidate projects to fund and maintains a prioritized list of requested projects. The Commission then forwards its recommendations to the Council as part of the annual budget process. It is possible that MPD projects could be nominated by city staff for review by the Commission as part of that process.

While not necessarily an immediate flood control priority, the early construction of Line 3 prior to construction of Serena Park, if done prior to construction of the later Phases 3 and 4 of Serena Park, would result in substantially lower construction costs and ultimately less disruption to the residents of those phases than if the construction of the storm drain facility were postponed until after the construction of the last phases of that development.

C. Hydrology and Water Quality Impacts

Threshold Criteria

Thresholds of significance were derived from criteria in the CEQA Guidelines and the standard CEQA Environmental Assessment Form. The following questions are relevant to determining whether a project could have a significant impact on the environment from a hydrology and water quality perspective. Would the project:

a) Violate any water quality standards or waste discharge requirements?

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

c) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

f) Otherwise substantially degrade water quality?

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Insurance Rate Map or other flood hazard delineation map?

h) Place within a 100-year flood hazard area, structures which would impede or redirect flood flows?

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

j) Inundation by seiche, tsunami, or mudflow?

Water Quality

The proposed project will reduce its potential impacts to water quality and waste discharge standards to less than significant levels by complying with the applicable regulatory programs during construction and throughout the life of the project (operation). Compliance will involve the development of detailed plans to demonstrate the appropriate implementation, recordkeeping and monitoring activities that address the water quality objectives and prevent any violations.

A Stormwater Pollution Prevention Plan (SWPPP) and a Fugitive Dust (PM10) Management Plan will be developed and implemented throughout all construction activities. Construction site Best Management Practices (BMPs), including erosion control, sediment control, tracking control, non-stormwater management and waste management measures will be implemented to prevent any contamination of water that could occur as a result of construction activities of the proposed project. To address potential impacts during the life of the project (operational), the project developer will prepare and submit a Project-Specific Water Quality Management Plan (WQMP) in accordance with the regulations of the Municipal Separate Storm Sewer System (MS4) within the Whitewater River Watershed (Order No. R7-2013-0011 and NPDES No. CAS617002). The detailed plan will be submitted to the City for review and approval prior to the issuance of a Grading Permit and it will be implemented throughout the life of the project.

SWPPP (Construction Activities)

The Clean Water Act and associated federal programs require that nearly all construction site operators engaged in clearing, grading, and excavating activities that disturb one acre or more to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges. As previously mentioned, the State of California is authorized by the U.S. Environmental Protection Agency (EPA) to implement the federal requirements and issue stormwater permits under the NPDES via a Construction General Permit (Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ). The proposed project will obtain coverage under such Construction General Permit, which will include the development of a compliant Stormwater Pollution Prevention Plan (SWPPP) designed to reduce any potential adverse impacts to surface water quality during the period of construction.

The SWPPP will involve a detailed site analysis and an assessment of the planned construction activities to identify opportunities for incorporating best practices and compliance measures. The SWPPP will describe and exhibit the pollution prevention measures and activities for the duration of construction. It will also include descriptions of the site and each major phase of the planned activity; the roles and responsibilities of the developers, practitioners, contractors and subcontractors; and the inspection schedules and recordkeeping requirements. The compliance procedures and best practices specified in the plan and summarized below will help ensure that the temporary construction activities associated with the project do not result discharges that will impact water quality or result in related violations.

1. Prior to the issuance of a grading permit, the Legally Responsible Person (LRP) of the project is required to electronically file the appropriate Permit Registration Documents (PRDs), which include a Notice of Intent (NOI), SWPPP, supporting documentation, and payment via the State Water Board's Storm Water Multiple Application and Report Tracking System (SMARTS). The SWPPP shall be prepared by a Qualified SWPPP Developer and implemented during construction by a Qualified SWPPP Practitioner. The plans shall

indicate a design and series of measures to reduce the discharge of pollutants, including sediment, to the maximum extent practical using best management practices, control techniques and systems, design and engineering methods, and other appropriate methods. Such practices shall include, but not necessarily be limited to the following:

I. The strategy of BMPs must include erosion control, sediment control, tracking control, non-stormwater management, and waste management measures.
II. All pollutants and their sources must be controlled, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction.
III. All non-stormwater discharges must be identified, eliminated, controlled and/or treated.
IV. Contractors shall be required to control runoff during periods of rain in order to minimize surface water contamination during construction. The California Stormwater Quality Association (CASQA) Best Management Practices (BMP) Handbook is a recommended reference.
V. Linear sediment barriers, sediment basins and/or other trapping facilities shall be employed as applicable to intercept potential sediment-laden runoff generated during construction activities. The BMPs will help trap and retain sediment, preventing it from reaching any proximate receiving waters or discharging in to the local storm drain system.
VI. Silt fences or other approved BMPs designed to intercept and detain sediment while decreasing the velocity of runoff shall be employed within the project site during construction.
VII. Where applicable, runoff must be diverted away from or around the construction site.
VIII. Re-vegetation of proposed landscaped areas should occur promptly.
IX. To reduce fugitive dust, exposed soils must be watered or treated with a soil binder.
X. Implementing the required good housekeeping measures will ensure the proper handling and managing of construction materials, waste management, vehicle storage and maintenance, landscape materials, and potential pollutant sources. Implementation includes conducting an inventory of products used, utilizing proper storage and containment, and properly cleaning any leaks from equipment or vehicles.
XI. Any hazardous materials associated with construction shall be located and stored in a manner in compliance with applicable regulations that preclude contact with precipitation and runoff. Monitoring and cleanup programs for spills and leaks of hazardous materials shall be maintained.
XII. The contractor and owner shall be responsible for the collection and disposal of waste products, prevention of oil leaks, and maintenance of equipment to prevent or reduce the contamination of urban runoff.

XIII. A SWPPP manager and Qualified SWPPP Practitioner shall oversee and monitor BMP and Stormwater management programs.

XIV. Upon project completion and final stabilization, a Notice of Termination shall be filed in SMARTS to certify that all State and local requirements have been met with the General Permit, including the installation of post-construction storm water management measures and related maintenance. This requirement is intended to ensure that post-construction conditions of the project do not cause or contribute to direct or indirect water quality impacts.

WQMP (Operational Activities)

The project will be required to develop and implement a Project-Specific Water Quality Management Plan (WQMP) to comply with the most current standards of the Whitewater River Region Water Quality Management Plan for Urban Runoff and the Whitewater River Watershed MS4 Permit (Order No. R7-2013-0011). A preliminary version of this plan has been developed consistent with the findings of the project's Hydrology Study as well as the site design and precise grading plans. It includes a detailed strategy of site design, source control and maintenance measures tailored for the project to limit any potential impacts of urban runoff to the receiving waters and therefore avoid any violation of water quality standards or waste discharge requirements.

The strategy of best management practices identified in a Project-Specific WQMP is based on a comparative assessment of the potential project pollutants that are generally known to be produced by the proposed project land use (detached residential) with the known pollutants that are causing impairments on the receiving waters based on the most recent version of the Clean Water Act Section 303 List of Impaired Water Bodies. The receiving waters of the proposed project are the Whitewater River and Coachella Valley Storm Water Channel. The Whitewater River is not recognized as an impaired water body, but it drains directly into the Coachella Valley Storm Water Channel, which is impaired by multiple pollutants. The Coachella Valley Storm Water Channel is impaired by Pathogens, Toxaphene, Dieldrin, DDT (Dichlorodiphenyltrichloroethane), and PCBs (Polychlorinated Biphenyls).

The proposed residential development will not produce toxaphene because the use of this substance has been illegal since 1990; therefore, it will not be used or form part of the proposed development. The project will not produce pollution from polychlorinated biphenyls (PCBs) because manufacturing this substance stopped in 1977 and its application was banned in 1979. The project will not generate Dieldrin pollution in urban runoff because the use of this substance was related to agricultural operations (found in pesticides for crops) and it has been illegal since 1987; therefore, it will not be used or form part of the proposed development. The project is not anticipated to generate DDT pollution in urban runoff because the use of this substance has been banned since 1972; therefore, it will not be used or form part of the proposed development.

The project has the potential to generate small amounts of pathogens. These pollutants are generally associated with various human activities, but pathogens are also present in natural environments. Types and concentrations pollutants typically found in urban runoff from residential development tend to be less adverse than other development projects, including restaurants, automotive repair shops, commercial/industrial development, and parking lots. To address the project's pollutants of concern, the project will incorporate site design measures that include infiltration BMPs, also known as retention basins. These facilities consist of an earthen basin designed to collect and infiltrate the project's stormwater through the bottom of the basin. As a result, such runoff does not leave the project and does not enter any downstream stormwater conveyance, including streams. Infiltration BMPs are have been found to have an adequate pollutant removal effectiveness (medium-to-high) to address the potential pollutants of concern.

The drainage of the project site falls under the jurisdiction of the City of Palm Springs. According to the Master Drainage Plan for the City of Palm Springs, the incremental increase volume for the 100-year storm is required to be retained on-site. Therefore, the storm drain systems and streets must be sized to adequately convey the 100-year storm event peak flow.

As a result of these requirements, the project has been designed with on-site retention facilities sized to percolate the entire storm water volume resulting from a 100-year storm event (approximately 871,000 cubic feet), including any potential nuisance runoff, the first flush and incremental increase volumes. To achieve this function, the project has been divided into two primary drainage tributary areas that are further sub-divided into smaller drainage management areas draining to two respective basins (#1 and #2).

Tributary Area to Basin #1 will accept runoff generally from the northern and central portions of the project, including the off-site Golden Sands Mobile Home Park. Storm runoff will be conveyed via surface flows to proposed storm drain inlets, then via storm drain pipes to Retention Basin No. 1, which has a storage capacity of approximately 392,000 cubic feet.

Tributary Area to Basin #2 will accept runoff generally from the southern portions of the project, including the off-site Alexander Estates. Storm runoff will be conveyed via surface flows to proposed storm drain inlets, then via storm drain pipes Retention Basin No. 2, which has a storage capacity of approximately 479,000 cubic feet.

At each proposed retention basin, a structural device will be installed to function as pre-treatment of the tributary flows. The structure is likely to be underground settling/retention chamber or drywell that will dissipate nuisance and first-flush flows. The structure would allow for trash, sediment and other particles to settle while the lower portion would allow for low-flow percolation. Runoff in excess of the device's capacity (larger storm events) will overflow into the retention basin, where further dissipation of potential project pollutants and percolation will occur within72 hours. During the 100-year peak storm, the basins will hold the entire 100-year storm volume.

Retention of urban runoff in the provided capacity deemed one of the most effective methods for preventing urban runoff impacts. The Project Specific WQMP also outlines the required maintenance practices necessary to ensure that the water quality facilities remain effective during the life of the project. These include a maintenance covenant, inspection and maintenance program, with regular monitoring for all proposed mitigation measures and devices. Reporting shall be implemented quarterly, semi-annually, or annually depending on the procedures and devices. This may include water quality testing to assess and verify the adequacy of the devices and programs.

- **Following implementation of Regulatory requirements impacts to water quality and waste discharge are expected to be less than significant.**

- **Impacts that would otherwise substantially degrade water quality are not expected.**

Exhibit 4.8-10
Existing Drainage Conditions

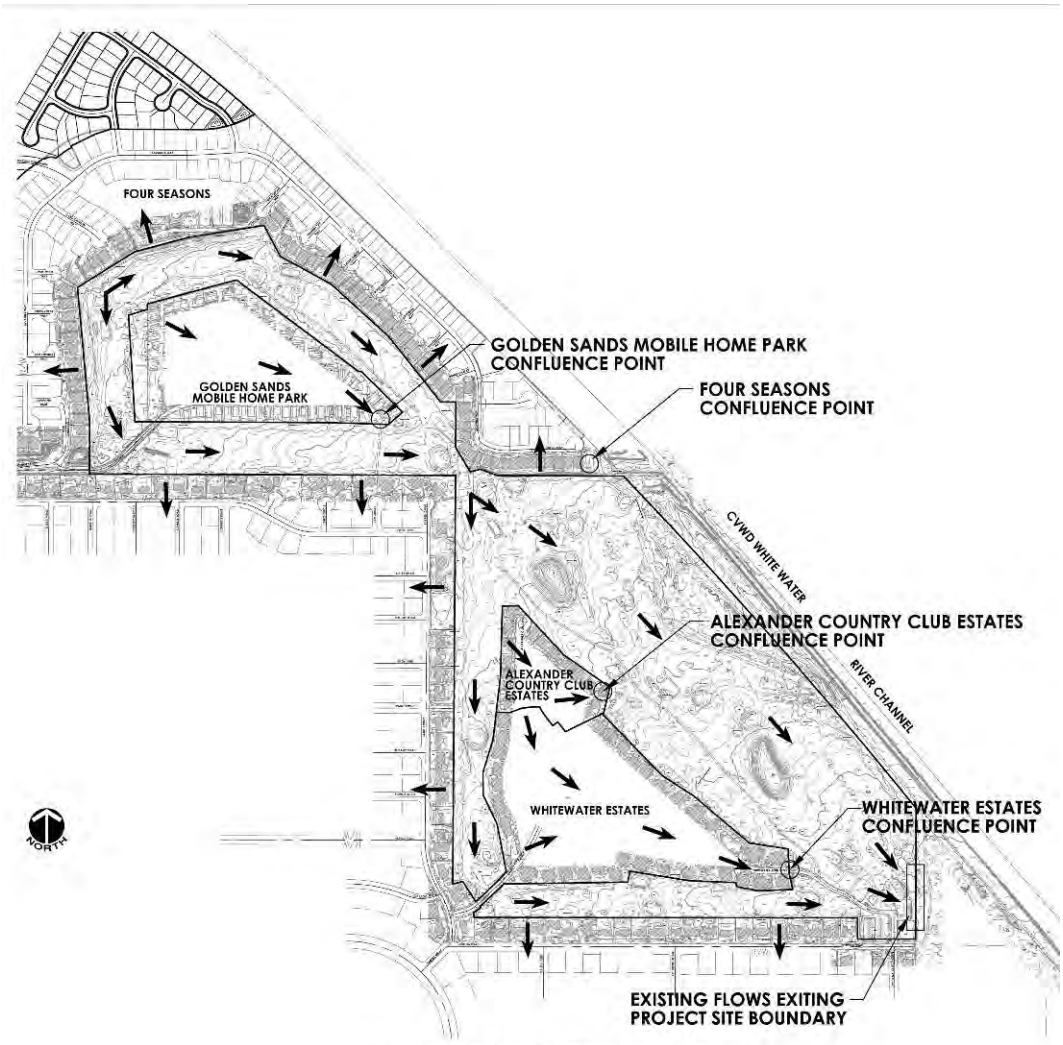

Exhibit 4.8-11
Proposed Drainage Conditions

Groundwater Supplies

Water consumption expectations are related to several factors. Residential use of water is one factor in consumption rates. Measures such as low flow fixtures and appliances will help to keep this consumption to acceptable levels. Long term ground water levels in the area are currently being stabilized by actions including the practice of artificial recharge of State Water Project supplies and other surplus water, orderly expansion of recycled water system and aggressive investment in and promotion of conservation programs.

The project site is not currently receiving domestic water services. Two existing private wells on the site were previously used to irrigate the golf course facilities. Consequently, there are no existing water lines on the project site. Existing 8-inch, 12-inch, 18-inch, and 30-inch water mains with related water accessories currently serve the residences north, south, west, and

surrounded by the project site. The project proposes to connect to existing lines at Verona Road and East View Road, Whitewater Club Drive, and San Rafael Drive. In order to serve individual units, 12" lines will be installed around the project's perimeter streets while 8" lines will be installed in the Cul de Sacs and hammerhead courtyard areas.

Development of the Project from its present condition will increase the existing demand for domestic water supply and services. Currently, there is no water demand on the project site given that it is undeveloped. However, in comparison to the site's previous use as a golf course, the site is expected to use less water as a residential development. By correspondence, DWA confirms that the project site occurs within its geographical boundaries. The annual water demand generated by the project is estimated at 687.8 acre feet per year (ac-ft/yr.).

The Project will be required to employ modern and efficient water conservation methods and technology both architecturally and as part of the project's architectural and landscaping design. Elements such as low flow shower heads and faucets, dual flush toilets, and xeriscaping of plants are strongly encouraged. Builders are strongly encouraged to consult with the Desert Water Agency on methods to implement the latest trends in water conservation available, recommended by the district for all customers in the service area. The proposed project is not expected to result in impacts related to a substantial reduction in the amount of groundwater.

- **Impacts to groundwater supplies and recharge capability from the project are expected to be less than significant.**

Drainage Patterns and Erosion

The developable Project site (west of the flood control levee) contains no active streams or rivers. There are no "Waters of the United States" or surface waters that have drainage paths across the property. The Project property was previously used as a golf course. Although presently inactive, the ground conditions of the site are maintained by the land owner based on an agreement with the City of Palm Springs. Water and wind-based soil erosion throughout the site, including fugitive dust emissions, are mitigated through the application of a soil polymer and mulch. Such form of maintenance helps preserve the soil condition stabilized. Gates were recently installed to prevent further disturbance and destabilization by unauthorized access. With such measures currently in place and the absence of any natural drainage paths across the property, soil erosion, siltation and flooding don't represent known problematic conditions.

The project will not alter any existing stream, river or drainage pattern on the project site. The proposed Project will include an engineered storm drain system and two retention basins that will adequately convey and accept runoff from the tributary off- and on-site areas. As a result,

problematic soil erosion, sedimentation, and flooding conditions will be prevented. Specifically, storm from the project and tributary off-site area will drain to the proposed streets, then conveyed via the proposed street wedge curbs to a series of storm drain inlets.

The storm drain inlets and underground storm drain pipes will direct the flows to one of two on-site retention basins three to four feet deep collectively sized to accept and percolate the entire storm water volume resulting from the 100-year storm event (approximately 871,000 cubic feet). This capacity includes any potential nuisance, first-flush and incremental increase runoff volumes. At each proposed retention basin, a structural device will be installed to pre-treat the tributary flows by removing most amounts of sediment, trash and other debris that may be collected in the stormwater throughout the project. This process will facilitate the percolation efficiency of the basin by preventing the accumulation of solids.

The retention facilities are designed to percolate the design capture volume within a period of 72 hours, therefore addressing the vector control objectives by preventing standing water for any prolonged period of time. Since these facilities are designed to hold the entire storm volume resulting from the 100-year peak storm, the project will not introduce storm water or pollutants to the City's storm drainage system (MS4). Any marginal amount of storm water beyond the project's retention capacity will leave the site in conditions generally consistent with the historic hydraulic pattern of the site. Such runoff would be considered pre-treated stormwater since the storm drain facilities would have previously dissipated any potential first flush pollutants.

Proposed Project Line #3 Coordination

The overall site planning for Serena Park incorporated an open space corridor (minimum width 45') through the site that would be part of the open space system maintained by the HOA. This corridor is designed to be dedicated on the Final Tract Map for the purpose of reserving the area in which Line 3 could eventually be constructed at such time that Line 3 were to become a priority. This corridor is shown in Exhibit 4.8-8. The last segment connecting Line 3 into the Whitewater Channel would be located within the 200' easement controlled by RCFC that covers the levee along the Whitewater Channel. Thus the planning of the project fully integrated the space needed for the Line 3 construction, operation and maintenance. Providing the easement for Line 3 through the site at no charge was considered as one of the project's "public benefits" as part of the project's Planned Development District entitlement.

As part of the Serena Park project, an interview with the City's Public Works Director, David Barakian, early in the design development process, pointed to the fact that there was some minor ponding at the intersection of Sunrise Way and San Rafael Road during heavy storms that, while a temporary nuisance, was not threatening to flood any built properties.

As the only portion of the Serena Park development that is tributary to Line 3, the northerly development area of the site surrounding the Golden Sands Mobile Home Park, is designed to drain through to the southerly portion where the incremental storm waters are designed to be captured and percolated in multiple recreation area/retention basins, thus not relying on the construction of Line 3 to provide flood protection to the development. Development areas in the southern portion of the site are not tributary to Line 3.

MSA Consulting prepared a schematic plan a (Exhibit 4.8-7) and a preliminary cost estimate for the portion of Line 3 that transects the Serena Park development which estimated the cost to construct at $5.25M to $6M if construction took place after the project were built out. If the construction were to occur prior to the building out of the project, those costs could be reduced roughly 20%, or in the range of $4.2M to $4.8M. As the phasing plan for the development shows Line 3 lying within Phases 3 and 4, if a feasible way to finance the construction could be found and the facility constructed prior to Phases 3 and 4, a substantial savings could be realized. It should be noted that the 1982 Master Plan of Drainage exhibit listed the estimated construction cost of the entirety of Line 3 (approximately 12,800 feet) as $2,745,000. The City Engineer's research indicated that the Construction Cost Index has risen 300% since 1983. Again, neither the master plan nor the Acreage Drainage Fees have been updated since the initial adoption. Should the City decide not to develop Line 3 the existing easement area would remain as open space.

Existing Standard Conditions

Since the advent of the policy to incorporate retention to reduce or eliminate the incremental increase of storm waters throughout the city, the standard development review process for the City of Palm Springs includes a thorough review of a Hydrology Study prepared by a licensed engineer that demonstrates that the design of the proposed development will protect not only the subject project from flooding but also insure that no increase in stormwater runoff will occur that could damage downstream properties. The second standard provision required by the City as part of the overall Conditions of Approval is the payment of acreage drainage fees which in the North Drainage Area amount to $6,511 per acre. These fees are collected at the building permit stage and could amount to as much as $800,000 for the 125 acre Serena Park project. Those fees are collected at the building permit stage so the funds would accrue over the expected 5 to 10 year build out of the project. Following the required payment of the City's drainage fee, less than significant impacts are expected.

- **Less than significant impacts are anticipated pertaining to soil erosion, sedimentation, flooding or contribution of stormwater.**

- **With the proposed improvements, the project would not substantially alter the existing drainage pattern of the site, including the alteration of the course of a**

stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Less than significant are expected.

- **With the proposed improvements, the project is not expected to create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Less than significant impacts are expected.**

Proposed Housing or Structures in Relation to a 100-year Flood Hazard Area

As previously described, the developable portion of the Project site is not located within a 100-year flood hazard area as mapped on the FEMA Flood Insurance Rate Map 06065C1557G. The Serena Park is bordered to the east by a flood control levee that protects the developable site and neighboring residential uses from the Whitewater River Flood Plain. A Remainder parcel under project ownership that will remain undeveloped is located within a FEMA Zone AE, which largely corresponds to the Whitewater Flood Plain.

In relation to the FEMA flood zones, a majority of the project lies within Zone X Shaded, an area described as having a reduced flood risk due to levee. *However, the Whitewater River West Bank Levee is not a certified levee through FEMA. As stated on the FIRM, the levee is identified as a "Provisionally Accredited Levee" or PAL. A PAL designation identifies the levee as not yet certified or accredited but reasonably expected to continue to provide 1% annual chance flood risk reduction*. A southwestern portion of the project occurs in a Zone X. A small northeast portion of the parcel 501-190-011 is situated within Zone AE. This area largely corresponds to the 200-foot wide easement in favor of Riverside County Flood Control, where the development will avoided or minimized.

The FEMA flood zones are described as follows:

Zone X Shaded: This zone applies to areas protected by the 1-percent-annual-chance flood by a levee, areas within the 0.2-percent-annual-chance floodplain, areas of the 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile. No Base Flood Elevations or depths are shown within this zone.

Zone X: Zone X corresponds to areas outside of the 1-percent and .2-percent-annual-chance floodplains. No Base Flood Elevations are shown within these zones.

Zone AE: This designation applies to areas subject to inundation by the 1-percent chance flood event determine by detailed methods. Base Flood Elevations are shown. Mandatory insurance purchase requirements and floodplain management standards apply.

The project will not place housing within a 100-year flood hazard area mapped on a Federal Flood Insurance Rate Map or other flood hazard delineation map; therefore, less than significant impacts are anticipated. The project will not place structures within a 100-year flood hazard area, such that would impede or redirect flood flows;

- **Therefore less than significant impacts are anticipated.**

The proposed stormwater and flood control improvements on-site are the result of a Preliminary Hydrology study prepared for this project. The purpose of this study and plans was in part to examine the existing and proposed conditions in order to provide a design solution that meets the hydrologic conditions set forth by the City of Palm Springs. In summary, the proposed basins provide sufficient storage to not only retain the project's incremental increase in flood volumes from the 100 year storm event (required by the City of Palm Springs Master Drainage Plan) but the project's 100 year storm event in its entirety. In addition the proposed street section, catch basins and storm drain systems are sized to sufficiently convey the 100-year peak flow to the retention basins. The existing site drainage characteristics generally remain the same with the exception of the project's 100-year storm event being retained onsite. Excess flows associated with the non-project tributary areas (Golden Sands Mobile Home Park, Whitewater Estates and Alexander Country Club Estates) will exit the project site per historic conditions.

- **It is therefore concluded that the proposed project will not adversely affect persons or properties onsite or existing downstream drainage facilities or developments.**

Pertaining to the topic of exposure of people or structures to a significant risk related to flooding, including flooding that result from a levee or dam, the assessment is as follows:

The existing Palm Springs Country Club golf course and nearby residential development are situated west of the Whitewater River right bank levee, a facility that forms part of the City's flood protection system maintained the Riverside County Flood Control and Water Conservation District. The Whitewater River levee *is defined by FEMA as a "Provisionally Accredited Levy" (PAL) meaning the levee is not yet certified or accredited but reasonably expected to continue to provide a 1% annual chance flood risk reduction* from the 100-year storm event, as depicted on the corresponding FIRM. Flood and dam inundation hazards within the City are identified in the Safety Element of the Palm Springs General Plan. Specifically, the Flood Hazards map (Figure 6-5) identifies a series of zones that are prone to flood or inundation hazards.

These areas are consistent with the FEMA flood zone designations, but also include the Tachevah Creek Detention Reservoir Dam failure inundation pathway. In this map, the project is located outside of the areas of the 100-year flood and outside of the Tachevah Creek

Detention Reservoir Dam failure inundation pathway. All levees in the City of Palm Springs have been certified or conditionally*/Provisionally accredited* by FEMA as being properly designed and contained. Therefore, repurposing of the existing a golf course with the proposed residential development will not introduce people or structures to an area with risks involving flooding as a result of failure of any of the City's flood protection system facilities. *All though the White Water River Bank Levee has a provisional status, it is still reasonably expected to continue to provide 1% annual chance flood risk reduction.* ~~particularly the right bank levee of the Whitewater River.~~

- **Therefore, less than significant impacts are expected.**

Seiche, Mudflow, Tsunami

The project is located inland and is not in an area that includes the possibility of inundation by a tsunami. A seiche is defined as the sloshing of a closed body of water resulting from seismic ground shaking. The proposed retention basins will not contain stormwater in a condition or duration that would expose surrounding areas, including structures or housing, to the risks of seiche impacts. The proposed project basins will only retain stormwater runoff during and for a short period of time following rain events. These retention facilities are situated and designed to accept and percolate the stormwater design capture volume in a maximum period of 72 hours, primarily due to vector control objectives. Impacts related to inundation by seiche are considered less than significant.

Moreover, the proposed development site is not located in an area prone to potential mudflow impacts. The project does not accept runoff under any condition from the Whitewater River due to the levee construction that forms part of the City's flood control system. Off-site areas that drain to the project site include the existing Golden Sands Mobile Home Park and the Alexander Country Club Estates and portions of the Whitewater Estates. The Golden Sands Mobile Home Park, which is surrounded by the northerly parcel of the project site, generally drains from the northwest to the southeast. Because the site is surrounded by a block wall, storm water sheet flows toward the southeast corner, outlets through an opening in the block wall and convergences with the project site. The existing Whitewater Estates and Alexander Country Club Estates, which are surrounded by the southerly parcel of the project site, generally drain from the northwest to the southeast as well. The Alexander Country Club Estates flow into a storm drain system which outlets into a retention basin on the easterly site boundary and a drywell system which borders the Whitewater Estates. The retention basin is sized to accept the incremental increase storm volume with excess flows overflowing onto the project site while the drywell is also sized to accept the incremental increase storm flow with excess flows sheet flowing into the adjacent Whitewater Estates to the south. The Whitewater Estates sheet flow from the northwest to the southeast and outlet the site via Whitewater Club Drive. Portions of the Whitewater

Estates were found to drain directly toward the project site as indicated by the tributary drainage areas.

The topography of the project site is relatively flat and slightly undulating from its previous use as a golf course. The surface of the former golf course is comprised primarily of sandy soil and has been treated with dust control. Historically, storm water runoff would flow from the northwest corner of the project to the southeast corner and ultimately outlet the site via Whitewater Club Drive. The southerly parcel is bounded to the east by an existing levee and separates the southerly parcel from the Whitewater Storm Channel.

- **The proposed stormwater conveyances and receiving retention basins are designed to address these conditions. Pertaining to mudflow, less than significant impacts are expected.**

Federal Regulatory Background

The Federal Emergency Management Agency (FEMA) evaluates flood hazards, including areas of significant potential flooding for the City and its planning area. The FEMA Flood Insurance Rate Maps (FIRMs) serve as the basis for determining the need for and availability of federal flood insurance. According to FIRM panel 06065C1557G, effective August 28, 2008, the majority of the project lies within Zone X Shaded, an area described as having a reduced flood risk due to levee. *However, the Whitewater River West Bank Levee is not a certified levee through FEMA. As stated on the FIRM, the levee is identified as a "Provisionally Accredited Levee" or PAL. A PAL designation identifies the levee as not yet certified or accredited but reasonably expected to continue to provide 1% annual chance flood risk reduction*. A southwestern portion of the project occurs in a Zone X while a small portion of the project is situated within Zone AE. The three flood zone designations are described as follows.

Zone X Shaded: This zone applies to areas protected by the 1-percent-annual-chance flood by a levee, areas within the 0.2-percent-annual-chance floodplain, areas of the 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile. No Base Flood Elevations or depths are shown within this zone.

Zone X: Zone X corresponds to areas outside of the 1-percent and .2-percent-annual-chance floodplains. No Base Flood Elevations are shown within these zones.

Zone AE: This designation applies to areas subject to inundation by the 1-percent chance flood event determine by detailed methods. Base Flood Elevations are shown. Mandatory insurance purchase requirements and floodplain management standards apply.

National Flood Insurance Program (NFIP) maps are based on exiting, rather than proposed, conditions. Because flood insurance is a financial protection mechanism for real-property owners and lending institutions against existing hazards, flood insurance ratings must be made accordingly. However, communities, developers, and property owners often undertake projects that may alter or mitigate flood hazards and would like FEMA's comment before constructing them.

According to the Flood Hazards map (Figure 6-5) in the Safety Element of the City of Palm Springs General Plan, the project is subject to three flood zones consistent with the FEMA designations, as described below:

- Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to the 100-year flooding with average depths of less than one (1) foot or where the contributing drainage area is less than on square mile (Zone X Shaded).

- The remaining southwest portion of the property is mapped as being outside of the 500-year flood (Zone X).

- Areas of the 100-year flood; base flood elevations and flood hazard factors determined (Zone AE).

Surface Water Quality

As previously discussed, the proposed development reduces its potential to impact surface water quality by adhering to the established water quality and stormwater regulations under the regulatory framework of the National Pollution Discharge Elimination System (NPDES) under the Clean Water Act during construction and during the life of the project.

Concerns relating to water quality during construction include the containment and control of any potential construction-related pollutants and sedimentation through the implementation of the best management practices identified for this project in a Storm Water Pollution Prevention Plan (SWPPP), which is a required plan that will undergo review by the State Water Resources Control Board. To ensure the proper implementation, such plan may only be developed by a Qualified SWPPP Developer (QSD) and implemented under the responsible charge of a Qualified SWPPP Practitioner (QSP). To prevent water quality impacts that may result from fugitive dust, the project will also comply with the regulations of the South Coast Air Quality Management District's (SCAQMD), which include additional best management practices and maintenance. The development of the Project will require the construction of onsite Stormwater facilities designed in accordance with Municipal Separate Storm Sewer System (MS4) within the Whitewater River Watershed (Order No. R7-2013-0011 and NPDES No. CAS617002). Project Improvement Plans will include the review and approval of a Final Water Quality Management Plan. The source control, site design and treatment control Best

Management Practices (BMPs) required for the project would ensure that the proximate receiving waters (Whitewater River and Coachella Valley Stormwater Channel), are not adversely impacted by project pollutants.

D. Potentially Significant Impacts

Development of the Serena Park Project is not anticipated to result in potentially significant impacts to hydrology and water quality as discussed above.

E. Standard Conditions (SC) and Mitigation Measures (MM)

The following Standard Conditions and Mitigation Measures are expected to reduce any hydrology and water quality impacts that could result during project development.

SC 4.8-1: The developer shall prepare and implement, throughout all lot disturbance and construction activities that exceed 5000 s.f. a Fugitive Dust (PM10) Control Plan to aid in minimizing erosion related issues associated with street grading and utility installation.

SC 4.8-2: The developer shall prepare and implement, throughout all construction activities greater than one acre, a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the National Pollution Discharge Elimination System (NPDES) Permit regulations. Construction site Best Management Practices (BMPs) shall be implemented to prevent any excess storm flows, or contamination of water that could occur as a result of all future construction activities within the proposed project.

SC 4.8-3: The developer shall submit Preliminary and Final Water Quality Management plans prepared in accordance with the Municipal Separate Storm Sewer System (MS4) within the Whitewater River Watershed (Order No. R7-2013-0011 and NPDES No. CAS617002.) Plans shall be submitted to the City for review and approval prior to the issuance of a Grading Permit and implemented throughout the life of the project.

SC 4.8-4: The developer shall ensure that the project development complies with all applicable state codes, the City's Water Efficient Landscape Ordinance and the water conservation recommendation of the California Department of Water Resources and the applicable water districts.

F. Level of Significance after Mitigation

Following implementation of the Proposed Project, Standard Conditions and Mitigation Measures discussed in this section and throughout this document, the Project on the existing

Serena Park is expected to result in less than significant impact related to Hydrology and Water Quality.

Since the proposed project would comply with all relevant State and County standards and regulations, it is judged that neither the project's incremental contribution nor the cumulative effect of water quality impacts would be significant.

Although the project would create additional impervious surfaces, the proposed retention basin improvements would prevent any contribution of urban runoff up to the 100-year event, therefore cumulative impacts are not anticipated.

G. Resources

Coachella Valley Water District 2010 Urban Water Management Plan Final Report, MWH July 2011.

Riverside County Integrated Project (RCIP) General Plan Final Program Environmental Impact Report Volume 1, County of Riverside Transportation and Land Management Agency (October 2003).

Palm Springs General Plan Draft Environmental Impact Report, The Planning Center, October 2007.

Preliminary Hydrology Report for Palm Springs Country Club (Tentative Tract Map No. 36691), MSA Consulting, Inc., January 20, 2014

Project Specific Preliminary Water Quality Management Plan for Palm Springs Country Club (Tentative Tract Map No. 36691), MSA Consulting, Inc., January 16, 2014

Section 4.15 – Utilities and Service System

This Section is included in its entirety for context. However, new language has only been added to pages 4.15-2 & 3, and 4.15-12)

4.15 UTILITIES AND SERVICE SYSTEMS

Implementation of the Serena Park project will have impacts to utilities and service systems. These impacts were assessed by reviewing resources which include, but are not limited to the City of Palm Springs General Plan (Adopted in 2007), the City of Palm Springs General Plan Environmental Impact Report (The Planning Center, March 2007), and written and verbal communications with agencies/service providers. A complete list of resources utilized is included following the analysis.

A. Regional Setting

Utilities and service systems are made available by private and public agencies in Riverside County. Major utilities and service systems providers in Coachella Valley include the following: Coachella Valley Water Department (CVWD), Desert Water Agency (DWA), Palm Springs Disposal Services (PSDS), Waste Management of the Desert, Southern California Edison (SCE), The Gas Company, Verizon, and Time Warner Cable. Some municipalities in Coachella Valley also provide utility services, such as the City of Palm Springs for wastewater services.

B. Existing Conditions

The proposed Serena Park project is located in the Coachella Valley region of Riverside County, California, and lies within the City of Palm Springs, corporate limits. The project site is located upon approximately 156 +/- acres east of Gene Autry Trail and north of Vista Chino. The property was formerly used as a golf course which was eventually closed for economic reasons and now lays vacant. There are two on-site wells that historically were utilized for golf course irrigation. These wells are capped and inactive and will not be utilized as part of the project. The property configuration is based upon the fairway alignment of the former golf course and has two distinct subareas: a northern portion and a southern portion. These subareas surround two existing residential enclaves, a mobile home park on the north and a condominium development on the south. Contiguous property that contains the Whitewater Floodplain east outside the project boundaries is also owned by the applicant but is not a part of the project.

The project proposes approximately 429 residential units. These will consist of 137 single story, attached residences in the northern portion (Attached Residential Subarea) and 292 detached single-family residences on the southern portion (Single Family Subarea). The subarea in the Whitewater Wash (Floodplain Subarea) is designated as "Not-A-Part" and is not proposed for development. Surrounding land uses in the project vicinity include undeveloped Indian Reservation land belonging to the Agua Caliente Band of Cahuilla Indians, existing medium and low density residential development, and habitat conservation area in the Whitewater River Floodplain.

According to the Palm Springs Master Drainage Plan Map, existing storm drain facilities are located south of the project in Vista Chino. *Line 3 of the Master Plan of Drainage is a major feature of the driange plan and will traverse the Serena Park property in an east-west direction. This line is proposed to be the major conduit of storm flows from the northern area of Palm Springs into the Whitewater Channel and to date, no part of this storm drain facility has been constructed.* The previous use of the property did not entail the introduction of impermeable surfaces which increase stormwater runoff. Consequently, the site hosts no flood or stormwater conveyance facilities.

Existing utilities and service systems found on the project site and the general project vicinity are described below.

Wastewater Services

Wastewater services in the Palm Springs corporate limits, including the PSCC project site, are provided by the City of Palm Springs. In general, the municipal sanitary sewer system consists of a network of sewer pipelines ranging from 6 to 42 inches in diameter, five pump stations and the Palm Springs Wastewater Treatment Plant.

The Palm Springs Wastewater Treatment Plant is located on 4375 Mesquite Ave. near Gene Autry Trail. The plant's current design flow is 10.9 million gallons per day, and presently processes a daily average of 7 million gallons per day. The plant also includes primary mechanical and secondary biological treatment of all effluent collected within the City. Secondary treated wastewater is transported to the nearby Desert Water Agency tertiary treatment plant for additional processing and distribution for parks and golf course irrigation. Operations, maintenance, and safety at the Palm Springs Wastewater Treatment Plant are conducted in accordance to environmental and regulatory standards.

The undeveloped Serena Park project site currently does not contain any sewer lines or components. City sewer mains/facilities are available in the streets surrounding the project site. Existing 8-inch, sewer mains currently serve the residences north, south, west, and contained within the project site. The project proposes to connect to existing lines at Verona Road and East View Road, and Whitewater Club Drive. In order to serve individual units, 8" lines will be installed around the project's perimeter streets and in the Cul de Sacs and hammerhead courtyard areas. The existing 8" line extending from Whitewater Club Drive and Farrell Drive, to Farrell Drive and Raquet Club Drive will be upgraded to 12" to manage the increase in demand from the proposed project.

Stormwater Management

The National Pollutant Discharge Elimination System (NPDES) established by the Clean Water Act of 1972, addresses non-point source pollution within counties with a storm

drain system that serves a population of 50,000 or more. Non-point source refers to the introduction of pollutants into water bodies from sources that are spread out and difficult to control such as roadways, parking lots, yards and farms. Rain and urban runoff transport pollutants such as bacteria, sediment, oil, grease, heavy metals, pesticides, fertilizers and other chemicals to the area's streams and other water bodies.

In the City of Palm Springs, the Director of Palm Springs Public Works Department is the local enforcer of the NPDES. Under NPDES, the local regulator is responsible for control measures including illicit discharge detection and elimination, construction site storm-water runoff control, post-construction storm-water management in new development and redevelopment and pollution prevention and good housekeeping for municipal operations (Earth Consultants International, 2005.)

The State Water Resources Control Board (SWRCB) requires construction sites over one acre in size to obtain permit coverage and comply with the NPDES. A requirement of this program is the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

The SWPPP has two major objectives: (1) to help identify the sources of sediment and other pollutants that affect the quality of storm water discharges and (2) to describe and ensure the implementation of Best Management Practices (BMPs) to reduce or eliminate sediment and other pollutants in storm water as well as non-storm water discharges (further discussions found in Section 4.7 Hazards and Hazardous Materials and Section 4.8 Hydrology and Water Quality.)

The previous use of the property did not entail the introduction of impermeable surfaces which increase stormwater runoff. Consequently, the site hosts no flood or stormwater conveyance facilities. The proposed development will include the construction of private streets, driveways, and residences. The introduction of these impermeable surfaces will also include provisions for stormwater conveyance and quality treatment.

The City of Palm Springs operates a stormdrain line (Line 3) that is planned to transverse the property as an extension of San Rafael Drive as a part of the City's Master Drainage Plan. Upon development of Line 3, stormwater will be conveyed through the line to be discharged in the Whitewater River. *However, no part of the stormdrain line has been constructed to date. Individal projects have typically not been required to install adjacent segments of the system, but since 1982 have been required to pay the adopted Acreage Drainage fee in lieu of construction.*

The project proposes to retain storm water on site within two retention basins. Storm water flows will be collected in project streets, curb and gutter, and catch basins then conveyed through a private storm drain system to two storm water retention basins.

The project's private and public parks will double as the project's storm water retention facilities. Expected storage capacity of the project's retention facilities is approximately 20 acre feet. Furthermore, site design, source control and treatment control BMPs will be implemented in the project design and throughout the life of the project to ensure that the residential complex complies with the regional water quality objectives.

The Serena Park Project occurs immediately south of the Whitewater River Levee. According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM), the project site has been designated as "Zone X Protected by Levee" while to the east of the project, land is designated as "Zone AE". Under a "Zone X Protected by Levee" designation, the project site is not located within a 100-year flood hazard area.

Domestic Water Service

Domestic water services are provided by Coachella Valley Water District (CVWD), Desert Water Agency (DWA), and Mission Springs Water District (MSWD) to the City of Palm Springs. Local groundwater basins are the primary source of water for the above water districts. The Palm Springs area is generally served by the following groundwater subbasins: Whitewater River, Mission Creek, and Indio. Other sources of domestic water supply include the surface run-off from the local mountains, and imported water from the Colorado River aqueduct and the State Water Project (SWP). The SWP water supply is limited to groundwater replenishment purposes only.

The majority of the Palm Springs area including the Serena Park project site are within the service boundary of the Desert Water Agency (DWA). Overall, the Desert Water Agency (DWA) facilities consist of wells, booster plants, reservoirs and a network of pipelines ranging from 8" - 42" in diameter.

DWA extracts groundwater from the Whitewater River subbasin which has been in a state of overdraft. A groundwater basin is considered in overdraft condition when the amount of water extracted exceeds the amount of water replenishing the basin over a period of time. (CVWD Urban Water Management Plan, 2005) In general, increased urbanization and groundwater pumping in the Coachella Valley have largely contributed to the decline of water levels in the Whitewater subbasin.

The Department of Water Resources indicates that the Whitewater subbasin has a total groundwater capacity of 29,800,000 acre-feet, based on 1935-1936 groundwater levels and utilizing a maximum depth below surface of 1,000 feet. DWR also indicates that according to Tyley (1974), groundwater in storage in the Whitewater subbasin is approximately 10,200,000 acre feet in the first 700 ft of saturated deposits. (Value excludes 1,520,000 acre feet of groundwater in storage for the Garnet Hill area) Tyley (1974) estimates that based on water level changes, groundwater stored in the

Whitewater subbasin is being depleted at the average rate of 33,000 acre feet annually from 1953 to 1967.

Current annual average decrease of groundwater storage is suspected to be higher, given the increased population and development in the Coachella Valley. DWA and CVWD continue to actively participate in the implementation of management actions that reduces groundwater basin overdraft and restoring the Coachella Valley groundwater basins to a long-term balance state. According to the 2010 CVWD Urban Water Management Plan, with the recent acquisition of additional SWP water, overdraft in the upper Whitewater River subbasin is expected to be eliminated by 2015.

The project site is not currently receiving domestic water services. Two existing private wells on the site were previously used to irrigate the golf course facilities, however these wells will remain capped and unactive. Consequently, there are no existing water lines on the project site. Existing 8-inch, 12-inch, 18-inch, and 30-inch water mains with related water accessories currently serve the residences north, south, west, and surrounded by the project site. The project proposes to connect to existing lines at Verona Road and East View Road, Whitewater Club Drive, and San Rafael Drive. In order to serve individual units, 12" lines will be installed around the project's perimeter streets while 8" lines will be installed in the Cul de Sacs and hammerhead courtyard areas. (See Project Description and Section 4.8 Hydrology and Water Quality).

Solid Waste Management

Palm Springs Disposal Services (PSDS) provides solid waste disposal services to the City of Palm Springs. PSDS is a local franchise and its main office is located at 4690 East Mesquite Avenue in Palm Springs. PSDS services include residential and commercial solid waste collection, recycling and green waste collection. Collected solid waste by PSDS is transported to the Edom Hill transfer station. The California Integrated Waste Management Board (CIWMB) reports that for 2013, residents and business in the City of Palm Springs generated 64,182.06 tons of solid waste.

Landfills

On-going development and construction in the Coachella Valley has resulted in the increased generation of solid waste. In recent years, two landfills in Coachella Valley have been closed for reaching maximum capacity - the Coachella landfill in 1997 and the Edom Hill landfill in 2004. Subsequently, the newly constructed Edom Hill Transfer Station became operational in 2004, which currently serves as the depot for solid waste collected from the City of Palm Springs, other major cities in the Coachella Valley, and a portion of the surrounding unincorporated areas of Riverside County. According to the Palm Springs Disposal Services website, Edom Hill Transfer Station is operated by the Waste Management North America. The transfer station is on an 8-acre site located at

70-100 Edom Hill Road in Cathedral City. It has a permitted capacity of 2,600 tons of waste and recyclables per day.

Edom Hill Transfer Station accepts a variety of waste types such as agricultural, construction/demolition, food wastes, green materials, industrial, and tires. From the Edom Hill Transfer Station, collected solid wastes are then transferred to the Lambs Canyon Landfill, the Badlands Landfill, and the El Sobrante Landfill.

The Lamb Canyon Landfill in the City of Beaumont has a maximum permitted capacity of 34,292,000 cubic yards and an estimated remaining capacity of 20,908,171 cubic yards. This landfill is authorized to accept 3,000 tons of solid waste per day. Lamb Canyon Landfill is expected to close on January 1, 2023.

The Badlands Sanitary Landfill is located in Moreno Valley. It is permitted to accept 4,000 tons (maximum) of solid waste daily. Maximum permitted capacity for the Badlands Landfill is 30,386,322 cubic yards and its remaining capacity is at 21,866,092 cubic yards. The estimated closure date for this landfill is January 1, 2016.

The El Sobrante Landfill is located in the City of Corona. It has a maximum permitted capacity of 184,930,000 cubic yards and a remaining capacity of 145,530,000 cubic yards. Disposal at this landfill is limited to 10,000 tons per day. El Sobrante is anticipated to close on January 1, 2030.

Hazardous Materials

According to the State of California, hazardous materials are substances that are toxic, ignitable or flammable, reactive and/or corrosive. The State also defines an extremely hazardous waste as a substance that demonstrates high acute or chronic toxicity, carcinogenic or bioaccumulative properties, is persistent in the environment, or is water reactive.

All hazardous materials are required to be disposed at a Class I landfill. At present, there are no Class I landfills within Riverside County. Hazardous waste in Riverside County is transported to active Class I landfills located in Kern County and Santa Barbara County. Some waste is also disposed of out of State.

The County of Riverside Department of Environmental Health, Hazardous Materials Management Division, provides a Household Hazardous Waste Site at 1100 S. Vella Rd, in Palm Springs. Household hazardous waste includes aerosol cans, antifreeze, auto batteries, bleach, cleaners, deodorizers, drain cleaner, fertilizer, floor wax, furniture polish, household and garden chemicals, latex paints, motor oil, oil paints, pesticides, pool chlorine, propane tanks, spot remover, and weed killer. This waste site also accepts antifreeze, battery, oil and latex paint (ABOP). Adverse environmental impacts

can occur when household hazardous materials are disposed of in unlined sanitary landfills, where these materials may leach through the soil and contaminate groundwater (County of Riverside Transportation and Land Management Agency, 2003.)

The City of Palm Springs participates in the Household Hazardous Waste program and has a drop-off facility located at the Palm Springs Fire Department Training Center, 3000 East Alejo Road.

Additional discussions regarding hazardous materials are also included in Section 4.7 Hazards and Hazardous Materials.

Recycling

The State of California requires local municipalities to comply with state Assembly Bill 939, which mandates a 50% waste diversion rate. This means that at least 50% of the total solid waste produced by a city, must either be recycled or brought to a recycling facility. According to the California Integrated Waste Management Board (CIWB), the City of Palm Springs has diverted 60% of solid waste from landfills during 2004.

The City of Palm Springs and the Palm Springs Disposal Services provide recycling programs and services. Recyclable materials include aluminum cans, plastic bottles and milk jugs, phone books, newspapers, and corrugated cardboard. Recycling centers are located at the Palm Springs Mall and Smoke Tree Center.

Other Solid Waste Disposal Services

PSDS offers green waste collection service to single-family residents in Palm Springs. Pick up schedule for green waste, such as tree and grass clippings, is once a week. PSDS encourages green waste recycling. The following facilities accept green waste for recycling purposes: California Bio-Mass in Thermal, SoCal Recycling in Thousand Palms and Palm Springs Disposal Services in Palm Springs.

Additional services provided by PSDS include document shredding, motor oil disposal, bulk item hauling, household hazardous waste collection, special events cleanup and electronic waste pickup.

Natural Gas Service

The Southern California Gas Company, a public utility, is the natural gas service provider to over 20.9 million customers in more than 500 communities, including the City of Palm Springs and its sphere-of-influence areas. The California Public Utilities Commission (CPUC) and Federal Energy Regulatory Commission (FERC) regulate Southern California

Gas Company. The availability of natural gas services is dependent upon current conditions of gas supply and regulatory policies.

The Serena Park project site is within the service area of Southern California Gas Company. The project site currently is undeveloped and no natural gas facilities are located onsite. Gas service extends across the site as an extension of a 2" line in Volturno Road to service the area of development within the southern subarea property. Gas service to the project is expected be provided from the nearby existing 4" and 3" gas mains located in Verona Road, Farrell Drive, Sunrise Way, and Joyce Drive. No special Gas Company conditions or requirements are anticipated.

Electric Service

Southern California Edison (SCE) is the electric service provider to Palm Springs and the City's sphere-of-influence. Southern California Edison is regulated by the California Public Utilities Commission and Federal Energy Regulatory Commission (FERC). Electrical power is generated by a combined system of gas and coal production, oil, hydroelectricity, nuclear production, solar and wind technology, and energy purchase. There are existing overhead and underground distribution and transmission lines on the subject property. The offsite distribution overhead lines are located along the southern and western boundaries of the site's southern subarea, and the southern boundary of the site's northern subarea. Distribution lines also cross the site at the southeastern corner north of the Verona and East View Road Intersection. Power lines in the vicinity could potentially provide all the power needs to the project site. Improvements onsite will include extending electrical services to each dwelling unit. All overhead distributions are typically conditioned by the City to be undergrounded.

Telephone Services

Time Warner and Verizon provide telecommunication services to the City of Palm Springs. Verizon is regulated by the California Public Utilities Commission. A wide array of products and telecommunication services for residential and commercial uses are offered by Verizon. In addition to telephone services, Verizon offers DSL and internet services, wireless services, television technology utilizing digital fiber optic network and state-of-the art satellite technology. The 2007 City General Plan Update indicates that there are adequate telecommunication facilities currently available to serve the City.

The Serena Park project site is within the service boundaries of Verizon. Currently, there is a direct buried cable system along the north side of Verona Road, the south side of Whitewater Club Drive, the south side of San Rafael Drive, and the east side of Sunrise Way. Buried cable also extends onto the site at the extreme southeast portion near the intersection of Verona Road and East View Road. Additionally, there is aerial cable along the southern boundary of the project's northern subarea.

Cable Services

The City of Palm Springs is served by Time Warner Cable as a distributor of cable internet, phone and television services. The subject site is currently vacant, but existing residential enclaves within the project are served with TWC services. TWC indicates that no unusual constraints are associated with serving the project site.

C. Utilities and Servie System Impacts

Threshold Criteria

Thresholds of significance were established based on the criteria found in the CEQA Guidelines and the standard CEQA Environmental Assessment Form. The following questions are relevant to determining whether a project could have a significant impact to utilities and service systems. Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Project applicant will construct all utilities and infrastructure associated with the development of the PSCC residential project. Individual lot purchases will be responsible for connection to provided infrastructure. Potential impacts resulting from the

construction of project related utilities and infrastructure are expected to be less than significant.

Wastewater Services

The subject property is currently vacant. The proposed Project will result in the construction of 429 residential lots, interior streets, and integrated open space, all proposed to be located within APNs 669-480-027, 669-590-066, and 501-190-011. The project would be connected to public sewer system provided by DWA. An 8" sewer main is located in Farrelll Dr., Verona Rd., East View Rd., and Sunrise Way. Wastewater is transported to Veolia North Amercia's Treatment Plan, a 10.9 mgd trickling filter plant. located at 4375 E. Mesquite Dr. Wastewater from the proposed project would be typical of other residential projects in Palm Springs.

- **Less than significant impacts are anticipated to exceeding wastewater treatment.**

The average household size is 1.95 persons in the City of Palm Springs. (2012 U.S. Census) Therefore, new residents potentially generated by the project development are estimated to be in the range of 837 persons. Wastewater flow factors cited in the City of Palm Springs Sanitary Sewer System Management Plan (2006) were utilized herein, to estimate wastewater generated by the proposed uses at the project site. The Sanitary Sewer System Management Plan estimates average wastewater flow at 250 GPD per dwelling unit. At 250 GPD, build out of the project could potentially generate approximately 107,250 gallons of wastewater per day. See Table 4.15-a below.

Table 4.15-1
Potential Wastewater Generated
During Serena Park Project Buildout

Proposed Uses	Number of Units or Square Feet	*Flow Rate (gpd/unit)	Flow (gal./day)
Residential	429 Units	250	107,250
TOTAL			**107,250 gal./day**

Source: City of Palm Springs Sanitary Sewer System Management Plan (May 2006). Veolia Water North America – Palm Springs.

Development of the Serena Park project requires the extension and installation of sewer infrastructure to the project site. According to preliminary engineering plans, all sewer lines throughout the project will be installed within the proposed rights-of-way of the internal street system and connection stubs will be established at the locations of each residential site, providing for full services once homes are constructed. To reduce the impact of the proposed project on the existing sewer system, the proposed sewer

system will separate flows towards two separate sewer systems. Per the MSA sewer system report prepard in January 2014 (Appendix M), The project is proposing to connect at two locations:

> Point of Connection 1 - Racquet Club Road and Farrell Drive; this connection involves connecting to the existing 12-inch main in Farrell Drive and extending a new 10-inch main along Farrell to Whitewater Club Drive (approximately 400-feet of 10-inch pipe). This new 10-inch main will reduce the pipe surcharge projected by the year 2025 flows as inidicated in the 2009 Palm Springs Sewer Master Plan.
>
> Poing of Connection 2 – on Whitwater Club Drive, north of Verona Road and Los Alamos Road intersection. Year 2025 flows downstream from this point of connection do not appear to have a surcharge.

The Sewer system reports concludes that by replacing the 8-inch pipe with a 12-inch will reduce the pipe flow level to 45% of the allotted pipe capacity and is the recommended improvement**.** The capacity analysis results indicate the project sewer system combined with the **r**ecommended improvement at POC 1 will satisfy the City of Palm Springs Sewer Master Plan requirements while also alleviating an existing surcharge condition within the existing Palm Springs sewer Collection system.

Proposed sewer infrastructure will comply with applicable wastewater treatment requirements and City standards. The proposed project will be consistent with the adopted General Plan Policies given that the project developer will pay sewer fees associated with project development. According to the City of Palm Springs, it has the capacity to accommodate wastewater generated by the proposed project and the construction of new wastewater treatment facilities is not required. Additionally, the Project is anticipated to attract second homebuyers which will reduce the year-round impacts related to wastewater generation.

- **No significant impacts to existing sanitary wastewater services is expected to result from the development of the proposed project.**

Stormwater Management

Development of the proposed project is not expected to alter predominant existing drainage patterns on-site. The project site has been disturbed previously during its development as a golf course which altered its natural drainage patterns. Furthermore, the construction of the RCFC Flood Control Levee has eliminated the possibility of Whitewater River flows to traverse the site. Nonetheless, implementation of the proposed project which includes the creation of impervious surfaces is anticipated to affect current drainage patterns on-site.

According to the Palm Springs Master Drainage Plan Map, existing storm drain facilities are located south of the project in Vista Chino. *Line 3 of the Master Plan of Drainage is a major feature of the driange plan and will traverse the Serena Park property in an east-west direction. This line is proposed to be the major conduit of storm flows from the northern area of Palm Springs into the Whitewater Channel. No part of the stormdrain line has been constructed to date. Individal projects have typically not been required to install adjacent segments of the system, but since 1982 have been required to pay the adopted Acreage Drainage fee in lieu of construction.*

The overall site planning for Serena Park incorporated an open space corridor (minimum width 45') through the site that would be part of the open space system maintained by the HOA. This corridor is designed to be dedicated on the Final Tract Map for the purpose of reserving the area in which Line 3 could eventually be constructed at such time that Line 3 were to become a priority. The project proposes to convey and retain all stormwater flows on-site by way of a private stormdrain and retention basin system. Two retention basins in the form of public and private parks will retain the stormwater flows from the site. Both basins are located in the southern subarea of the development, Retention Basin 1 along Street A in the center of the subarea, and Retention Basin 2 in the southeast corner of the subarea. These basins have a combined capacity of 871,625 Cubic Feet (Approx. 20 Acre Feet). A private stormdrain system beneath street ROW and lettered lots will convey stormwater flows to the retention basins.

Section 4.8 Hydrology and Water Quality provides a detailed discussion regarding storm water retention.

Temporary impacts to water quality during construction will be mitigated and reduced to less than significant levels through required preparation and implementation of a Storm Water Prevention Pollution Plan throughout all construction activities.

- **Less than significant impacts to storm water drainage facilities or expansion are expected to result from the future development of the proposed project.**

Domestic Water Services

Development of the project from its present condition will increase the existing demand for domestic water supply and services. However, in comparison to the site's previous use as a golf course, the site is expected to use less water as a residential development. By correspondence, DWA confirms that the project site occurs within its geographical boundaries. As shown in Table 4.15-2, the annual water demand generated by the project is estimated at 687.8 ac-ft/yr acre-feet. Currently, there is no water demand on the project site given that it is undeveloped.

Table 4.15-2
Estimated Annual Water Demand
at Project Buildout

Proposed Land Uses	Units	*Demand Factor	Annual Water Demand (acre feet/year)
Residential	429 Units	1,400 gallons/day	687.8 ac-ft/yr
TOTAL			**687.8 ac-ft/yr**

*Source: Desert Water Agency 1 acre feet = 326,000 gallons

The project proposes to extend domestic water service to serve the project by way of private on-site infrastructure. Preliminary engineering plans propose 12-inch water main encompassing the project's boundaries with 8-inch mains beneath project cul-de-sacs and hammerhead courtyard area to serve residences. The private system will connect to existing mains at Whitewater Club Drive and San Rafael Drive. Off-site improvements to dometic water services will not be needed.

Per the DWA will serve letter dated February 2015 (Appendix L), the agency will provide water service to the site provided on-site water system improvements and portions of the property be set aside for development of domestic water wells. The DWA Master Water Plan shows a 2400 gpm proposed replacement well plant with a 12" proposed pipeline on the northern subarea of the proposed Serena Park project.

Facilities will be analyzed during the design process of any future development and facility fees will be collected to aid in financing any needed extensions/expansions necessitated by the project. Future design of the development will be expected to follow water conservation guidelines included within the Palm Springs General Plan and Desert Water Agency standards to mitigate the impacts to public water supplies.

- **Less than significant impacts to domestic water services are expected to result from the future development of the proposed project.**

Solid Waste Management

At present, no solid waste services is generated on the undeveloped project site. Implementation of the proposed residential project has the potential to generate approximately 361 tons of solid waste per year. The proposed land uses on the project site is not expected to produce unusual high quantities of solid waste or hazardous waste materials. Construction of the project would generate waste materials, however, a majority of these materials would be readily recyclable such as wood, concrete, metal and soil. Construction and demolition materials would be hauled and disposed of at a qualified recycling facility.

Table 4.15-3
Estimated Solid Waste Generated
During Buildout

Land Use	Number of Units or Square Feet	*Generation Rate (tons / unit /year)	Waste Generation (tons/year)
Residential	429 units	.82 / unit / year	360
TOTAL			**360 tons/year**

Source: City of Palm Spring General Plan EIR (2007)

Collected solid waste from the project site will be transported to the Edom Hill Transfer Station which has a permitted capacity of 2,600 tons of waste and recyclables per day. During buildout, the Project could contribute approximately 1,983 pounds or 0.99 tons of solid waste to the local transfer station daily. All solid waste activities resulting from the implementation of the proposed project will be carried out in compliance with all State, Federal and local statues regulating solid waste.

- **No significant impacts to solid waste services are expected to result from project implementation.**

Electric Services

The project site is currently vacant and does not currently generate any demand for electric services. Future development of proposed residential uses on the project site will generate demand for electric services. The annual electrical demand during buildout of the project is approximately 2,475,660 kwh/yr. (See Table 4.15-3)

There are existing overhead and underground distribution and transmission lines on the subject property. The offsite distribution overhead lines are located along the southern and western boundaries of the site's southern subarea, and the southern boundary of the site's northern subarea. Distribution lines also cross the site at the southeastern corner north of the Verona and East View Road Intersection. Power lines in the vicinity could potentially provide all the power needs to the project site. Improvements onsite will include extending electrical services to each dwelling unit. All overhead distributions are typically conditioned by the City to be undergrounded.

Project developer will adhere to City and appropriate agencies' development standards and requirements. Project design will incorporate energy efficient standards that comply with Title 24, as required by state law. No significant impacts to electric services are expected to result from the implementation of the project.

Table 4.15-4
Estimated Annual Electrical Demand
At Project Buildout

Land Use	Number of Units or Square Feet	*Usage Rate	Estimated Demand (kwh/yr)
Residential	429 units	5,626.50 kwh/unit/yr	2,413,768 kwh/yr
TOTAL			**2,413,768 kwh/yr**

*Source: CEQA Air Quality Handbook, Table A9-11, prepared by South Coast Air Quality Management District, April 1993.

Natural Gas Services

Because the project site is currently vacant, there is no natural gas demand. Implementation of the proposed project will increase the demand for natural gas services. During buildout, the proposed project could require approximately 35,191,200 cubic feet of natural gas per year. (See Table 4.15-4) Natural gas consumption at the project site is associated with residential uses. Project design will incorporate natural gas conservation measures. The proposed project is not expected to have significant impacts to natural gas services.

Table 4.15-5
Estimated Annual Natural Gas Consumption

Land Use	Quantity	*Usage Factor	Annual Natural Gas Consumption
Residential Single-Family	429 units	6,665.0 cubic feet / unit /month	**8,797,800 cubic feet/year**

*Source: CEQA Air Quality Handbook, Table A9-12, prepared by South Coast Air Quality Management District, November 1993.

Telephone Services

Extension of telephone conduits/lines and appurtenances will be necessary to provide telecommunication services to future residents of the proposed project. Verizon will provide telephone services to the project site. Significant impacts to telephone services are not expected to result from project development.

Cable Service

Implementation of the proposed PSCC project will require the extension/installation of cable lines and related facilities. Time Warner Cable will provide cable services to the project site. No significant impacts to cable services are expected to result from the implementation of the proposed project.

D. Potentially Significant Impacts

Development of the Serena Park Project is not anticipated to result in potentially significant impacts to utilities and service systems as discussed above.

E. Standard Conditions (SC) and Mitigation Measures (MM)

SC 4.15-1: Project developer will pay for the costs of construction and expansion of water, sewer/wastewater, and storm drainage improvement and other public utilities which are necessitated by the proposed project prior to building permits.

SC 4.15-2: Project developer will notify utility agencies of its intentions to develop property in the early stages of the development process to provide sufficient time to plan for necessary improvements.

SC 4.15-3: Prior to issuance of permit, Project Developer will submit onsite utility design.

SC 4.15-4: Domestic water services to said project/site shall be subject to all applicable rules, regulations, ordinances, and orders of the Desert Water Agency. Project developer shall complete financial arrangements with DWA, along with the installation of required facilities, prior to DWA providing domestic water services.

SC 4.15-5: Watsewater services to the project site shall be subject to all applicable rules, regulations, ordinances and orders of the City of Palm Springs. Project Developer shall complete financial arrangements with the City, along with the installation of required facilities, prior to the City providing sewer services.

F. Level of Significance after Mitigation

Potential impacts to utilities and service systems resulting from Project development are considered less than significant after standard conditions are implemented.

G. *Resources*

WWW.calrecycle.ca.gov Disposal Reporting System, accessed March 2014, and May 2015

CEQA Air Quality Handbook, prepared by South Coast Air Quality Management District, April 1993.

City of Palm Springs 2007 General Plan, prepared by The Planning Center, Adopted October 2007.

City of Palm Springs General Plan Environmental Impact Report, prepared by The Planning Center. March, 2007

City of Palm Springs Sanitary Sewer Management Plan (January 2014), prepared by Veolica Water North America – Palm Springs.

Riverside County Integrated Project General Plan Final Program Environmental Impact Report, Volume I, prepared by Riverside County Transportation and Land Management Agency Planning Department, October 2003.

MSA Consulting, Sewer System Report, June 2014

0.4 MITIGATION MONITORING REPORTING PROGRAM

Section 0.4 contains the Mitigation Monitoring Reporting Program (MMRP). The MMRP is a matrix that identifies the mitigation actions to be taken to avoid significant environmental impacts. The MMRP is fully enforceable through permit conditions, agreements or other measures. The City of Palm Springs is the designated lead agency for the MMRP and is responsible for the review of all monitoring reports and enforcement actions.

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity

0.4 MITIGATION MONITORING REPORTING PROGRAM

Air Quality

MM 4.2-1: During grading, earth disturbing and construction activities, the project developer shall employ adequate watering techniques to partially mitigate the impact of construction-generated dust particulates. Portions of the project site that are undergoing earth moving operations shall be watered such that a crust will be formed on the ground surface and then watered again at the end of the day, as part of the construction specifications.	Project Contractor	During Grading and Construction Activities			
MM 4.2-2: During grading, earth disturbing and construction activities the project developer shall pave any construction access roads as soon as possible and clean after each workday. The maximum vehicle speed limit on unpaved road surfaces should be 15 mph.	Project Contractor	During Grading and Construction Activities			
MM 4.2-3: During grading, earth disturbing and construction activities the project developer shall ensure that all trucks maintain at least two feet of freeboard.	Project Contractor	During Grading and Construction Activities			
MM 4.2-4: During grading, earth disturbing and construction activities, the project developer shall ensure that trucks hauling dirt, sand, soil, or other loose dirt material off-site are covered and washed	Project Contractor	During Grading and Construction Activities			

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
off before leaving the site.					
MM 4.2-5: During grading, earth disturbing and construction activities, adjacent streets shall be swept if silt is carried over to adjacent public thoroughfares. The project developer shall provide required street sweeping.	Project Contractor	During Grading and Construction Activities			
MM 4.2-6: During grading, earth disturbing and construction activities, the project developer, per construction specifications, shall ensure that any vegetative ground cover to be utilized on-site shall be planted as soon as possible to reduce the disturbed area subject to wind erosion. Irrigation systems needed to water these plants shall be installed as soon as possible to maintain the ground cover and minimize wind erosion of the soil.	Project Contractor	During Grading and Construction Activities			
MM 4.2-7: During all grading and earth disturbing activities, the project developer shall comply with the provisions of the City of Palm Springs Municipal Code (Chapter 8.50 Fugitive Dust Control), which establishes minimum requirements for construction activities, unpaved roads, unpaved parking lots, disturbed vacant lands, and paved roads to reduce fugitive dust and PM10 emissions. A Fugitive Dust Control Plan describing fugitive dust sources at the site and the Coachella Valley Best Available Control Measures to be implemented for each fugitive dust	Project Developer and Project Contractor	Prior to Grading and Construction Activities			

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
source during any dust-generating activity from the Coachella Valley Fugitive Dust Control Handbook (SCAQMD; May, 2003) shall be prepared and submitted to the City of Palm Springs for approval, prior to the issuance of any grading permits or building permits associated with the project and prior to the initiation of any earth-moving operations.					
MM 4.2-8: Throughout all grading, earth disturbing and construction activities, the project developer shall comply with the Uniform Building Code (Chapter 70) and the Palm Springs Municipal Code (Section 9.60.040). The developer(s) of the site shall be responsible for compliance with all applicable City of Palm Springs blowsand control measures.	Project Developer and Project Contractor	During Grading and Construction Activities			
MM 4.2-9: Throughout all grading, earth disturbing and construction activities the project developer shall comply with all applicable SCAQMD Rules and Regulations including but not limited to the following: • Rule 403 (Fugitive Dust) specifies control measures for use in developing site specific fugitive dust control plans to minimize blowing dust from construction sites and insure the cleanup of construction-related dirt on approach routes to the site including: watering measures, chemical stabilizers, wind fencing, covering haul vehicles, bed liners in	Project Developer and Project Contractor	Prior to Grading and Construction Activities			

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
haul vehicles, wheel washers, and high wind measures; • Rule 1108 and 1108.1 prohibits the use of rapid and medium cure cutback asphalts as well as organic compounds in emulsified asphalts used during the construction process; and • Rule 1113 (Architectural Coatings) restricts the VOC content of any architectural coating materials used on-site to a maximum of 2.08 pounds of VOC per gallon.					
MM 4.2-10: Building construction on-site shall, at a minimum, comply with the 2013 statewide energy efficiency standards pursuant to California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings.	Project Developer	Prior to Issuance of Grading Permits			
MM 4.2-11: The project proponent shall comply with all applicable City of Palm Springs requirements regarding master planned bikeways (including a future Class I bikeway located top of the levee) and multi-purpose trails within and/or adjacent to the project site.	Project Developer	Prior to Issuance of Grading Permits			

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
MM 4.2-12: The architectural coatings used for the project shall have an average of 150 grams or less of VOC per liter to achieve net (mitigated) project emissions below 75 pounds per day.	Project Contractor	During Construction Activities			

Biological Resources

MM 4.3-1: The project proponent shall ensure that a burrowing owl preconstruction survey takes place at least 30 days prior to site disturbance. If an active burrow is found during the clearance survey, a biological monitor should be placed onsite during ground disturbance.	Project Developer	Prior to Grading and Construction Activities			
MM 4.3-2: The project proponent shall incorporate all relevant adjacency guidelines found in the CVMSHCP Section 4.5 during design and construction activities for the South Village.	Project Developer	Prior to Grading and Construction Activities			

Cultural Resources

MM 4.4-1: *A resource cultural inventory shall be prepared by a qualified archaeologist prior to project development.*	Project Developer	Prior to Grading and Construction Activities			

Geology and Soils

MM 4.5-1: The project contractors shall adhere to the recommendations contained within the project specific Geotechnical Report throughout grading and construction activities.	Project Contractor	During Grading and Construction Activities			

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
MM 4.5-2: All structural design shall adhere to the structural recommendations within the site specific Geotechnical Reports for each portion of the project. Minimum seismic design should comply with the most current edition of the California Building Code using the seismic coefficients given in the Geotechnical Report.	Project Developer	Prior to Issuance of Grading Permits			
MM 4.5-3: Design Level Geotechnical Engineering Report(s) shall be prepared for grading and construction activities.	Project Developer	Prior to Issuance of Grading Permits			
MM 4.5-4: A representative of the soils consultant shall observe site clearing, grading and the bottoms of excavations before placing fill. Local variation in soil conditions may warrant adjustments such as increasing the depth of recompaction and over-excavation. The soils consultant shall be retained during the construction of the proposed improvements to provide testing and observe compliance with the design concepts and geotechnical recommendations, and to allow design changes in the event that subsurface conditions or methods of construction differ from those assumed while completing the soils analysis.	Soils Consultant Contracted by Project Developer or Project Contractor	During Grading and Construction Activities			
MM 4.5-5: At the start of site grading for all portions of the project, existing vegetation, trees, large roots, pavements, foundations, non-engineered fill, construction debris, abandoned underground utilities	Project Contractor	During Grading and Construction Activities			

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
and other deleterious material shall be removed from the proposed building, structural, tank, pavement areas and areas that receive fill. The surface shall be stripped of organic growth and removed from the construction area. Areas disturbed during demolition and clearing shall be properly backfilled and compacted.					
MM 4.5-6: Positive drainage shall be maintained away from the structures and shall include a minimum gradient of 5% for a minimum distance of 5 feet. Water should not pond on or near paved areas.	Project Developer	Prior to Issuance of Grading Permits			

Greenhouse Gasses

MM 4.6-1 The project developer should incorporate a strategy of the following practices that help mitigate Greenhouse Gas emission impacts. • Reuse and recycle construction waste. • Follow and enforce idling time limits for construction vehicles and commercial delivery vehicles. • Integrate a reuse and recycling program in the project. • Ensure consistency with "smart growth" policies and meet recognized benchmarks (i.e., mixed use, higher-density projects that provide alternatives to individual vehicle travel and promote the efficient	Project Developer	Prior to Issuance of Grading Permits			

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
delivery of goods and services). • Preserve and create open space and parks and plant trees. • Incorporate public transit into the project design. • Incorporate pedestrian and bicycle facilities in the project design. • Provide amenities to encourage non-motorized transportation (such as secure and convenient bicycle parking). • Create bike lanes and shared walking/bike paths that connect neighborhoods to parks and open space design elements. • Incorporate green building practices and design elements. • Meet recognized green building and energy efficiency benchmarks. • Include energy efficient indoor and outdoor lighting, heating and cooling systems, appliances, equipment, and control systems. • Incorporate passive solar design (e.g., orient buildings and incorporate landscaping to maximize passive solar heating in cool months, minimize solar heat gain in hot months, and enhance					

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
natural ventilation). • Incorporate light colored roofs and cool pavement materials. • Incorporate solar power systems with energy storage and solar hot water heaters. • Incorporate solar panels on unused roof space and over parking areas. • Incorporate water reducing features into building and landscape design. • Create water efficient landscapes. • Incorporate water-efficient irrigation systems and devices. • Make effective use of gray water for landscape irrigation. • Retain storm water runoff on-site to reduce the need for imported water. • Design buildings to be water-efficient (install water-efficient fixtures and appliances). • Build or contribute to the cost of a transit stop near the development. • Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles.					

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
Hazards and Hazardous Materials					
MM 4.7-1: The developer shall ensure that enforcement of the City's and County's hazardous materials policies combined with State and Federal law and appropriate Industry Regulations and Standards be incorporated throughout the life of the project.	Project Developer	Prior to Issuance of Grading Permits			
MM 4.7-2: The project's drainage system shall be designed to reduce contaminant content in on-site storm flows and nuisance water prior to release into the public storm drain system, as required by local, State and Federal regulations.	Project Developer	Prior to Issuance of Grading Permits			
MM 4.7-3: All design and construction activities shall be conducted in compliance with standard regulations related to emergency response contained with the City's Municipal Code.	Project Contractor	Prior to Issuance of Grading Permits			
MM 4.7-4: The developer shall ensure that the project complies with the Conditions identified by the Riverside County Airport Land Use Commission.	Project Developer	Prior to Issuance of Grading Permits			
Noise					
MM 4.10-1: The Developer shall ensure that all construction equipment, fixed or mobile, is equipped with properly operating and maintained mufflers and the engines shall be equipped with shrouds throughout construction activities.	Project Contractor	Prior to Grading and Construction Activities			

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
MM 4.10-2: The developer shall ensure that all construction equipment is in proper working order and maintained in a proper state of tine to reduce backfires throughout all construction activities.	Project Contractor	Prior to Grading and Construction Activities			
MM 4.10-3: The developer shall ensure that stockpiling and vehicle staging areas are located as far as practical from noise-sensitive receptors throughout all construction activities.	Project Contractor	Prior to Grading and Construction Activities			
MM 4.10-4: The developer shall ensure that parking, refueling and servicing operations for all heavy equipment and on-site construction vehicles are located as far as practical from existing homes throughout all construction activities.	Project Contractor	During Grading and Construction Activities			
MM 4.10-5: The developer shall ensure that every effort be made throughout all construction activities to create the greatest distance between noise sources and noise-sensitive receptors located in the vicinity of the project site.	Project Contractor	Prior to Grading and Construction Activities			
MM 4.10-6: The developer shall ensure that stationary equipment is placed such that emitted noise is directed away from noise-sensitive receptors during all construction activities.	Project Contractor	During Grading and Construction Activities			
MM 4.10-7: The developer shall ensure that the project complies with all requirements identified in the Riverside County Airport Land Use Compatibility Plan Policy Document (Adopted March 2005) related to the residential development within the Palm	Project Developer	Prior to Issuance of Grading Permits			

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
Springs International Airport Influence Area, as discussed on pages 4.10-14 and 4.10-15 of the DEIR.					
Public Services					
MM 4.12-1: Prior to issuance of grading permit, the project developer shall pay appropriate fees to the Palm Springs Unified School District. Payment of fees will mitigate school impacts.	Project Developer	Prior to Grading and Construction Activities			
Transportation/Traffic					
MM 4.14-1: As required by the City of Palm Springs, the project proponent shall contribute on a fair-share basis to the cost of the construction of street improvements (consisting of pavement widening, curb and gutter and sidewalks) which shall be constructed in conjunction with approved phasing plans for development and/or associated with an approved Final Map or Maps (if the development is phased) as follows: • Whitewater Club Drive, north of Verona Road: reconstruction of the northern terminus and access to the existing Palm Springs Country Club and Alexander Estates; and • San Rafael Drive, east of Sunrise Way: reconstruction of the access road between	Project Developer	Prior to Grading and Construction Activities			

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
Sunrise Way and the Golden Sands Mobile Home Park.					
MM 4.14-2: The project developer/applicant shall be responsible for construction of all private streets, in conjunction with approved phasing plans for development and/or as associated with an approved Final Map or Maps (if the development is phased).	Project Developer	Prior to Grading and Construction Activities			
MM 4.14-3: The project applicant shall contribute on a fair-share basis to circulation improvements required on roadways and/or at intersections that are not in the TUMF program, as specified by the Palm Springs City Engineer. The applicant's fair share contribution to the cost of improvements at intersections involving roadways that are not part of the CMP System is identified in Section 4b of the Traffic Analysis.	Project Developer	Prior to Grading and Construction Activities			
MM 4.14-4: As required by the City of Palm Springs, the project proponent shall contribute on a fair-share basis to the cost of mitigation at two off-site key intersections by the dates provided in the Traffic Analysis. • Farrell Drive at Vista Chino - add a dedicated northbound right-turn lane. • Sunrise Way at Vista Chino - add a second dedicated southbound left-turn lane.	Project Developer	Prior to Grading and Construction Activities			

Mitigation Measure	Source/ Responsible Party	Proposed Date	Actual Date	Comments	Non-compliance Sanction/Activity
MM 4.14-5: The project developer/applicant shall coordinate with SunLine Transit Agency regarding required public transit facilities on and adjacent to the project site. Any required public transit facilities shall be furnished, constructed and installed in conjunction with construction of the associated street improvements.	Project Developer	Prior to Grading and Construction Activities			