



North City Extended Specific Plan

Draft Environmental Impact Report

September, 2013

Adopted January 15, 2014



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DRAFT ENVIRONMENTAL IMPACT REPORT

SCH # 2013012068

North City Extended Specific plan

City of Cathedral City

Case # 12-001

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Appendix I	Traffic Impact Study	Endo Engineering
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1.0 INTRODUCTION

1.1 PURPOSE

This introduction is included to provide an overview of the purpose content and format of this Environmental Impact Report (EIR) and its relation to the City of Cathedral City planning and environmental review process for the Proposed Project.

1.2 CEQA EIR PURPOSE AND STANDARDS FOR ADEQUACY

The purpose of this Draft Environmental Impact Report (EIR) is to inform decision-makers and the general public of the potential environmental impacts resulting from the proposed development of the North City Extended Annexation and Specific Plan (NCESP) (the "Project"). The project site consists of 684 acres located within unincorporated Riverside County, north of Rancho Mirage, between Cathedral City and the Thousand Palms community. The Annexation area is located north of Interstate 10, north and south of Varner Road. It is bounded on the west by the extension of Da Vall Drive and on the east by an existing Industrial Complex. The Specific Plan area is strategically situated north of Interstate 10, on both sides of the newly constructed Bob Hope Drive/I-10 interchange. The northern site boundary is located along Varner Road. A detailed description of the Project is included in Section 2.0 (Project Description) of this EIR.

The Project will require certain discretionary approvals by the City and other governmental agencies. Therefore, the Project is subject to environmental review requirements under the California Environmental Quality Act (CEQA). The City of Cathedral City is the Lead Agency under CEQA for the Project.

As described in Section 15121 (a) and 15362 of the *State CEQA Guidelines*, an EIR is an informational document that appraises public agency decision-makers and the public of any potential significant environmental effects of a project, identifies possible methods to minimize the significant effects, and identifies and addresses reasonable alternatives to the project. Thus, the purpose of this EIR is to focus the discussion on those potential environmental effects of the Project that the Lead Agency has determined could be significant. In addition, where applicable, feasible mitigation measures are recommended that could reduce or avoid significant environmental impacts identified for the Project.

This EIR was prepared in accordance with Section 15151 of the *State CEQA Guidelines*, which defines the standards for EIR adequacy as follows:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

The City of Cathedral 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 Resources Code Section 21000-2117,)* *CEQA Guidelines* and the Lead Agency's local CEQA implementation requirements, all as amended.

1.3 ENVIRONMENTAL REVIEW PROCESS

The City of Cathedral City prepared and distributed a Notice of Preparation (NOP) to public agencies and interested parties stating that the City would be preparing an EIR.

The NOP for the EIR was circulated for a 30-day review period starting on January 25, 2013, and ending on February 25, 2013. Refer to Appendix A to this EIR for a copy of the Initial Study and NOP, and refer to Appendix B to this EIR for written comments submitted to the City in response to the NOP.

According to CEQA, a Project EIR should focus primarily on the changes in the environment that would result from the project by examining all phases of the project including planning, construction and operation (CEQA Section 15161.) Based on a review of the Proposed Project, the Initial Study and responses to the Notice of Preparation, the City determined that the EIR should address the following topics:

- Aesthetics
- Air Quality
- Greenhouse Gas Emissions
- Fire and Police Services
- Archaeological and Cultural Resources
- Biological / Burrowing Owl
- Geology/Seismicity
- Hydrology / Water Quality
- Land Use and Planning
- Noise

- Domestic Water and Sanitary Sewer
- Transportation / Traffic Impacts
- Utilities and Service
- Mineral Resources
- Population and Housing
- Recreation
- Lighting and Glare

Section 3.0 provides an analysis of all the issues addressed in the Initial Study including those identified as not requiring further study in the EIR.

This Draft EIR is being circulated for a 45-day public review period in conformance with the requirement of Section 15161 of the *CEQA Guidelines*. Written responses to all written comments received by the City on the Draft EIR and these comments and responses will be incorporated into the Final EIR.

1.4 FORMAT OF THIS EIR

The organization of this EIR and the general contents of each section following this introduction are described below:

Section 2.0 Project Description - describes the Proposed Project in Detail, including the identification of all discretionary approvals required to allow implementation of the project. This section also discusses alternatives to the proposed project developed and analyzed to provide additional information on ways to avoid or lessen the impacts of the Proposed Project.

Section 3.0 Environmental Impact Analysis - contains the analysis of each of the environmental topics and impacts identified as being previously associated with the Proposed Project.

Section 4.0 Cumulative Impacts - provides a discussion of the Proposed Projects incremental effects that may or may not be cumulatively considerable when combined with related impacts of other area projects.

Section 5.0 Unavoidable Impacts - describes any significant impacts that cannot be reduced to a level of insignificance, their implications and why the project is being proposed notwithstanding their effect.

Section 6.0 Alternative Summary - the Alternatives section of this Draft EIR evaluates the environmental effects of the project alternatives.

Section 7.0 Summary of Project Impacts - provides a synopsis of the environmental impacts from the Proposed Project describes recommended mitigation measures and indicates the level of significance of impacts before and after mitigation.

Appendices - to this EIR include technical information and other materials used in the preparation of this EIR. The Appendices can be found in a separate volume.

1.5 LIST OF ACRONYMS

This list provides reference to the various acronyms mentioned throughout the Draft EIR.

°F	Degrees Fahrenheit
AAQS	Ambient Air Quality Standards
ACBI	Agua Caliente Band of Cahuilla Indians
ACTHCP	Agua Caliente Tribal Habitat Conservation Plan
ADT	Average Daily Traffic
AQMP	Air Quality Management Plan
BIA	Bureau of Indian Affairs
BLM	US Bureau of Land Management
BMP	Best Management Practices
BUSD	Banning Unified School District
CAA	Clean Air Act
Cal EPA	California Environmental Impact Protection Agency
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCFD	Cathedral City Fire Department
CCMC	Cathedral City Municipal Code
CCPD	Cathedral City Police Department
CC&R's	Codes, Covenants, and Restrictions
CDF	California Department of Forestry
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFD	Community Facilities District
CFS	Cubic Feet per Second
CIWMB	California Integrated Waste Management Board
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CSA	County Service Area
CVAG	Coachella Valley Association of Governments
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVSIP	Coachella Valley State Implementation Plan (PM10)

CVUSD	Coachella Valley Unified School District
CVWD	Coachella Valley Water District
CWA	Federal Clean Water Act
CY	Cubic Yard
dB/dBA	decibel (s)
DEIR	Draft Environmental Impact Report
DOT	Department of Transportation
DSA	Division of State Architect
DSUSD	Desert Sands Unified School District
DTSC	Department of Toxic Substance Control
EIR	Environmental Impact Report
EIS	Environmental Impact Study
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FESA	Federal Endangered Species Act
FHA	Federal Highway Administration
FONSI	Finding of No Significant Impacts
GP	General Plan
GPM	Gallons per Minute
GIS	Geographic Information Systems
HCM	Highway Capacity Manual
HOA	Home Owners Association
HWMP	Hazardous Waste Management Plan
ICU	Intersection Capacity Utilization
IS	Initial Study
ISO	Insurance Service Office
IWMP	Integrated Waste Management Plan
LOS	Level of Service
MDAB	Mojave Desert Air Basin
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MSHCP	Multiple Species Habitat Conservation Plan
MSL	Mean Sea Level
MSWD	Mission Springs Water District
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Community Conservation Plan
ND	Negative Declaration
NEPA	National Environmental Protection Agency
NO	Nitric Oxide
NO2	Nitrogen Dioxide
NOP	Notice of Preparation
NOX	Oxides of Nitrogen
NCESP	North City Extended Specific Plan

NCSP	North City Specific Plan
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O3	Ozone
OPR	State Office of Planning and Research
PAN	Peroxyacetyl Nitrate
Pb	Lead
PBS	Peninsular Bighorn Sheep
PCB	Polychlorinated Biphenyl
PEIR	Program Environmental Impact Report
PM 10	Particulate Matter less than 10 microns in diameter
PM 2.5	Particulate Matter less than 2.5 microns in diameter
PSI	Per Square Inch
PSUSD	Palm Spring Unified School District
RCFC	Riverside County Flood Control
RCFD	Riverside County Fire Department
RCFD	Riverside County Fire Department
RWQCB	Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management
SCE	Southern California Edison
SEMS	Standardized Emergency Management System
SIP	State Implementation Plan
SO2	Sulfur Dioxide
SOX	Oxides of Sulfur
SQG	Small Quantity Generator
SRA	Source Receptor Area
SRA	State Responsibility Area
SSAB	Salton Sea Air Basin
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TIP	Transportation Improvement Program
THCP	Tribal Habitat Conservation Plan
TMDL	Total Maximum Daily Limits
TUMF	Transportation Uniform Mitigation Fee
UBC	State of California Uniform Building Code
UFC	Uniform Fire Code
USEPA	United States Environmental Protection Program
USFS	United States Forest Service
USGS	United States Geological Survey
UST	Underground Storage Tanks

VOC	Volatile Organic Compounds
WCD	Water Conservation District
WUIBS	Wildland Urban Interface Building Standards
ZO	Zoning Ordinance

2.0 PROJECT DESCRIPTION

2.1 PURPOSE

The purpose of the Project Description in an EIR is to describe the project in a manner that is meaningful to the public, reviewing agencies and decision-makers. CEQA Guideline 15124 requires that a Project Description address the following items: 1) a statement of project objectives; 2) a description of the project location; 3) a general description of the project's characteristics; and 4) a statement briefly describing the intended uses of the EIR. The CEQA guidelines state that the Project Description should not supply extensive detail beyond that needed for evaluation and review of the environmental impact.

2.2. PROJECT OBJECTIVES

The Project Description is to include a "statement of objectives sought by the applicant" which will "aid the decision in preparing findings". In order to better understand these objectives for the North City Extended Specific Plan (NCESP), it is best to consider them from within the stated "North City Vision" as restated from the original North City Specific Plan:

- Establish a unique community identity within the Coachella Valley;
- Create a thriving mixed-use area that strengthens Cathedral City's economic base;
- Create compact, walkable neighborhoods and mixed use districts that support healthy living and multiple transportation options;
- Provide a signature open space framework that complements and enhances the natural environment; and
- Encourage sustainable, energy-efficient development.

Within this framework, the "Project Objectives" of the NCESP are presented within six basic categories: 1) Land Use; 2) Economic Development; 3) Open Space and Natural Resources; 4) Circulation; 5) Parking; and 6) Infrastructure.

- 1) Land Use:** To provide for mixed use development within the Specific Plan by designating land uses and intensities to meet the needs of anticipated growth and to achieve Cathedral City's objectives, including; creating a jobs/ housing balance in North City, creating the opportunity for a regional commercial/ destination resort development at the new I-10/ Bob Hope Drive interchange, creating a "smart growth" range of housing opportunities and choices, creating

a vibrant and efficient environment for both residents and visitors, and creating a development which incorporates sustainable design and development practices.

- 2) Economic Development:** To encourage a complementary mix of commercial and industrial development in the Specific Plan that will enhance the long-term financial stability and fiscal viability of Cathedral City and establish North City Extended as a commercial and job employment node within the Coachella Valley.

- 3) Open Space and Natural Resources:** To preserve and enhance an interconnected open space framework which complements the natural desert environment, including the following elements; preservation of the natural topography and drainage patterns as appropriate, promotion of water conservation and water quality, creation of a comprehensive and integral open space network and trails system, assurance that views into the Specific Plan from I-10 are attractive and inviting, protection of views and vistas from the Specific Plan toward the surrounding mountain ranges and Mt. San Jacinto, and enhancement of the pedestrian environment with comfortable gathering spaces.

- 4) Circulation:** To create a multi-modal circulation system which separates local project traffic from regional traffic flows, provides convenient access to Interstate Highway 10, provides access for all modes of transportation while maintaining efficient circulation and accessibility, enhances connectivity through the development of Valley Center Boulevard, limits the impact of truck traffic on residential neighborhoods and connects North City with the rest of Cathedral City and the Coachella Valley.

- 5) Parking:** To provide adequate, efficient vehicular parking throughout the Specific Plan Area, while avoiding an oversupply of parking through the use of shared parking and reduced parking requirements where they are judged to be appropriate, and encourage alternate modes of public transportation

- 6) Infrastructure:** To provide a complete system of public infrastructure, including sewer, water and storm drainage, to meet the need of future development within the Specific Plan while providing a sustainable, long-term supply of water that is available to the area.

- 7) Adaptability:** To provide development plan and program flexibility to adapt to changing market dynamics through the implementation of a Land Use Equivalency (LUE) Program; and to a facilitate the maintenance of adequate

Open Space to accommodate a stormwater management system of retention/detention basins and drainageways through the implementation of a Transfer of Development Rights (TDR) Program.

2.3 PROJECT CHARACTERISTICS

A. Project Location and General Description

The NCESP encompasses 591.38 acres of vacant land in unincorporated Riverside County that is being prepared for annexation into the City of Cathedral City. The property's current land use designation within the Riverside County General Plan (RCIP) is "Light Industrial", and a 9.41 acre portion of the property has an approved Final Parcel Map (FPM) designed as a small highway-oriented commercial area, including a small hotel. The Specific Plan is located within Cathedral City's Sphere of Influence, north of Interstate Highway 10 along the Varner Road corridor, and is defined by Bob Hope/ Rio Del Sol road on the east and DaVall Road/ Cathedral City Limit Line on the west. The site includes the north eastern half of Section 13 and the central portion of Section 11, both in Township 4 South and Range 5 East, of central Riverside County, CA. See Exhibit 2.0-1 Regional Location and Exhibit 2.0-2 Aerial Photo.

In 2007, Cathedral City initiated a comprehensive effort to create and implement a North City Specific Plan and annexation process for approximately 5,000 acres of vacant land located north of Interstate Highway 10 and extending eastward over to the extended north/south right-of-way of DaVall Road. This effort was successfully completed in 2009. Subsequently, in 2012, the property owners and developer of this project came forward with a developer-initiated Specific Plan and annexation request to Cathedral City as part of the City's overall effort to annex eastward from DaVall Road to include the Thousand Palms Community. This Specific Plan area does not include the entire proposed Cathedral City annexation area, but extends east from DaVall Road to Bob Hope Drive/ Rio Del Sol Road.

The "Preferred Alternative" as presented for the North City Extended Specific Plan builds upon and extends the land use planning objective and community design guidelines of the original North City Specific Plan while recognizing input from residents and businesses of the Thousand Palms Community. Of the 591.38 acres of land included within the Specific Plan, an estimated 240.44 acres of land, or 40.66% of the area, is to be maintained as "Open Space" for the accommodation of neighborhood and community parks, multi-use trail network, wind and noise buffers and stormwater retention basins and drainageways. Also, approximately 95.57 acres are to be included in rights of way for public streets within a planned vehicular Circulation System.

Approximately 65.28 acres are designated as a “Mixed Use-Urban” land use district which will provide for regional and community scale commercial projects and higher density housing such as condominiums, apartments and mixed use options. It is projected that 115.93 acres of a “Mixed Use-Neighborhood” land use district will accommodate a variety of lower density housing types including apartments, town homes and single family residences. “Light Industrial” land use is designated within 74.16 acres of the Specific Plan, and will provide planned business campus sites (Exhibit 2.0-3 NCESP Zoning Districts).

The projected build-out of the “Preferred Alternative for the North City Extended Specific Plan is to be phased and absorbed over a 15 year period and is anticipated to generate an equivalent of up to: 200,000 square feet of retail/ commercial buildings; 120,000 square feet of restaurants; 190,000 square feet of office/ services buildings; 400 hotel rooms and 3,200 residential dwelling units. “Light Industry” uses could generate up to 595,000 square feet of building floor area at build-out. This “Preferred Alternative” is being analyzed within the EIR as the alternative with the most impacts among the five alternatives considered.

Also being considered within each of the five alternatives are two methodologies to address development plan/ program flexibility and adaptability issues: 1) a Land Use Equivalency (LUE) Program which will provide flexibility in order to adapt to changing market dynamics through a system of equivalent impact land use “exchanges”; and 2) a Transfer of Development Rights (TDR) Program to facilitate the maintenance of adequate Open Space to accommodate an environmentally sensitive stormwater management system of retention/ detention basins and drainageways by permitting the transfer of property “yield” from designated stormwater retention basin sites to other nearby property within the Specific Plan.



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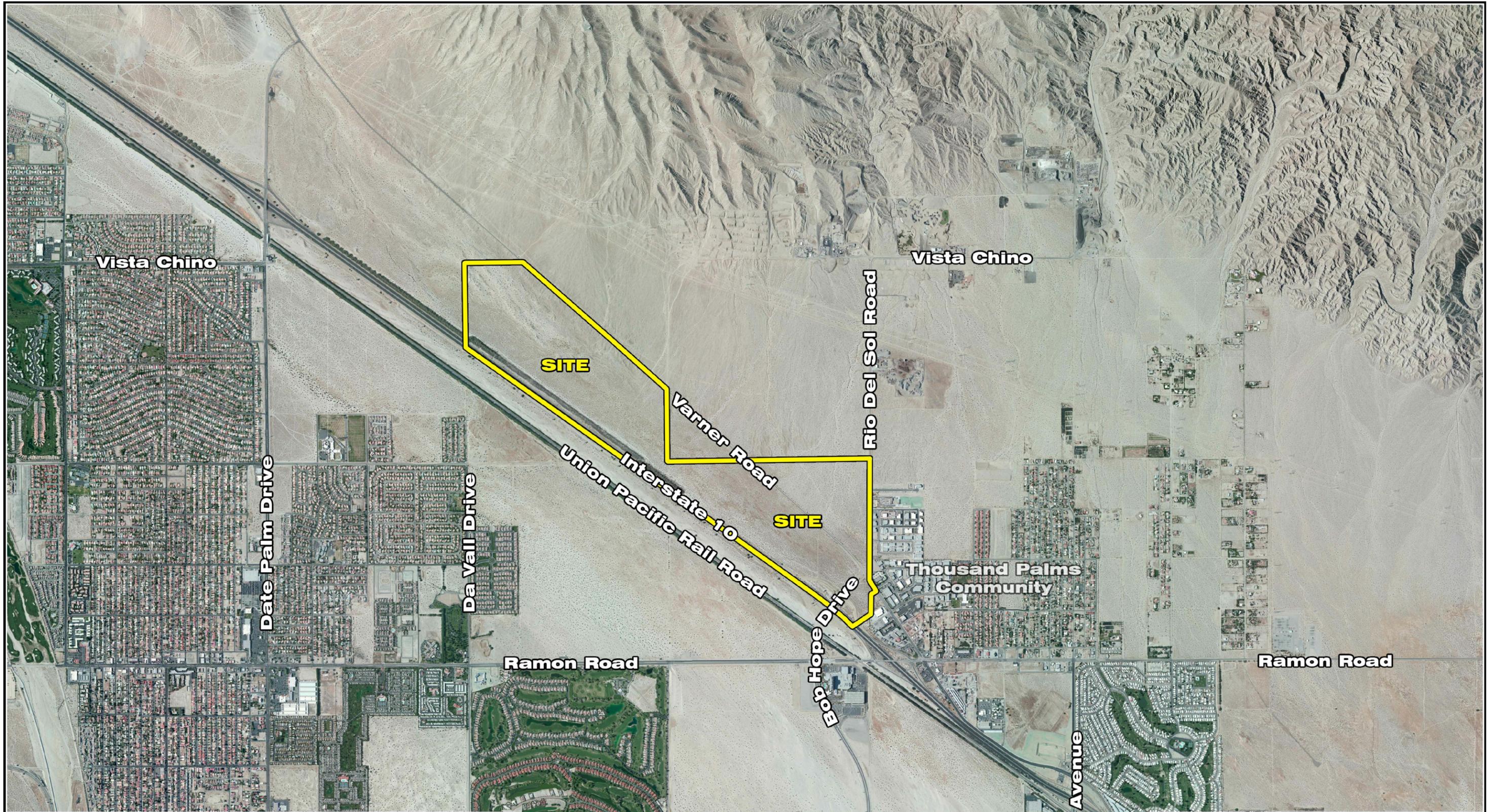
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Regional Map

North City Extended Specific Plan
 Environmental Impact Report

Exhibit 2.0-1

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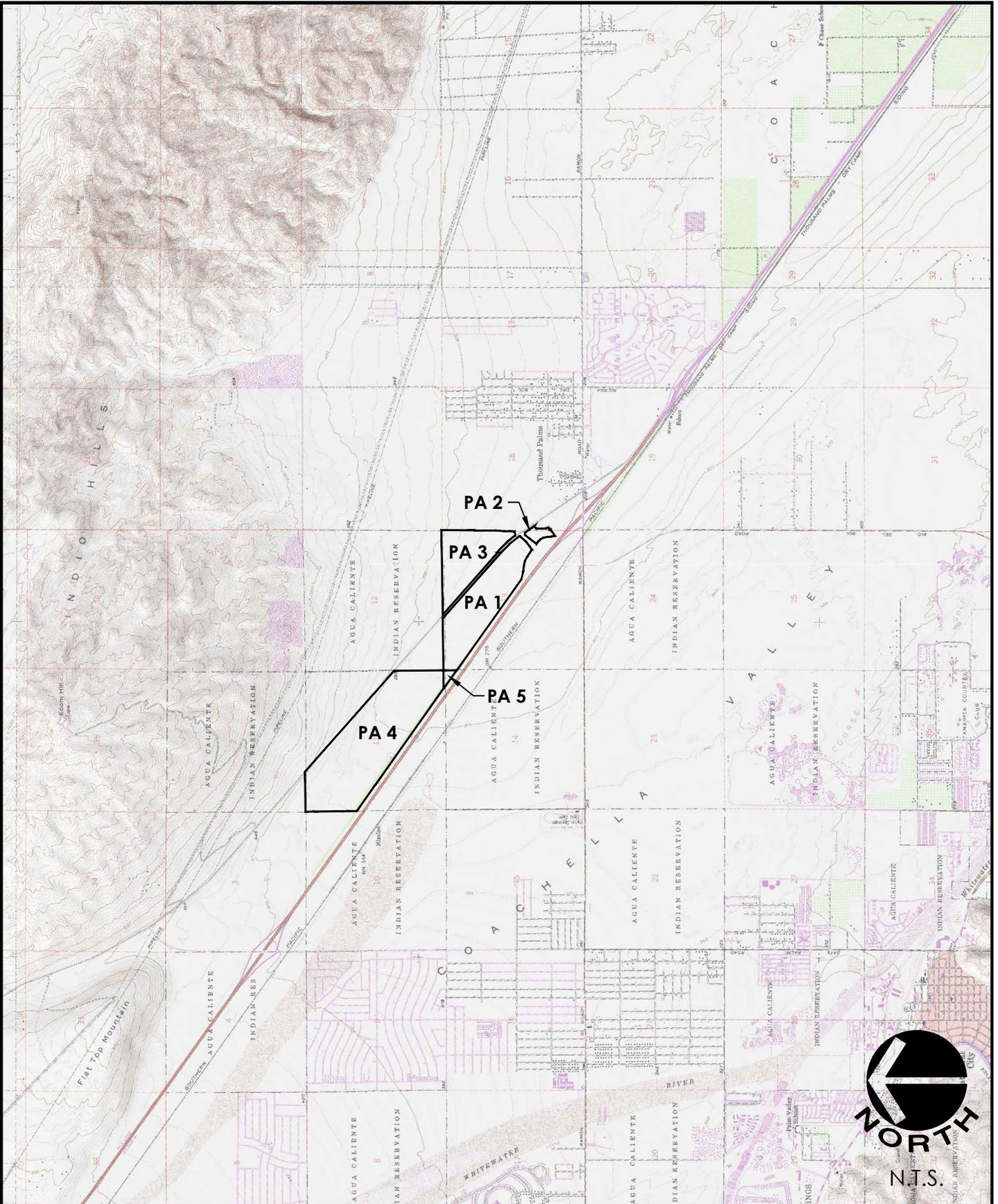
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Aerial Photograph

North City Extended Specific Plan
Environmental Impact Report

Exhibit 2.0-2
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USGS

North City Extended Specific Plan
 Environmental Impact Report

Exhibit 2.0-3

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B. Background

The Specific Plan is characterized by significant mountain range and open desert views and vistas in all directions. This area is located within the northern portion of the western extents of the Coachella Valley in a geographical area known as the Colorado Desert, a subdivision of the Sonoran Desert. Both the Little San Bernardino Mountains to the north and Indio Hills to the northeast dominate the landscape in the area. Land north of Interstate Highway 10 and further north of the Specific Plan Area remains largely undeveloped and consists of steep, eroding, sand covered slopes of the Indio Hills and natural drainage ways and washes that emanate from them. The Specific Plan consists of primarily gently sloping desert open spaces which are significantly impacted by stormwater drainage from the west and north.

The Specific Plan is undeveloped and is dominated by natural desert terrain. There is no evidence that this area has been utilized for agricultural purposes. The site is located within the lower alluvia areas of the Indio Hills to the north and contains primarily Sonoran creosote bush scrub habitat including recently stabilized sand hummocks along the I-10 right-of-way. The site's highest point of elevation on the alluvial fan is approximately 300 feet above sea level at the northwestern edge of the SP, gently sloping southeast to an elevation of 240 feet.

This Specific Plan has remained vacant of any land development activity despite its central location in the Coachella Valley along the I-10 corridor. Significant stormwater retention and drainage issues which impact the entire SP, all of which is currently located within the 100 year flood zone, have discouraged any serious consideration for development within the area until the recent completion of the new I-10 interchange at Bob Hope Drive/ Rio Del Sol Road. Further, the Specific Plan is impacted by occasional high winds that blow from the northwest to southeast, resulting in wind erosion and "blowsand" impacts which have discouraged development.

C. City Processing and Land Use

The City of Cathedral City will process the North City Extended Specific Plan (Project Number SPL 12-001), as part of its overall annexation initiative for this area plus additional lands east of Rio Del Sol, pursuant to the provisions of California Government Code, Title 7, Division I, Chapter 3, Article 8, Sections 65450 through 65457.

D. Conceptual Land Use Plan

The North City Extended Conceptual Land use Plan is best illustrated in Exhibit 2.0-5: "North City Extended Specific Plan". The stated central theme of the Conceptual Land

Use Plan is a focus on the creation of compact, walkable neighborhoods which support healthy lifestyles, and multiple transportation options, all integrated within an “Open Space” framework that is intended to complement and enhance the natural desert environment of the Specific Plan area. This framework emphasizes sustainable environmental and site design principles appropriate to the native desert and an overall landscape design theme which also emphasizes low maintenance and water requirements of the desert.

The “Conceptual Land use Plan” organizing framework “Open Space” system integrates several basic components: 1) a subsystem of stormwater drainage corridors and retention basins; 2) view corridors to mountain range panoramas in all directions, with an emphasis on Mt. San Jacinto to the southwest; 3) a variety of landscaped water features within a “Desert Oasis” theme; 4) planned Community Park and Neighborhood Parks, including public recreational facilities, for the use of residents of the Specific Plan; 5) a network of bikeways and pedestrian walkways which provide connectivity to all open space system components; 6) a landscaped linear parkway along the north right-of-way line of Interstate Highway 10 which serves as a noise buffer as well as a designed “edge” to the freeway frontage; 7) landscaped wind buffers along the western edge of the project; and 8) Primary and Secondary Gateways to the Specific Plan Area which emphasize and highlight the overall landscape design theme of the “Open Space” system.

A second organizing framework of the “Conceptual Land Use Plan” is a system of landscaped “Streetscapes” which complements the “Open Space” system previously discussed. This system includes the following linkages: 1) Interstate Highway 10 corridor improved with a linear parkway and multi-use trail along its north right-of-way line; 2) Varner Road corridor, improved as a “Modified Major Highway”, with a landscaped central median and parkways which include a multi-use pathway and sidewalk; 3) a new Valley Center Boulevard, classified as a “Major Highway”, which is intended to serve as the plan’s central visual and circulation spine, including landscaped central median, parkways and a multi-use pathway and sidewalk. Also, within this system, a themed “Main Street” central corridor is directed through a planned “Village Center” as a means to enhance pedestrian activity, on-street parking options and flexibility for mixed retail/residential uses in the central commercial core of the “Conceptual Land Use Plan”.

Within the two organizing framework systems, the “Conceptual Land Use Plan” integrates four (4) designated land use and zoning districts:

- **Mixed Use-Urban (MU-U):** Takes advantage of freeway visibility and accessibility along the I-10 corridor, including public transportation routes, to accommodate regional and community scale commercial and mixed use

projects and provides for a mix of higher density housing such as condominiums, apartments and vertical mixed use options.

The objectives of the MU-U district are to: 1) create the maximum amount of commercial development at a variety of scales, from regional to community serving retail and resort/ hotel/ recreational complexes; 2) encourage higher density residential development in close proximity to employment uses and services; 3) foster pedestrian-oriented activity nodes by providing a mix of uses in compact and walkable areas; and 4) provide appropriate locations for a range of live/work activities such as residential over retail and live/work lofts.

The maximum gross Floor Area Ratio (FAR) for the commercial component of a development project is 1.0; for a residential component, the maximum gross density is 45 dwelling units/ acre. The maximum building height is 65 feet or 5 stories, whichever is less.

- **Mixed Use-Neighborhood (MU-N):** Provides for a variety of lower density housing types including apartments, town homes and single family residences with some flexibility for mixed use options.

The objectives of the MU-N district are to: 1) promote a variety of housing types and range of densities to accommodate diverse housing needs; 2) provide residential uses that are proximate to supportive commercial services in a mixed use environment; 3) foster pedestrian-oriented activity area by providing a mix of uses in compact and walkable areas; and 4) encourage new housing opportunities, such as live/work units and residential over retail.

The maximum gross Floor Area Ratio (FAR) for the commercial component of a development project is 1.0; for a residential component, the maximum gross density is 25 dwelling units/ acre. The maximum building height is 45 feet or 3 stories, whichever is less.

- **Light Industrial (I-1):** Provides planned business campus and light industry sites for tax base enhancement and job creation.

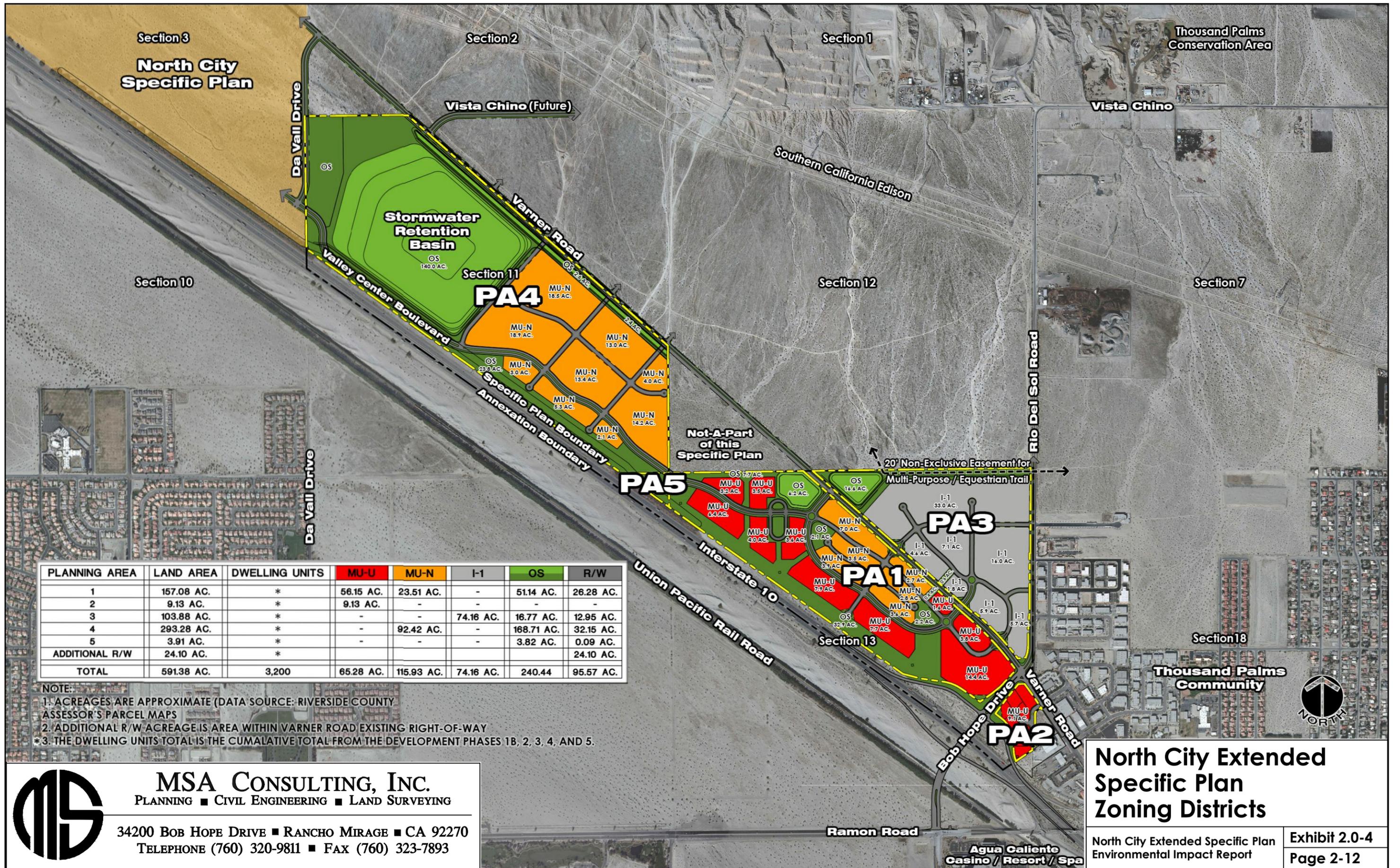
The purpose and intent of this use district is to provide a wide diversity of industrial uses in areas where such uses are not likely to have adverse effects upon each other or upon neighboring residential or commercial areas. Uses permitted are those generally regarded as “light industry”, conducted

primarily indoors, but which may require limited outdoor storage or assembly areas.

The maximum site coverage by building(s) is 80%; the maximum building height is 36 feet or 3 stories except where abutting a residential district, in which case the maximum height shall be that of the residential district at all locations within 50 feet of the residential district boundary.

- **Open Space (OS):** Provides for the preservation of the “Open Space” network, as previously discussed, as well as provisions for solar and wind generation. This system will work in concert with a Transfer of Development Rights (TDR) program in order to achieve the “Open Space” system as illustrated in the “Site Plan” of Figure 7-1.

The “Open Space” designation is to be placed on property under one of the following circumstances: 1) when by the nature of its use, such as regional transmission of electricity, or its natural limitation, such as being subject to flooding or faulting, make the property inappropriate for habitation or intensive development; or 2) when the property is under public control and is intended for the development of public uses (buildings may be permitted in this instance).



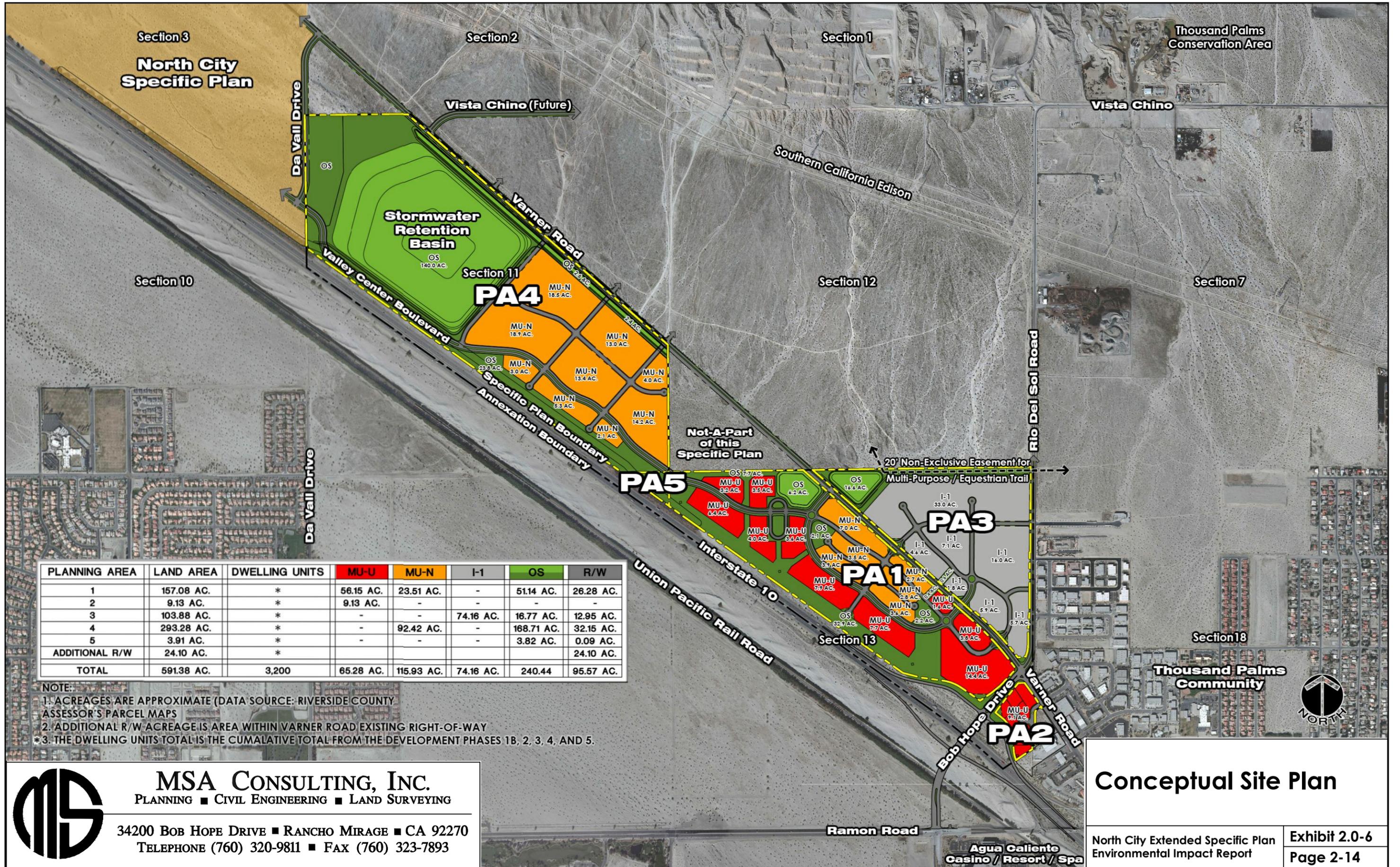
PLANNING AREA	LAND AREA	DWELLING UNITS	MU-U	MU-N	I-1	OS	R/W
1	157.08 AC.	*	56.15 AC.	23.51 AC.	-	51.14 AC.	26.28 AC.
2	9.13 AC.	*	9.13 AC.	-	-	-	-
3	103.88 AC.	*	-	-	74.16 AC.	16.77 AC.	12.95 AC.
4	293.28 AC.	*	-	92.42 AC.	-	168.71 AC.	32.15 AC.
5	3.91 AC.	*	-	-	-	3.82 AC.	0.09 AC.
ADDITIONAL R/W	24.10 AC.	*	-	-	-	-	24.10 AC.
TOTAL	591.38 AC.	3,200	65.28 AC.	115.93 AC.	74.16 AC.	240.44	95.57 AC.

NOTE:
 1. ACREAGES ARE APPROXIMATE (DATA SOURCE: RIVERSIDE COUNTY ASSESSOR'S PARCEL MAPS)
 2. ADDITIONAL R/W ACREAGE IS AREA WITHIN VANNER ROAD EXISTING RIGHT-OF-WAY
 *3. THE DWELLING UNITS TOTAL IS THE CUMULATIVE TOTAL FROM THE DEVELOPMENT PHASES 1B, 2, 3, 4, AND 5.



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North City Extended Specific Plan Zoning Districts



PLANNING AREA	LAND AREA	DWELLING UNITS	MU-U	MU-N	I-1	OS	R/W
1	157.08 AC.	*	56.15 AC.	23.51 AC.	-	51.14 AC.	26.28 AC.
2	9.13 AC.	*	9.13 AC.	-	-	-	-
3	103.88 AC.	*	-	-	74.16 AC.	16.77 AC.	12.95 AC.
4	293.28 AC.	*	-	92.42 AC.	-	168.71 AC.	32.15 AC.
5	3.91 AC.	*	-	-	-	3.82 AC.	0.09 AC.
ADDITIONAL R/W	24.10 AC.	*	-	-	-	-	24.10 AC.
TOTAL	591.38 AC.	3,200	65.28 AC.	115.93 AC.	74.16 AC.	240.44	95.57 AC.

NOTE:
 1. ACREAGES ARE APPROXIMATE (DATA SOURCE: RIVERSIDE COUNTY ASSESSOR'S PARCEL MAPS)
 2. ADDITIONAL R/W ACREAGE IS AREA WITHIN VANNER ROAD EXISTING RIGHT-OF-WAY
 *3. THE DWELLING UNITS TOTAL IS THE CUMULATIVE TOTAL FROM THE DEVELOPMENT PHASES 1B, 2, 3, 4, AND 5.



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Conceptual Site Plan

E. Landscape Plan

The North City Extended Specific Plan is intended to have a landscape design theme which is sensitive to its natural desert setting, yet present a “Desert Oasis” thematic emphasis. New development is to be integrated into the natural environment by respecting the existing native habitat and unique desert systems. This is to be achieved by complementing and enhancing a network of natural open areas and creating recreation spaces, streetscapes, parks and plazas that are planted with an ecologically appropriate palette of low-maintenance and low-water requiring materials that are indigenous or readily adaptable to the Coachella Valley.

The design intent of the “Landscape Plan” is to:

- Enhance development by contributing to a pedestrian-friendly environment;
- Provide a backdrop, framework and visual setting for architecture and highlight architectural elements;
- Create focal points with color, scale and visual interest;
- Provide sun shading and wind control climate control elements;
- Protect sensitive uses from excessive solar exposure, glare, wind, noise dust and odors;
- Provide a unified appearance along street frontages and reinforce the street hierarchy;
- Direct vehicular and pedestrian traffic;
- Define building and parking area entrances;
- Identify and shelter pedestrian walkways;
- Provide a buffer between neighboring properties; and
- Screen undesirable views and uses, including service structures and loading areas.

Landscape is to be designed to encourage the use of drip irrigation and other low-flow irrigation methods, with no water flow onto pavement, and such that wind does not blow irrigation water onto people, cars and pavement.

Relative to selected Plant Materials in the “Landscape Plan”, selected materials are to be drought-tolerant and low maintenance, generally following the plant material palette listed in the Coachella Valley Water District’s (CVWD’s) “Lush and Efficient Landscape Gardening” publication. Applicable Plant Material guidelines are to emphasize the following:

- Vegetative turf is to be used only in parks and recreation areas or as an accent material in limited areas, with artificial turf as an option;
- Both deciduous and evergreen trees are to be planted to provide seasonal interest and a variety of texture, color and form, with deciduous trees placed on the south and west sides of structures and outdoor spaces to provide summer shade and winter sun;
- Canopy and accent plants are to be appropriately sized and placed to allow them to reach their natural mature size and to reduce the need for pruning and trimming;
- Plants selected as windscreens are to provide protection from the wind with dense, low, non-brittle branching material;
- Plants with seasonal fruit and excessive leaf drop and sap are not to be planted in public areas;
- All required trees are to have a minimum of 24-inch box size and specimen trees are to have a 36-inch box or larger;
- A root barrier is to be used around all trees planted within seven feet of a property line or public sidewalk; and
- Plantings in landscaped setback areas and parking areas are not to obstruct views into retail sales windows or interfere with site lighting or restrict access to utility equipment or emergency apparatus.

The “backbone” of the Plant Materials palette for the North City Extended Specific Plan is to be expressed and emphasized within the streetscapes of the Circulation Network. Examples of primary landscape materials in these corridors are summarized as follows:

- Modified Major Highway (Varner Road): Desert Willow, Mexican Ebony and Honey Mesquite;

- Major Highway (Valley Center Boulevard): California Fan Palm, Desert Willow, Desert Museum Palo Verde, Chaste Tree, and Cascalote Tree;
- Collectors and Local Streets: Velvet Mesquite, Blue Palo Verde, Texas Mountain Laurel, African Sumac and Smoke Tree.

This illustrative list provides a brief overview of a broader palette, constrained to desert compatible species, which will create a local design statement as well as a sustainable “Landscape Plan” which is low-maintenance and drought tolerant.

F. Circulation Plan (Vehicular/ NEV and Pedestrian/ Bicycle)

- **Vehicular:** In order to support the future development of the Specific Plan, a backbone vehicular circulation system is intended to provide adequate access throughout the interior of this SP as well as provide connectivity to the North City SP and existing and future residential and commercial development within Cathedral City, Rancho Mirage, the Thousand Palms Community and other areas within the Coachella Valley. The sizing of these roadways has been determined based on traffic model forecasts from the RIVTAM traffic model. The circulation network is intended to respond to and respect existing topographical conditions and to minimize impacts on washes that cross the area.

The roadway classifications included within the Vehicular Circulation Plan are summarized as follows:

- 1) Modified Major Highway: The right-of- way width of a Modified Major Highway (Varner Road and Da Vall Drive) is to be 102’ with two lanes in each direction and a 14’ landscaped central median. Curb-to curb width will be 70 feet, with no on-street parking or bike lanes.
- 2) Major Highway: The right-of-way width of a Major Highway (the new Valley Center Boulevard) is to be 112’ with two lanes in each direction and a 25’ central landscaped median. Curb-to curb width is to be 81 feet, with no on-street parking or bike lanes.
- 3) North City Collector: The right-of-way width of a North City Collector is to be 56’ with one 11 foot wide traffic lane in each direction, with no central median. Curb-to-curb width is to be 36’ with an on-street parking lane on each side of the street. Through the designated “Village Center” of the plan, a special, modified section of Collector is to designated as a “Main Street”, with on-street diagonal and/or parallel parking on each side of

the street and a 10' central landscaped median and 15' sidewalks on both sides. The right-of-way width of this section is to be 106'.

- 4) Industrial Collector: Located within the "Light Industrial" areas of the plan, the right-of-way width to be 66' with a pavement width of 48'. It will have two 12' wide traffic lanes in each direction.
- **Pedestrian/ Bicycle:** A Bike and Trail Network included in the plan incorporates pedestrian circulation as a component of the system. This network includes the following linkages:
 - 1) Multi-Use Trail within Parkway adjacent to and along I-10: This trail will provide an uninterrupted off-street/ open space corridor path for pedestrians and bicycles (Class I Bikeway) along the southern edge of the SPA and is to be an easterly, seamless extension of the trail included in the North City SPA. Trail width is to vary between 12' and 16'.
 - 2) Western Coachella Valley Regional Multi-Use Trail: This network component is to be included within the western Coachella Valley Regional Trail System and will link this SPA with North City SPA and to a regional trail network. This multi-use pathway is to be located along the south side of Varner Road and is to accommodate both pedestrians and bicycles (Class I Bikeway). Trail width is to be 12'.
 - 3) Valley Center Boulevard Multi-Use Trail: This trail link is to be located along the south side of the new Valley Center Boulevard and will serve both pedestrians and bicycles (Class I Bikeway) within its varying 12'- 14' width. It will also be linked to the regional trail network.
 - 4) Class II Bikeways: Striped on-street bike lanes providing one-way bicycle travel are proposed on DaVall Drive and along Collector Streets within this SPA.
 - 5) Sidewalks: 5' wide sidewalks are included within all street sections, complementing the multi-use trail system.

In addition to the above, property owners are to provide additional trail and bikeway easements over their developments to connect to the overall pedestrian/ bikeway network as well as to the parkway along the south side of interstate Highway 10.

G. Infrastructure Plan

- **Domestic Water System:** The Coachella Valley Water District (CVWD) previously conducted master planning studies and evaluated domestic water transmission main needs for the Sky Mountain Pressure Zone (SMPZ) at buildout, including the property included within this SP. The required Domestic Water System improvements for the entire SMPZ area resulting from this analysis include:
 - 1) 16.7 million gallons (MG) of domestic water storage at a proposed CVWD reservoir site located north of I-10 and east of the intersection of Rio Del Sol Road and Vista Chino; and
 - 2) A 36-inch domestic water transmission main extended from the intersection of Bob Hope Drive and Ramon Road to the proposed CVWD reservoir site.

Based upon the CVWD analysis of the NCESP buildout requirements, the following Offsite Domestic Water System improvements will be required in conjunction with the implementation of the Specific Plan:

- 1) Offsite Elevated Reservoir Storage: The NCESP requires approximately 6.7 Million Gallons (MG) of storage capacity for domestic diurnal demands, operational standby and fire flow. CVWD will require the NCESP developer to design and construct this elevated reservoir storage with the base elevation of 435 feet.
 - 2) Offsite Domestic Water Pipeline: The developer of the NCESP will be required to design and construct and 30-inch diameter ductile iron domestic water pipeline from the 6.7 MG Offsite Elevated Reservoir to the existing 30-inch water main located at the intersection of Bob Hope Drive and Ramon Road.
 - 3) Water Supply and Well Sites: Seven (7) well sites will be required; and three of the seven sites will need to be pumping plants.
- **Sanitary Sewer System:** CVWD will also provide Sanitary Sewer Service to the NCESP. The project will convey wastewater flows to an existing 15-inch sewer main that parallels Varner Road to the southeast. This pipeline increases to a 24-inch main and is tributary to Water Reclamation Plant No. 7 (WRP7).

The design of the on-site gravity sewer system throughout the NCESP will comply with the rules, regulations and specifications of CVWD. Only gravity sewer lines will be required; no sewer lift stations are anticipated.

In addition, the developer of the NCESP will be responsible for the following off-site improvements to the sanitary sewer system:

- 1) Replace approximately 260 linear feet of an existing 15-inch sewer with a 24-inch sewer main on Varner Road east of Jack Ivey Drive, near Cook Street/ Interstate Highway 10 interchange; and
- 2) Install approximately 1,600 linear feet of 24-inch sewer main on Varner Road beginning 260 feet east of Jack Ivey Drive and extending to Cook Street.

The developer of the NCESP may be required to install additional off-site improvements, depending on the development schedule of NCESP and adjacent projects.

- **Dry Utilities:** The following Dry Utility services are required to implement the NCESP:
 - 1) Electrical System; to be provided by Southern California Edison. There are existing overhead distribution and transmission lines on the subject property, points of connection are located at Bob Hope and Varner Road.
 - 2) Gas Systems; to be provided by Southern California Gas Company. Service to the site could be provided from the nearest 4" gas main located at the intersection of Varner Rd and Rio Del Sol.
 - 3) Telephone System; will be provided by Verizon. There are connection points at Rio Del Sol and Varner Road. There is manhole capacity to serve the active project.
 - 4) Cable Television System to be serviced by Time Warner Cable. Connections are located at Rio Del Sol at Varner Road. Service to site is readily available.

In each of these systems, there are no anticipated unusual requirements or unforeseen constraints or conditions associated with servicing the NCESP.

H. Drainage Plan

Three (3) regional stormwater retention basins are to be developed to capture and infiltrate runoff from the Riverine Drainage Area Corridor, thereby minimizing the flood potential to the NCESP. Each retention basin is to be a shallow open design intended to provide wide runoff capture areas. Stormwater sheet flows which enter into the basins are to be captured and held allowing for the contained water to percolate into the soil. Each basin will be engineered and designed with 3:1 side slopes and a minimum of three feet of freeboard. Access roads will be constructed in accordance with City of Cathedral City standards. The basin shape, size and bank heights shall be designed to capture the debris potential of the design storm. The captured sediment would settle within the basins as the storm water percolates into the soil.

Maintenance of the regional basins is anticipated to fall under the responsibility of a regional organization. Some of the examples of possible responsible entities are an Assessment District, Land Owner Partnership or CVWD.

As part of the development of the NCESP, a system of localized retention basins, storm drains, inlet structures, and roadways with curbs and gutters will be constructed to handle the estimated runoff from the project site. Graded slopes will be protected from the erosive effects of their own runoff by a system of drains, erosion control mats and landscaping. V-ditches, catch basins, roof drains and area drain systems will be utilized to convey water away from building foundations.

Streets within the NCESP will have integral concrete curbs and gutters which will convey the runoff from the street surfaces, street parkways, parking lots, adjacent planter islands, commercial/ industrial lots and landscaped areas. Catch basins and area drain systems will remove storm runoff from the streets.

Responsible Agencies for the NCESP Storm Drain System include:

- 1) Coachella Valley Water District (CVWD) for Domestic Water, Wastewater and Riverine Drainage Corridor.
- 2) Riverside County Flood Control and Water Conservation District (RCFCWCD) for surface drainage and flood protection.
- 3) U.S. Army Corps of Engineers (USACE) for streambed alteration if additional state or federal permitting is required.
- 4) City of Cathedral City for stormwater management

2.4 INTENDED USE OF THIS EIR

The City of Cathedral City, as the public agency that has the responsibility for approving the Proposed Project, is serving as the Lead Agency. The City of Cathedral City intends to use this EIR as the environmental review document for each of the proposed discretionary actions described previously and as listed below:

Approval of:

- 1) The North City Extended Specific Plan;
- 2) Pre-zoning of the site associated with the NCESP Annexation; and
- 3) Annexation of the NCESP into Cathedral City
- 4) Tentative Parcel Map and “Freeway Sign” design for Planning Area 2; and
- 5) Planned Unit Development and Conditional Use Permits Implementing Planning Area 2.

2.5 ALTERNATIVES TO THE PROPOSED PROJECT

Section 15126.6 of the CEQA Guidelines requires the consideration and discussion of alternatives to proposed projects. According to these guidelines, an EIR shall “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.

Section 15126.6 (e) (1) declares that the specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation.

Reference should be made to Section 6.0 “Alternative Summary” of this EIR. The Alternatives to be considered in this regard include the following:

1) No Project Alternative:

The “No Project” alternative assumes that no land development or internal circulation/ infrastructure improvements will occur within the Specific Plan, including a significant stormwater management system with large retention basin(s), supporting engineered berms, and drainage channels

2) Regional Stormwater Retention Basin(s) Alternative:

This alternative assumes that public source funding can be secured to construct a “least cost” regional stormwater management system within this Specific Plan Area which would retain/ detain projected stormwater flows coming from the North City SP and Indio Hills areas as well as provide for any incidental on-site retention/detention requirements. This system would also provide adequate flood protection for the Thousand Palms Community to the east of Rio Del Sol Road/ Bob Hope Drive, from stormwater flows coming from the west.

3) Current County Light Industrial Zoning Alternative:

The entirety of the Specific Plan is currently zoned for “Light Industrial” uses in Riverside County. This alternative assumes that this use would be consistently maintained on all of the net developable property within the SP except for two areas located on both sides of Bob Hope Drive and south of Varner Road, which would be logical for rezoning to “Commercial” given their adjacency to the new Interstate Highway 10 interchange at Bob Hope Drive.

4) Light Industrial/ Business Park Mixed Use Alternative:

This alternative assumes that the currently zoned “Light Industrial” uses would still remain the majority use of the net developable property of the Specific Plan, but somewhat reduced from the area shown for this use in Alternative 3. Also, the “Retail/ Commercial”, “Restaurant” and “Hotel” uses identified and quantified in Alternative 3, located within the two areas on both sides of Bob Hope Drive and south of Varner Road, would consistently remain within this alternative. However, a significant increase in “Office/ Services” uses is programmed for this alternative, giving it more of a “Business Park/ Mixed Use” profile in combination with the reduced remainder of “Light Industrial” uses of the plan. Also, a “Multifamily Residential/ Apartment” use is introduced into this alternative to provide for some work force housing associated with the business park emphasis.

3.1 AESTHETICS

Each environmental component within this section is divided into a number of additional subheadings addressing the regional setting, existing conditions, the project specific impacts addressed pursuant to the *CEQA Guidelines*, and standard conditions and mitigation measures. Following this evaluation based on the proposed project, the impacts of the four alternatives outlined in Section 2.0 (Project Description) are described.

Under CEQA, an impact is determined to be potentially significant if the differences between the existing conditions and future (proposed) conditions exceed an adopted standard of significance. The City of Cathedral City uses Appendix G of the *CEQA Guidelines*. This Environmental Impact Report also uses the policies adopted in the current Cathedral City General Plan as additional guidance interpreting the CEQA Guidelines at the local level. For some topical areas, this EIR uses significance standards established by agencies with expertise in certain environmental topics such as air quality or noise. In each of the following sections, the standards of significance are used in the analysis of impacts of the proposed North City Extended Specific Plan.

The discussion within this section is based on a variety of information sources. These sources include the City of Cathedral City General Plan (July 2002); the City of Cathedral City General Plan EIR (April 2002); the Riverside County Integrated Plan (RCIP) General Plan and EIR (October, 2003); and the North City Specific Plan and EIR (May and July 2009).

This Section describes the visual setting of the Project and evaluates its potential impacts to the visual (aesthetic) environment due to project implementation. Aesthetics, views and night-time illumination are topics related to the visual environment.

- *Aesthetics generally refer to the identification of visual resources and the quality of what can be visually perceived in surrounding environment;*
- *Views refer to visual access and/or obstructions in relation to the ability to see a focal point or panoramic view of the area; and*
- *Nighttime illumination addresses the effects of a Project's exterior lighting upon adjoining uses.*

A. Regional Setting

The North City Extended Specific Plan (NCESP) is located immediately east of the city limits of Cathedral City and borders the north right-of-way line of Interstate Highway 10. Cathedral City is located in Riverside County, CA, and is approximately 115 miles east of Los Angeles, 150 miles northeast from San Diego and 60 miles west from the City of Riverside. Within the Coachella Valley, Cathedral City is strategically located with land on both sides of the east-west Interstate Highway 10 Corridor which runs parallel to the Union Pacific Railroad Corridor. Cathedral City is bordered by the City of Palm Springs on the west and southwest and by the City of Rancho Mirage on the east and southeast. Unincorporated areas of Riverside County currently border Cathedral City to the north and east along the north right-of-way line of the I-10 corridor, including the “North City Extended Specific Plan”. The unincorporated Thousand Palms Community is located directly east of this Specific Plan, also north of Interstate Highway 10, and is located within Cathedral City’s Sphere of Influence, as is the NCESP.

The North City Extended Specific Plan includes approximately 591.38 acres of vacant desert land located just north of Interstate Highway 10 (I-10). Its general boundaries are I-10 along the south, DaVall Drive (as to be extended north of I-10)/ current Cathedral City Limit Line on the west and Rio Del Sol Road on the east. The proposed project lies within the Sphere of Influence of Cathedral City, in a portion of Sections 11, 13 and 14, Township 4 South, Range 5 East, San Bernardino Base and Meridian. Varner Road defines a majority of the Specific Plan on the north, with the exception being the entirety of Section 12 which is located immediately north of the NCESP. This North City Extended Specific Plan has been prepared as an easterly extension of the previously prepared and adopted North City Specific Plan (July 2009). The original North City Specific Plan included nearly 5,000 acres of mostly undeveloped land north of I-10 and has been annexed into Cathedral City.

The NCESP is characterized as vacant, undeveloped desert land, with significant mountain range and open desert views and vistas in all directions. The Specific Plan is located within the northern portion of the western extents of the Coachella Valley in a geographical area known as the Colorado Desert, a subdivision of the Sonoran Desert. Both the Little San Bernardino Mountains to the north and Indio Hills to the northeast dominate the landscape in the area. Land north of I-10 remains largely undeveloped and consists of steep, eroding sand covered slopes of the Indio Hills, natural drainage ways and washes that emanate from them, and desert open spaces. Land immediately north of the SP includes undeveloped Indian Reservation land in Section 12, attributed to the Agua Caliente Band of Cahuilla Indians, as well as portions of vacant land under Riverside County’s jurisdiction. The vast majority of land included within the North City Extended Specific Plan lies within the 100 year flood plain as defined by FEMA.

B. Existing Conditions

The North City Extended Specific Plan is undeveloped and dominated by natural desert terrain. The site is located within lower alluvial areas of the Indio Hills to the north, and contains primarily Sonoran creosote bush scrub habitat, including recently stabilized sand hummocks. Varner Road traverses the NCESP and forms the northern boundary of the majority of the Specific Plan area. Rio Del Sol Road traverses the eastern portion of the NCESP. These existing roadways currently lack landscape and streetscape features. Interstate Highway 10 parallels the NCESP to the south. Various regional utility lines and associated easements also traverse the area. The site's highest point of elevation on the alluvial fan is approximately 300 feet above sea level at the northwestern edge of the NCESP area, sloping southeast to an elevation of 240 feet, or an overall change in elevation of approximately 60 feet. Soils in the area tend to be shallow and covered with hardpan or caliche, a cement-like layer that accumulates below the surface. These poor-draining soils are often present in upland and slope areas, causing intense runoff and flooding events in storms.

The regional climate of the Coachella Valley is classified as a subtropical desert with average summer high temperatures of 107 degrees and winter lows ranging from 36 to 42 degrees. The majority of days are sunny. Average annual rainfall is just over five inches. Wide varieties of native and drought tolerant landscape plants are indigenous to this desert climate. There are high winds in the Specific Plan area that generally blow from northwest to southeast. Blowing sand constitutes a significant environmental concern as it abrades and damages buildings and motor vehicles, fills drainage ways, driveways and yards, limits visibility on roadways and requires substantial expense for sand removal and clean-up. Wind erosion and "blowsand" have been shown to contribute to significant health threats associated with the suspension of fine particulate matter in the air. Conversely, high and sustained winds do provide the opportunity to harness wind energy to generate electricity, although this Specific Plan may not exhibit the consistency to support the feasible implementation of wind energy parks.

The abundance of Aeolian (wind-blown) sand in the area provides the prime habitat for the Coachella Valley fringe-toed lizard. Thus, this Specific Plan is located within the Coachella Valley Multi-Species Habitat Conservation Plan; however, this area is not located within a Conservation Area of this Plan. Property located directly to the north of this Specific Plan area is located within the Tribal Habitat Conservation Plan for the Agua Caliente Indian Reservation (2010).

Vacant, undeveloped land currently abuts the NCESP on the west and north, and the Interstate Highway 10 right-of-way forms the southern boundary. Land to the east of Rio Del Sol Road includes the unincorporated Thousand Palms Community, which recently became part of the Cathedral City Sphere of Influence. This community

includes, among other uses, light industrial, residential and highway commercial development. Existing commercial uses line the Varner Road corridor and largely serve the Interstate Highway 10 area with fueling stations, hotels and fast-food restaurants.

The entirety of this North City Extended Specific Plan is currently zoned “Light Industrial” (LI) in Riverside County, which permits “industrial and related uses including warehousing/ distribution, assembly and light manufacturing, repair facilities and supporting retail uses”. This is consistent with the “Light Industrial” land use indicated for this area in the Western Coachella Valley Area Plan of the Riverside County Integrated Project (RCIP). Per the Riverside County Circulation Element I-10 is an eligible State Scenic Highway.

C. Threshold Criteria

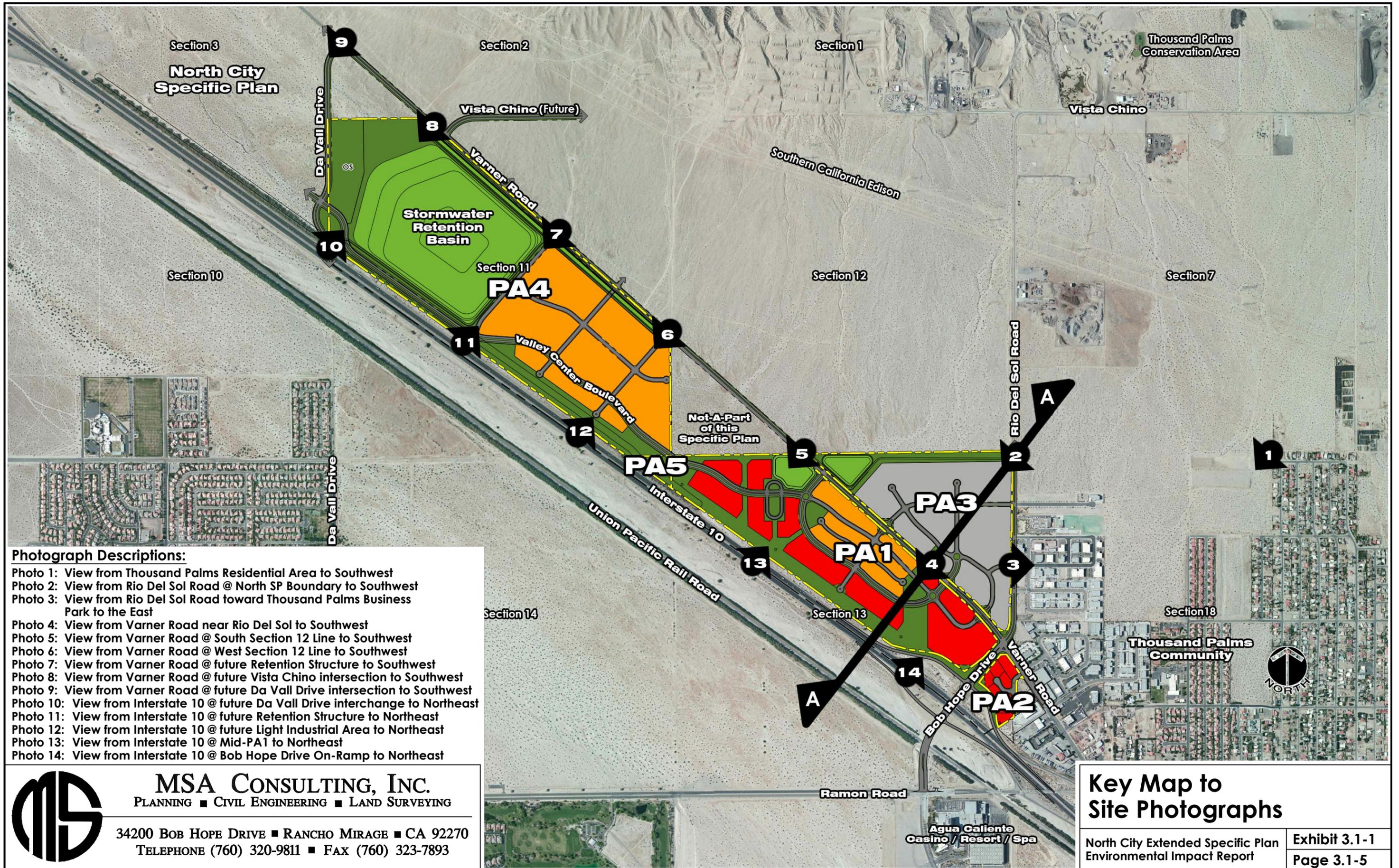
Thresholds of significance were derived from criteria in the CEQA Guidelines and the standard CEQA Environmental Assessment Form. The following questions are relevant to determining whether a project could have a significant impact on the environment from an aesthetics perspective.

Would the project:

- a) Have a substantial adverse effect on a scenic vista?
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- c) Substantially degrade the existing visual character or quality of the site and its surroundings?
- d) Create a new source of substantial light or glare which would adversely affect day or night time views in the area?

D. Project Impacts Found Not to be Significant

The findings of “Project Impacts Not to be Significant” are summarized within this section of the “Aesthetics” discussion of this EIR; and are supported by eye-level photographic analyses and a graphic site section that follow. Refer to Exhibit 3.0-1 “Key Map to Site Photos” for location and orientation of Site Photos. This Key Map is followed by Exhibit 3.0-2 the illustrative “Transverse Site Section A-A



Photograph Descriptions:

- Photo 1: View from Thousand Palms Residential Area to Southwest
- Photo 2: View from Rio Del Sol Road @ North SP Boundary to Southwest
- Photo 3: View from Rio Del Sol Road toward Thousand Palms Business Park to the East
- Photo 4: View from Varner Road near Rio Del Sol to Southwest
- Photo 5: View from Varner Road @ South Section 12 Line to Southwest
- Photo 6: View from Varner Road @ West Section 12 Line to Southwest
- Photo 7: View from Varner Road @ future Retention Structure to Southwest
- Photo 8: View from Varner Road @ future Vista Chino intersection to Southwest
- Photo 9: View from Varner Road @ future Da Vall Drive intersection to Southwest
- Photo 10: View from Interstate 10 @ future Da Vall Drive interchange to Northeast
- Photo 11: View from Interstate 10 @ future Retention Structure to Northeast
- Photo 12: View from Interstate 10 @ future Light Industrial Area to Northeast
- Photo 13: View from Interstate 10 @ Mid-PA1 to Northeast
- Photo 14: View from Interstate 10 @ Bob Hope Drive On-Ramp to Northeast



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Key Map to Site Photographs

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- **Transverse Site Cross Section “A-A”**

This transverse site cross section explores questions relating to potential blocking of scenic views and vistas from the nearest Thousand Palms future development areas, located in Section 7 to the northeast of the Specific Plan, due to the ultimate buildout of the NCESP with its maximum permitted building heights. The projected horizontal “line of sight” is taken from the northeast corner of the SP, at the intersection of Rio Del Sol Road and the south boundary line of Section 12, looking to the southwest toward Mt. San Jacinto. *A key feature of this Cross Section is that the natural existing grade drops approximately 40 feet from the northeast corner of the SP to the Interstate Highway 10 right-of-way/ southwest SP boundary.*

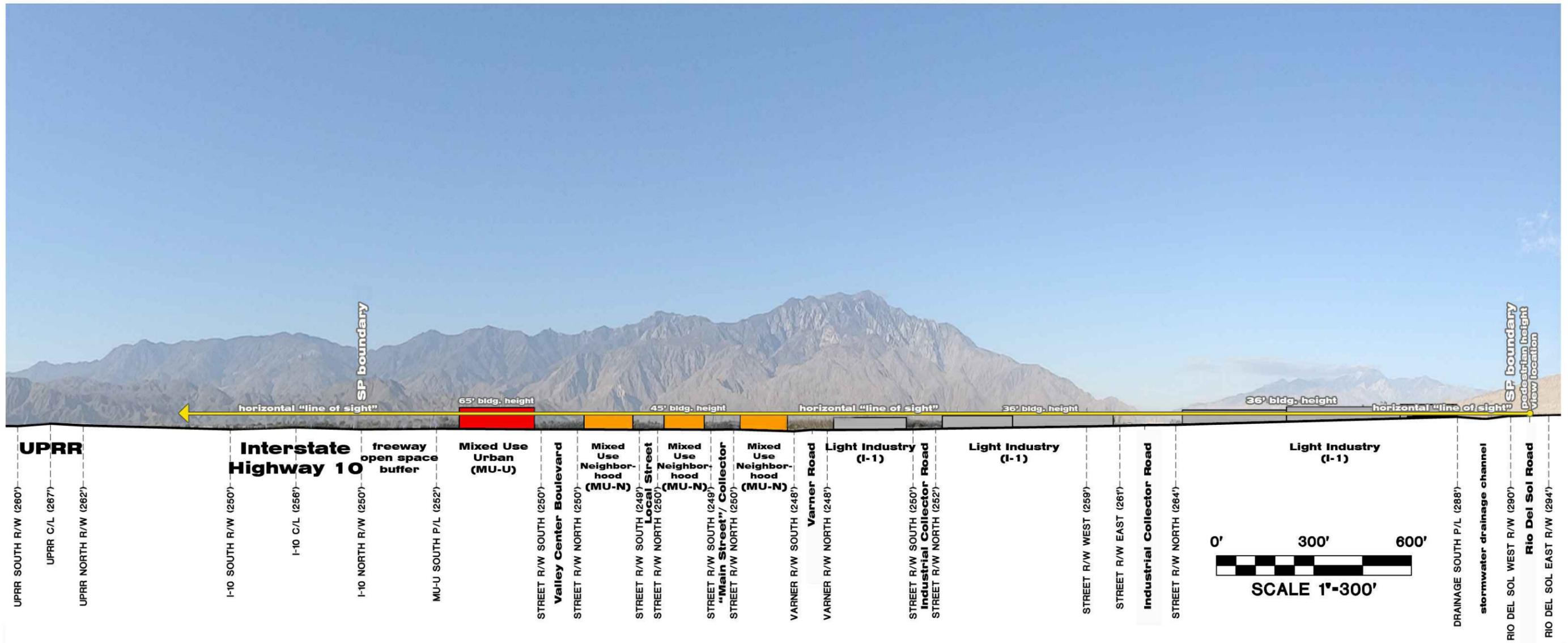
The section illustrates that the most significant impacts on this view shed will be created by the buildout of the nearest Light Industrial (I-1) areas within the northeast corner of the NCESP, at their maximum permitted building heights of 36 feet. Viewed from within Section 7 east of Rio Del Sol Road, these future buildings will be very similar in land use and heights to those currently constructed along the east side of Rio Del Sol to the south of this view location in the Thousand Palms Business Park. They will maintain similar views of the mountains to the southwest, including Mt. San Jacinto, that are currently prevalent within the Thousand Palms Business Park. Current or future residential areas are not anticipated to be impacted by this potential buildout condition.

The Mixed Use- Neighborhood (MU-N) areas located further to the southwest of the Light Industrial (I-1) areas will have permitted maximum building heights of 45 feet. As shown on the Site Section, due to the drop in grade elevations, the “top of roof” elevations of these buildings will be essentially at the same elevation as the “line of sight” from the northeast corner of the NCESP, and will only be visible between foreground Light Industry (I-1) buildings from this vantage point. Scenic views and vistas to the southwest will not be impacted by the MU-N buildings.

The Mixed Use-Urban (MU-U) areas located along the southwestern edge of the NCESP, and beyond the MU-N areas from the line of site vantage point, will have permitted maximum building heights of 65 feet. Again, due to the continuing drop in grade elevations toward the southwest, the “top of roof” elevations of these buildings will only be about 25 feet above the elevation from the “line of sight” from the northeast corner of the Specific Plan area. Thus, scenic mountain views and vistas to the southwest will not be impacted by the MU-U buildings, but sight lines to Interstate Highway 10 as well as to the Union Pacific Rail Road

and its linear wind screen of Tamarisk trees will be blocked from the selected vantage point.

Therefore, as a result of this Site Cross Section analysis, it is concluded that the maximum building heights and locations within the proposed project will not have a substantial adverse effect on scenic vistas to the southwest.



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Transverse Site Section "A-A"
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- **Photo 1: View from Thousand Palms Residential Area to Southwest**

This panorama photo was taken from an existing Thousand Palms residential area with the greatest visual exposure to the proposed project's buildout, looking toward the southwest and Mt. San Jacinto. The existing grade elevation at this point is approximately 320 feet, with an estimated horizontal "line of sight" elevation for a person standing at this location at 325 feet. The "top of roof" building elevations for the tallest structures in the Mixed Use-Urban areas in the Specific Plan will approximate 315 feet to 335 feet due to the seventy foot drop in existing natural grade elevation from this point. Therefore, the tallest buildings anticipated in this development will not block scenic vistas from this location, but will screen views of Interstate Highway 10 as well as the Union Pacific Rail Road and its linear windbreak of Tamarisk trees.

This photo reinforces the findings of the Transverse Site Section "A-A" analysis, and it is concluded that the maximum building heights and locations within the proposed project will not have a substantial adverse effect on scenic vistas to the southwest from existing Thousand Palms residential neighborhoods.

- **Photo 2: View from Rio Del Sol Road @ North SP Boundary to Southwest**

This photo was taken from the northeast corner of the NCESP, at the intersection of Rio Del Sol Road and the south boundary line of Section 12, looking across open desert land in Planning Area 4 of the Specific Plan toward the southwest and Mt. San Jacinto. This coincides with the Transverse Site Section "A-A" orientation and alignment toward the southwest.

This photo further reinforces the findings of the Transverse Site Section "A-A" analysis as well as Photo 1, and it is concluded that the maximum building heights and locations within the proposed project will not have a substantial adverse effect on scenic vistas to the southwest. In addition, this photo and subsequent photo exhibits show that the proposed development of the Specific Plan Area will not substantially damage on-site scenic resources, including but not limited to trees, rock outcroppings, and historic buildings, since none are currently apparent on the property. Further, this and following photo exhibits illustrate that the proposed development of the project will not substantially degrade the existing visual character or quality of the site and its surroundings.



Photo 1: View from Thousand Palms Residential Area to Southwest



Photo 2: View from Rio Del Sol Road @ North SP Boundary to Southwest



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Photo View 1 & 2

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- **Photo 3: View from Rio Del Sol Road toward Thousand Palms Business Park**

This photo was taken along the west right-of-way line of Rio Del Sol Road, looking east into the Thousand Palms Business Park. The light industrial buildings within this business park range between 24 feet and 36 feet in height. These building heights and associated lot coverages and floor area ratios are consistent with those proposed within the “Light Industry” (I-1) areas of the North City Extended Specific Plan area located immediately west of this area, also along Rio Del Sol Road. Thus, the Rio Del Sol Road corridor will present a consistent building profile on both sides of the street that will help integrate the NCESP development with the existing Thousand Palms community development in this area.

- **Photo 4: View from Varner Road near Rio Del Sol Road to Southwest**

The first in a series of photos taken along the Varner Road right-of-way, looking across Planning Area 1 of the NCESP to the southwest, shows an existing basic rural section roadway with no landscaping and exposed overhead electrical power transmission lines. Vacant desert lands abut Varner Road along both sides of the roadway.

The North City Extended Specific Plan proposes Mixed Use-Urban (MU-U) and Mixed Use- Neighborhood (MU-N) land uses along this section of Varner Road, featuring a landscaped Secondary Community Gateway, the intersecting landscaped Valley Center Boulevard and mixed use “Village Center”. Varner Road is to be improved as a “Modified Major Highway” with a landscaped center median and landscaped parkways and multiuse trail and sidewalk. The proposed streetscape along Varner Road is to be comprised of boulders placed along clusters of native and adapted shrubs and cacti, with crushed stone as the primary groundcover. Primary plant materials will include Mexican Ebony, Honey Mesquite, and Desert Willow. As an option, the overhead electrical transmission lines may be relocated underground at a significant cost to the developer. If left in their current configuration, the proposed landscaping will soften their visual impact along the Varner corridor.



Photo 3: View from Rio Del Sol Road toward Thousand Palms Business Park to the East



Photo 4: View from Varner Road near Rio Del Sol to Southwest



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Photo View 3 & 4

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- **Photo 5: View from Varner Road @ South Section 12 Line to Southwest**

The second in a series of photos taken along the Varner Road corridor looking across Planning Area 1 of the SP to the southwest reflects the same existing conditions and proposed improvements as discussed for Photo 4. The left half of the photo is included within the Specific Plan with the right half included in Section 12 and not a part of this SP. Again, Varner Road will be improved and landscaped as discussed for Photo 4.

- **Photo 6: View from Varner Road @ West Section 12 Line to Southwest**

The third in a series of photos taken along the Varner Road corridor looking to the southwest reflects the same existing conditions and proposed improvements as discussed for Photos 4 and 5. However, the left half of the photo is not included within the Specific Plan, but is within Section 12. The right half of the photo is included within Planning Area 4 of the SP and will feature “Light Industry” (I-1) land use with required landscaping and site improvements per the Specific Plan. The Varner Road corridor will be landscaped and improved as discussed for Photos 4 and 5.

- **Photo 7: View from Varner Road @ future Retention Structure to Southwest**

The fourth in a series of photos taken along Varner is centered on the approximate location of a proposed retention structure for a stormwater retention basin which will occupy the right half of Planning Area 4 in the photo. The left half of the photos is proposed for “Light Industry (I-1) land use with accompanying site improvements and landscaping as required in the Specific Plan. The Varner Road landscaping and improvements as proposed in the North City Extended Specific Plan will be continued through this area,

- **Photo 8: View from Varner @ future Vista Chino intersection to Southwest**

The fifth in a series of photos taken along Varner is centered on the future “T” intersection of Vista Chino at Varner Road. Most of the property shown within this photo is to be included in a stormwater retention basin and its related open space within Planning Area 4 of the NCESP. The Varner Road corridor will be consistently landscaped and improved through this area as presented in the North City Extended Specific Plan.



Photo 5: View from Varner Road @ South Section 12 Line to Southwest



Photo 6: View from Varner Road @ West Section 12 Line to Southwest



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Photo View 5 & 6

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Photo 7: View from Varner Road @ future Retention Structure to Southwest



Photo 8: View from Varner Road @ future Vista Chino Intersection to Southwest



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Photo View 7 & 8

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- **Photo 9: View from Varner @ future DaVall Drive intersection to Southwest**

The sixth and final photo in a series taken along Varner Road is centered on the approximate location of the future DaVall Drive “T” intersection with Varner. The right half of the photos shows the existing character and condition of the adjacent North City Specific Plan with the left half showing the setting for the previously referenced stormwater retention basin and a triangular out-parcel which is not included within either the North City or North City Extended Specific Plans. The existing Date Palm at I-10 interchange and overpass is shown in the background at the far right of the photo. Finally, the Varner Road corridor will be landscaped and improved in a manner which is consistent with the requirements of the North City Specific Plan and the North City Extended Specific Plan.

- **Photo 10: View from I-10 @ future DaVall Drive interchange to Northeast**

The first photo in a series taken along the Interstate Highway 10 corridor is centered at the approximate western boundary of the North City Extended Specific Plan area, which coincides with the future DaVall Drive interchange and overpass of I-10. The North City SP is shown to the left of the DaVall interchange location. Planning Area 4 of the North City Extended Specific Plan is shown to the right of the future DaVall Drive and is the location of the future stormwater retention basin.

The existing condition of the I-10 frontage at this location is characterized by a windbreak of Tamarisk trees as well as creosote bush habitat, including recently stabilized sand hummocks. *The Specific Plan anticipates that this “wind break” will need to be replaced with a more consistent, visually attractive and environmentally sustainable “wind break” to meet CalTrans standards.*

Both the North City Specific Plan and the North City Extended Specific Plan show this frontage to be improved as the future alignment of the landscaped “Valley Center Boulevard” which will be constructed as a “Major Highway”. This facility will include a central, landscaped median and parkways with a multiuse pathway and sidewalk. California Fan Palms will be used as theme trees in the parkways, with Desert Willows along the multiuse path. Other trees along the corridor will include Desert Museum Palo Verde, Chaste Tree and Cascalote Tree mixed within a variety of colorful trees, shrubs and groundcovers. *As mentioned previously, the existing Tamarisk trees, creosote bush habitat and sand hummocks are to be removed and replaced by designed berms and themed “desertscape” treatment as described above, complementing the reconstructed “wind break” to CalTrans standards.*



Photo 9: View from Varner Road @ future DaVall Drive Intersection to Southwest



Photo 10: View from Interstate Highway 10 @ future DaVall Drive Interchange to Northeast



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Photo View 9 & 10

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- **Photo 11: View from I-10 @ future Retention Structure to Northeast**

The second photo in a series taken along the Interstate Highway 10 corridor is centered at the approximate location of a proposed retention structure for a future stormwater retention basin which is to be located in the left portion of the photo in Planning Area 4 of the SP. Edom Hill is a significant natural landmark of regional significance in the background of this photo.

The existing condition of the I-10 frontage at this location is characterized by a partial and irregular “windbreak” of small Tamarisk trees as well as creosote bush habitat, including recently stabilized sand hummocks. *The Specific Plan anticipates that this “wind break” will need to be replaced with a more consistent, visually attractive and environmentally sustainable “wind break” to meet CalTrans standards.*

Both the North City Specific Plan and the North City Extended Specific Plan show this frontage to be improved as the future alignment of the landscaped “Valley Center Boulevard” which will be constructed as a “Major Highway”. This facility will include a central, landscaped median and parkways with a multiuse pathway and sidewalk. California Fan Palms will be used as theme trees in the parkways, with Desert Willows along the multiuse path. Other trees along the corridor will include Desert Museum Palo Verde, Chaste Trees and Cascalote Trees mixed within a variety of colorful trees, shrubs and groundcovers.

In the right-center portion of the photo, the I-10 frontage of the NCESP transitions from the Valley Center Boulevard to a “Freeway Open Space Buffer”, an approximately 250 foot wide improved “desertscape” characterized by a palette of selected native and adaptive desert plants and a regional multiuse trail corridor which runs parallel and continuous to the north I-10 right-of-way line from this point to Bob Hope Drive. *As mentioned previously, the existing Tamarisk trees, creosote bush habitat and sand hummocks are to be removed and replaced by designed berms and themed “desertscape” treatment as described above, complementing the reconstructed “wind break” to CalTrans standards.*

Photo 12: View from I-10 @ future Light Industrial Area to Northeast

The third photo in a series taken along the Interstate Highway 10 corridor is centered at the “Light Industry” area of Planning Area 4 of the NCESP. Again, Edom Hill is a significant natural landmark of regional significance in the background of this photo.

As in Photo 11, the existing condition of the I-10 frontage at this location is characterized by a partial and irregular “windbreak” of small Tamarisk trees as well as creosote bush habitat, including recently stabilized sand hummocks. Per the North City Extended Specific Plan, this section of the I-10 frontage of the NCESP area is to be improved as a “Freeway Open Space Buffer”, an approximately 250 foot wide “desertscape” characterized by a palette of selected native and adaptive desert plants and a regional multiuse trail corridor which runs parallel and continuous to the north I-10 right-of-way line past this point to Bob Hope Drive.

The existing Tamarisk trees, creosote bush habitat and sand hummocks are to be removed and will be replaced by designed berms and themed “desertscape” treatment as described above.



Photo 11: View from Interstate Highway 10 @ future Retention Structure to Northeast



Photo 12: View from Interstate Highway 10 @ future Light Industrial Area to Northeast



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Photo View 11 & 12

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- **Photo 13: View from I-10 @ mid-Planning Area 1 to Northeast**

The fourth photo in a series taken along the Interstate Highway 10 corridor is located at the western portion of the “Mixed Use-Urban” area of Planning Area 1 of the SP, an area proposed as higher density multifamily residential uses with maximum building heights of 65 feet. Again, Edom Hill is a significant natural landmark of regional significance in the background of this photo. The existing Thousand Palms Business Park appears in the background of the photo, at the far right side and along Rio Del Sol Road.

Per the North City Extended Specific Plan, this section of the I-10 frontage of the SP is to be improved as a “Freeway Open Space Buffer”, an approximately 250 foot wide “desertscape” characterized by a palette of selected native and adaptive desert plants and a regional multiuse trail corridor which runs parallel and continuous to the north I-10 right-of-way line past this point to Bob Hope Drive.

The existing creosote bush habitat is to be replaced by designed berms and themed “desertscape” treatment as described above. As an option, the overhead electrical transmission lines may be relocated underground at a significant cost to the developer. If left in their current configuration, the proposed landscaping will soften their visual impact along the Varner corridor.

- **Photo 14: View from I-10 @ Bob Hope Drive On-Ramp to Northeast**

The fifth and final photo in a series taken along the Interstate Highway 10 corridor is located at the eastern portion of the “Mixed Use-Urban” area of Planning Area 1 of the SP, an area proposed as higher density multifamily residential uses with maximum building heights of 65 feet. Again, Edom Hill is a significant natural landmark of regional significance in the background of this photo. The existing Thousand Palms Business Park appears in the background of the photo, at the right side and along Rio Del Sol Road.

Per the North City Extended Specific Plan, this section of the I-10 frontage of the SP is to be improved as a “Freeway Open Space Buffer”, an approximately 250 foot wide “desertscape” characterized by a palette of selected native and adaptive desert plants and a regional multiuse trail corridor which runs parallel and continuous to the north I-10 right-of-way line past this point to Bob Hope Drive. This will help preserve the County’s State Scenic Highway designation.

The existing creosote bush habitat is to be replaced by designed berms and themed “desertscape” treatment as described above. The visible overhead

electrical transmission lines will be very expensive to underground, and will be a developer option. If left in their current configuration, the proposed landscaping will soften their visual impact along the I-10 corridor.

Therefore, the Transverse Site Section and Photo Exhibits verify that the three “Project Impacts Found Not to be Significant” include:

- Development of the project will have less than a significant adverse effect on a scenic vista;
- Development of the project will have a less than significant impact on scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; and
- Development of the project will not substantially degrade the existing visual character or quality of the site and its surroundings; and less than significant impacts are anticipated relative to these resources.

The fourth potentially significant project impact to be addressed is:

- Will development of the project create a new source of substantial light or glare which would adversely affect day or night time views in the area?

This potentially significant impact is addressed with the North City Extended Specific Plan “Design Standards and Guidelines” as incorporated by reference into the North City Extended Specific Plan. Specifically, the following provisions of these “Design Standards and Guidelines” which apply to exterior site and architectural lighting are cited as follows:

“All light fixtures shall be in compliance with CCMC Chapter 9.89 (Outdoor Lighting Standards and be:

- Hooded and directed downward to minimize light and direct glare impacts on neighboring properties and reduce impact upon dark skies;
- Directed to illuminate only the areas and elements intended, such as paths, entryways and focal elements;
- Shielded to avoid direct views to any unshielded light source from pedestrian or vehicular sight lines (light sources include freestanding and façade lighting, as well as interior light within ten feet of the structure’s windows);

- Shielded to direct light spillover from the MSHCP Conservation Area. Lighting adjacent to the MSHCP Conservation Area shall have 100% cut-off capability (North City Extended SPA does not include an MSHCP Conservation Area, but this requirement acknowledges adjacency to the project); and
- Equipped with an appropriate level of fixture dimming and cut-off capability (fixtures certified by the *International Dark Sky Association*).

Given the anticipated enforcement of and compliance with these standards, the fourth “Project Impact found not to be Significant” is stated as:

- *Development of the project will not create a new source of substantial light or glare which would adversely affect day or night time views in the area; and therefore impacts related to light glare are expected to be less than significant.*



Photo 13: View from Interstate Highway 10 @ Mid-PA1 to Northeast



Photo 14: View from Interstate Highway 10 @ Bob Hope Drive On-Ramp to Northeast



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Photo View 13 & 14

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E. Potentially Significant Impacts

Based upon the findings of the previous analysis, no Potentially Significant Aesthetic Impacts have been identified.

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

The project developer shall ensure that the following mitigation measures are implemented to reduce potential impacts to aesthetics:

MM 3.1-1: A landscape plan for infiltration Basin # 1 shall be submitted concurrently with the initial development plans implementing the NCESP that demonstrates the restoration of native vegetation at the top of any basins, exclusive of access roads.

MM 3.1-2: Landscape plans for infiltration Basins # 2 & 3 shall be submitted concurrently with adjoining development to demonstrate the “Desert Oasis” theme & they adequately shield views into the basins.

G. Level of Significance after Mitigation

Included in this conclusion is the recognition of a set of comprehensive Design Guidelines included in the Specific Plan which address aesthetic qualities of the proposed development, including building design, landscape design and a signage program. Under the latter, billboards are excluded and highway-oriented signage is addressed in a themed design approach relating to community gateways.

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

H. Resources

City of Cathedral City General Plan (July 2002);

City of Cathedral City General Plan EIR (April 2002);

Riverside County Integrated Plan (RCIP) General Plan and EIR (October, 2003); and

North City Specific Plan and EIR (May and July 2009).

3.2 AGRICULTURAL RESOURCES

The discussion within this section is based on information and analysis included in the Riverside County Integrated Project (RCIP) General Plan Final Program Environmental Impact Report Volume 1 (October 2003).

A. Regional Setting

The Coachella Valley region is noted for prime agricultural lands in the southeastern 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, predominately dates and citrus, early in this century and has given way to resort, residential and commercial development.

According to the Riverside County General Plan, a total of 180,178 acres of land are currently being used for agricultural purposes. Within what the Riverside County General Plan refers to as the Eastern County, where the City of Cathedral City and the Coachella Valley are located, 157,575 acres are currently being used for agriculture (87% of total). Most of these lands are located in the Eastern Coachella Valley Cities of La Quinta, Indio, and Coachella; and unincorporated regions such as Thermal.

B. Existing Conditions

The North City Extended Specific Plan and surrounding areas include primarily vacant land to the west, north and south as well as a mixture of commercial, light industrial and residential uses to the east that do not include agricultural operations. According to the 2008 California Farmland Mapping and Monitoring Program (FMMP) Geographic information Systems database, the land is categorized as "Other Land (X)". Per FMMP, this category is not considered important farmland. The project site is not adjacent to land that is categorized as Prime Farmland, Unique Farmland, or Farmland of Local or Statewide Importance.

According to the Williamson Act Program 2008 Status Report, no portion of land within a one mile radius is recognized as being under a Williamson Act Contract. There are no other agricultural areas or related zoning policies with which the proposed project would conflict. The project will not impact or remove any portion of land from the County's agricultural zoning or agricultural preserve.

Further, no forest land, timberland or Timberland Production areas are situated on or in the immediate surroundings of the site, largely because forest vegetation is uncharacteristic of the Coachella Valley's desert floor environment.

C. Threshold Criteria

Thresholds of significance were derived from criteria in the CEQA Guidelines and the standard CEQA Environmental Assessment Form in which the Project is measured against for agricultural impacts. Potentially significant impacts would result if the Proposed Project would:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- b) Conflict with existing Zoning for agricultural use, or a Williamson Act contract?
- c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural uses?

D. Project Impacts Found Not To Be Significant

As stated previously, no farmland or related activities exist on the project site, or adjacent to the proposed Project. Maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, do not show the agricultural designations Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the subject property. No agricultural zoning designation exists in the immediate vicinity, and no Williamson Act contract is in effect within or adjacent to the Specific Plan.

Given the absence of agricultural land use and zoning designations, Williamson Act contract and farming activities on the subject site, the development of the proposed project would not adversely affect agricultural resources in the area. Conversion of farmland to non-agricultural uses is not expected to result from proposed project implementation.

E. Potentially Significant Impacts

No potentially significant impacts to agricultural resources will result from the development of the proposed North City Extended Specific Plan.

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

Because there are no impacts to agricultural resources resulting due to proposed Project implementation, no standard conditions or mitigation measures are required.

G. Level of Significance after Mitigation

No impacts to any agricultural resources will result due to the development of the North City Extended Specific Plan. Therefore no mitigation measures are necessary.

H. Resources

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.

3.3 AIR QUALITY

Analysis of the North City Extended Specific Plan and Annexation Project impacts to air quality involved the review of various information sources which include the County of Riverside Integrated General Plan (RCIP 2003), the Riverside County Integrated Project General Plan Final Program Environmental Impact Report, Volume I (October 2003), and Air Quality Element from the City of Cathedral City Comprehensive General Plan (Amended June 2009). Document review also includes the City of Cathedral City Comprehensive General Plan, Zoning Map Amendment, and the Downtown Precise Plan Amendment Draft Environmental Impact Report (April 2002).

The Air Quality analysis in the North City Specific Plan EIR (May 2009), The North City Extended Specific Plan Air Quality Impact Study was prepared for the proposed project and can be found in the Technical Appendices of this EIR (See Appendix C). A complete listing of resources utilized is included at the end of this analysis. This air quality analysis also contains information and evaluation of Greenhouse Gas (GHG) impacts as they relate to the proposed North City Extended Specific Plan and Annexation project.

Based on the Cathedral City Annexation and North City Extended Specific Plan Air Quality Impact Study, Project-related impacts have the potential to exceed the SCAQMD significance thresholds during both construction activities and long-term operation. There are currently no feasible mitigation measures to substantially reduce the project-related operational emissions or the significant impact associated with the project's inconsistency with the applicable 2007 AQMP. These impacts are considered significant and unavoidable. A Statement of Overriding Considerations must be adopted for significant cumulative impacts on air quality.

There is no significance threshold established for the reduction of greenhouse gas emissions at the individual project level or exposure to the risks associated with climate change and global warming against which the project could be measured. The incremental contribution of the project to climate change is considered potentially significant and unavoidable.

According to CEQA, section 15126.4(c) Mitigation Measures Related to Greenhouse Gas Emissions: measures to mitigate the significant effects of greenhouse gas emissions may include, among others:

Reductions in emissions resulting from a project through implementation of project features, project design, or other measures such as those described as the potential of siting, orientation, and design to minimize energy consumption, including transportation energy, water conservation and waste management.

According to the California Energy Commission, research shows that increasing a community's density and its accessibility to job centers are the two most significant factors for reducing vehicle miles traveled, which is an important component of reducing statewide emissions. (California Energy Commission 2007, 2007 Integrated Energy Policy Report, CEC-100-2007-008-CMF (-2007 IEPR), at P.12; see also CEC, The Role of Land Use in Meeting California's Energy and Climate Goals (2007) at p. 20).

As described within the SP and EIR, project design features are in line with components in Sustainable Sites Initiative. The mixed use development encourages pedestrian access through proximity of diverse uses including single and multi-family residential, commercial, industrial and recreational. Project impacts related to GHGs are expected to be less than significant.

The valley is designated as non-attainment for the Criteria pollutants of Ozone Precursors (NO_x) and PM₁₀. According to the Air Quality Analysis, these pollutants exceed regulatory thresholds only during construction activities. Ozone, NO_x and PM₁₀ are not utilized as indicators for GhG.

LESS-THAN-SIGNIFICANT AIR QUALITY IMPACTS

According to the Air Quality Impact Study, the construction activities required to implement the project have the potential to expose future sensitive receptors that locate within the project site to toxic air contaminants emitted by diesel fueled construction equipment (including diesel particulate matter and diesel exhaust organic gases, benzene, 1,3-butadiene, formaldehyde, acetaldehyde, and acrolein). Given the limited exposure of these future sensitive receptors, the maximum incremental cancer risk would not exceed ten per million people exposed.

The emissions of CO, SO_x, PM₁₀, and PM_{2.5} during project-related construction activities are not projected to exceed the SCAQMD thresholds of significance and are therefore considered less than significant.

Since there are no existing sensitive receptors located within one-quarter mile of the project site, air contaminants emitted during project-related construction or operation would not expose existing sensitive receptors to substantial concentrations of criteria air pollutants or toxic air pollutants.

The project shall comply with all of the requirements in SCAQMD Rule 403.1 applicable to areas within the Coachella Valley Blowsand Hazard Zone to minimize potential project-related impacts on blowsand. Through the implementation of approved *Site-Specific Dust Control Plans*, the project shall implement the Coachella Valley Best Available Control Measures to ensure that applicable performance standards are met during construction activities. The residual impact of the project on wind-blown fugitive

dust and PM₁₀ generated in the Coachella Valley Blowsand Hazard Zone would be less than significant.

Any proposed gasoline dispensing station will require SCAQMD permits to construct and operate. Best Available Control Technology for toxics will be required at the site of any gasoline refueling facility per applicable SCAQMD Rule 1401. This facility will be subject to the SCAQMD New Source Review Rule requirements. The potential impact of locating any gasoline dispensing station on-site would be less than significant, provided sensitive receptors (including transient lodging) are located a minimum of 50 feet from the facility and the gasoline throughput remains below 3.6 million gallons per year. According to the Air Quality Impact Study, this separation would represent a cancer risk of less than ten per million people exposed over a period of 70 years. A separation in excess of 300 feet would be required for gasoline dispensing facilities with an annual throughput between 3.6 million and 19 million gallons per year.

There are no existing sensitive receptors within one-quarter mile of the intersections most heavily used by project traffic; however, based upon a carbon monoxide “hot spot” analysis, the year 2035 carbon monoxide levels are not projected to exceed state or federal CO standards at the intersection of Bob Hope Drive and Varner Road with or without project related traffic. The proposed project would not interfere with the attainment of the state 1-hour or 8-hour carbon monoxide standards by either exceeding them or contributing to an existing or projected violation at sensitive receptor locations.

The proposed project shall comply with SCAQMD Rule 402 - *Public Nuisance* (Adopted May 7, 1976) and therefore is not expected to produce appreciable levels of objectionable odors that would be perceptible to any existing sensitive receptors within or adjacent to the property.

The long-term emissions of SO_x and PM_{2.5} associated with the operation of the Preferred Project are not projected to exceed the SCAQMD mass thresholds of significance and are therefore considered less than significant.

POTENTIALLY SIGNIFICANT AIR QUALITY IMPACTS

The project site is located within an area prone to natural windstorms, wind erosion, and blowsand. The adverse health effects that result from human exposure to blowsand can be severe. To minimize potentially significant impacts of blowsand exposure on future sensitive receptors that locate within the project site, the Specific Plan should incorporate design standards and development guidelines detailing appropriate techniques to be implemented to control and reduce wind erosion and blowsand over the long term. Permanent blowsand abatement elements should be implemented on-site to protect and stabilize the soil within the project site. Appropriate techniques to

prevent the accumulation of blowsand on-site should be incorporated in the project design to minimize future damage from and exposure to blowsand.

Construction activities required to implement the Preferred Project would increase greenhouse gas emissions through the combustion of fossil fuels and contribute incrementally to global warming. Although there are no established significance thresholds for greenhouse gas emissions during construction activities, these emissions are considered potentially significant because they will occur over twenty years and may contribute to California not achieving the greenhouse gas reduction targets identified under AB 32 to reduce the state's impact on climate change.

The project-related long-term increase in greenhouse gas emissions through the combustion of fossil fuels, energy usage, water usage, and waste disposal has been reduced 13 percent through the project design and development standards. The project would contribute incrementally to global warming and may contribute to California's inability to achieve the greenhouse gas reduction targets identified in AB 32 to reduce the state's impact on climate change. The incorporation of a Climate Action Plan in the North City Extended Specific Plan would establish specific design features and development standards to achieve sustainable decreases in greenhouse gas emissions at the individual project level and could reduce this impact to less than significant.

In 2005, the CARB and SCAQMD recommended a minimum separation of 500 feet between freeways and new sensitive land uses located downwind of a freeway to reduce localized air pollution exposures. This general recommendation is advisory, not regulatory.

The proposed project may result in sensitive land uses being constructed within 500 feet of Interstate 10, a local source of air pollutants and toxic air contaminants. The data show that potential public health risks decrease with distance and the relative exposure drops substantially within the first 300 feet from the downwind edge of a freeway. The health risk on the upwind side of a freeway is much less than that at the same distance on the downwind side of a freeway. The project site is upwind of Interstate 10 approximately 77 percent of the time. The health risks increase with higher concentrations of air pollutants and longer exposure.

Many factors will influence the future levels of criteria pollutants and air toxics near Interstate 10 but control of the mobile emissions sources is the most effective mitigation strategy. Existing federal and state emissions control regulations will reduce the air pollutants emitted by diesel engines by 90 percent by the year 2020. The following measures shall be implemented to reduce the impact of the environment on all future sensitive receptors located on-site within 500 feet of Interstate 10 to the maximum extent feasible.

A buffer zone has been incorporated in the Site Development Plan between Interstate 10 and future residential and hotel uses within the project site.

- Fixed non-openable windows shall be installed on the residential and hotel building faces with line-of-sight exposure to Interstate 10.
- Active or passive filtration shall be installed in the HVAC systems of residential and hotel buildings with ventilation from the side of the building facing away from Interstate 10.
- Intervening buildings or sound barriers shall be used to shield outdoor activity areas (swimming pools, playgrounds, parks, etc.) where sensitive receptors will be found.

SIGNIFICANT AND UNAVOIDABLE AIR QUALITY IMPACTS

Construction activities undertaken to implement the proposed project will cause localized emissions both NO_x and ROG in the project vicinity at levels projected to exceed the SCAQMD mass daily significance thresholds.

The SSAB is a non-attainment area for ozone and PM₁₀. ROG and NO_x are ozone precursors, therefore, the emission of these pollutants over the short term and long term constitutes the emission of ozone. PM₁₀ emissions associated with the operation of the

Preferred Project are projected to exceed the SCAQMD mass thresholds of significance over the long term. Therefore, the NCESP would substantially contribute to a cumulatively considerable net increase in the emissions of pollutants for which the SSAB is designated nonattainment.

Although the proposed project is consistent with the City's air quality goals and policies, a change of zone would be required to increase the development density. Consequently, the project would not be consistent with the population and employment growth assumptions used in developing the regional *Air Quality Management Plan*. As a result, the long-term operational air quality impacts associated with the Preferred Project may prevent the Coachella Valley from meeting the ambient air quality standards and should be considered cumulatively considerable.

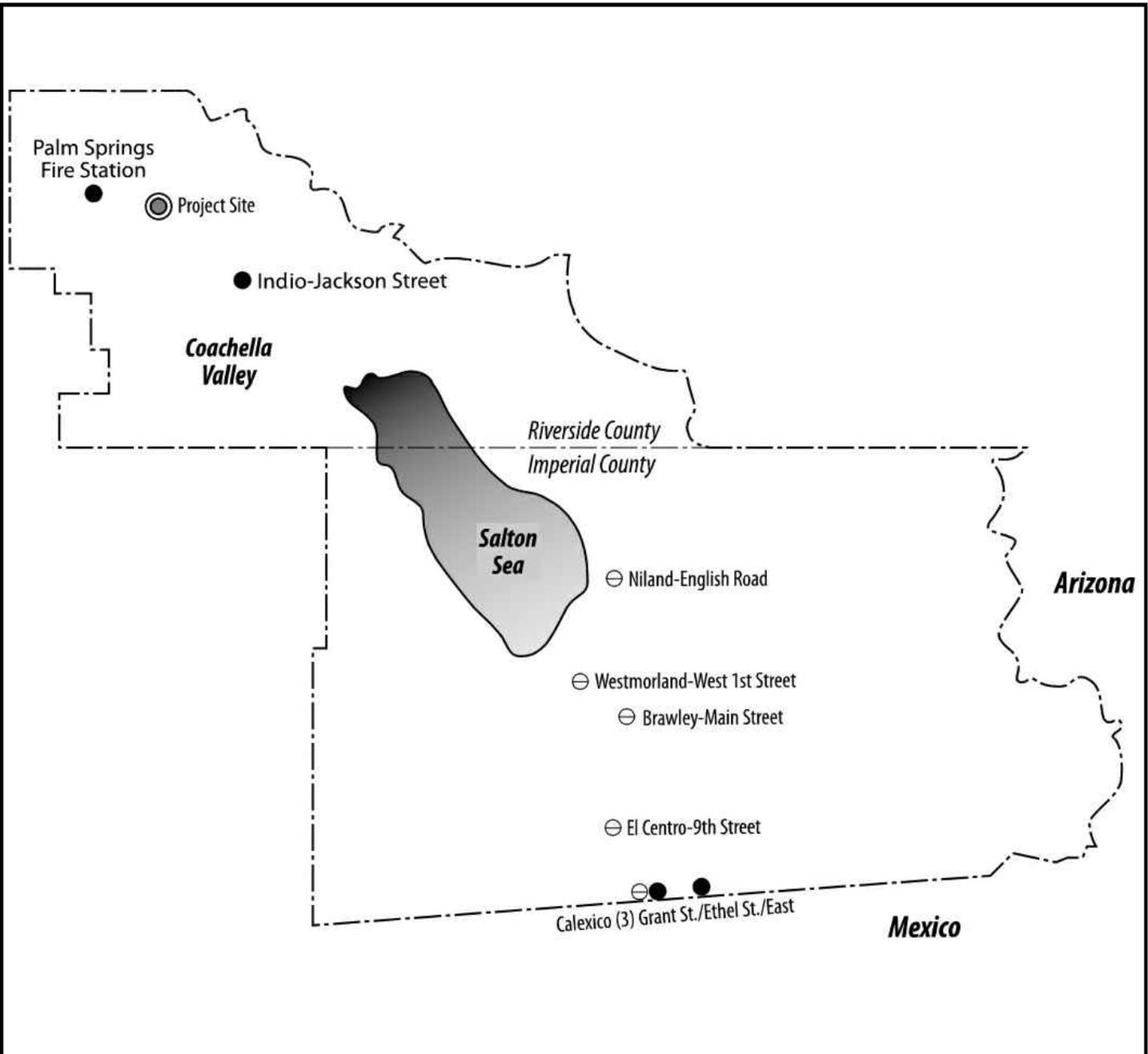
A. Regional Setting

In the past twenty years, extensive air quality improvements have been made in California. However, severe air pollution problems continue to occur in Southern California, which includes Riverside County. As shown on Exhibit 3.3-1, Riverside County lies within three air basins: the South Coast Air Basin (SOCAB), Salton Sea Air Basin

(SSAB) and the Mojave Desert Air Basin (MDAB). Appointed agencies (air districts) oversee air quality conditions in each of the County basins. Air quality in the SOCAB and SSAB is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The MDAB is managed partly by the SCAQMD and partly by the Mojave Desert Air Quality Management District (MDAQMD). See Exhibit 3.3-2.

Air pollution consists of many substances produced by a variety of sources, both natural and man-made. Most air pollutants are actually wasted energy in the form of unburned fuels or by-products of the combustion process. The burning of fossil fuels is a major generator of air pollution. Motor vehicles produce air pollutants by emitting photochemically reactive hydrocarbons (unburned fuel), carbon monoxide, and oxides of nitrogen. These primary pollutants chemically react in the atmosphere with sunlight and the passage of time to form secondary pollutants such as ozone.

Air pollutants have been classified into two types: primary pollutants and secondary pollutants. Primary pollutants are those emitted directly from a source and include: carbon monoxide (CO), nitric oxide (NO), sulfur dioxide (SO₂), particulates, and various hydrocarbons and other volatile organic compounds (VOC). Secondary pollutants are generated with the passage of time in the air mass and include: photochemical oxidants (90% of which are ozone), photochemical aerosols, peroxyacetylnitrate (PAN), and nitrogen dioxide (NO₂).



Legend	
●	Gaseous Monitoring and Particulate Sampling
⊖	Particulate Sampling Only



Greenhouse Gases (GhG)

GhG are gases that trap heat in the atmosphere, similar to how a greenhouse would retain heat. Sources of GhG are natural processes and human activities. The following are common GhG: aerosols, carbon dioxide, chlorofluorocarbons, hydrofluorocarbons, methane, ozone, perfluorocarbons, sulfur hexafluoride, water vapor. A separate discussion on global climate change and greenhouse gases is provided in the Section 3.7 Greenhouse Gas Emission section of this DEIR impact analysis. Human activities (such as burning carbon-based fossil fuels) create water vapor and CO₂ as byproducts, thereby impacting the levels of GHG in the atmosphere.

Sources of Air Pollutants

Two main sources of air pollutant emissions are classified as mobile sources and stationary sources. Mobile sources are generally divided into two categories: on-road and non-road sources. On-road sources generally comprise motorized vehicle such as automobiles, motorcycles and trucks. Non-road sources include trains, boats, jet skis and all terrain vehicles.

The RCIP indicates that motor vehicles are the primary source of air pollutants in Riverside County. Deterioration of air quality in the County has been linked to the County's land use pattern, geographical proximity to Orange and Los Angeles Counties, and subsequent auto-generated traffic.

Stationary sources are subdivided into two subcategories: point sources and area sources. Examples of point sources are power plants and refinery boilers, while area sources include small emission sources such as residential water heaters and architectural coatings. As stated in the RCIP, agricultural and industrial land uses are generally the main stationary pollution sources. However, poor air quality in the region has also been linked to most urbanized land areas and their associated activities.

In addition to mobile and stationary emission sources, atmospheric conditions including wind speed, wind direction, temperature and rainfall also affect air quality. Further, a substantial percentage of air pollution has historically been generated in the Los Angeles area which in turn is transported into the County.

Criteria Air Pollutants

In accordance with the Clean Air Act, the United States Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for pollutants determined to be harmful to public health and the environment. The two types of national air quality standards implemented by the EPA are primary standards and secondary standards. Primary standards set limits to protect public health, including

the health of “sensitive” populations such as children, the elderly and people with chronic respiratory conditions. Secondary standards set limits that protect public welfare including protection against decreased visibility. Additionally, secondary standards are implemented to reduce/prevent damage to crops and vegetation, buildings and animals.

Criteria air pollutants refer to air contaminants for which air quality standards currently exist. In 1971, the EPA established the National Ambient Air Quality Standards for the following air pollutants: ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon monoxide (CO), fine suspended particulates (PM₁₀), and lead (Pb).

Additionally, California has set State standards for some of these pollutants that are more restrictive than the National standards. Precursors or emissions of criteria air contaminants include oxides of nitrogen (NO_x), oxides of sulfur (SO_x), particulate matter (PM₁₀). Unlike national standards, there are no attainment deadlines for state standards. The national and state standards of allowable concentrations for these six pollutants is illustrated in Table 3.3-1. Further, a brief description and the health effects of each of these air pollutants are provided on the following pages.

**Table 3.3-1
Federal and State
Ambient Air Quality Standards
For Criteria Air Pollutants**

Pollutant	Unallowable Concentration* ppm or µg/m ³ (where noted)	Type
Carbon Monoxide (CO)		
8-hour average (US)	≥9.5	Primary
8-hour average (CA)	>9.0	
1-hour average (US)	>35	Primary
1-hour average (CA)	>20	
Nitrogen Dioxide (NO₂)		
AAM (US)	>0.0534	Primary and Secondary
1-hour average (CA)	>0.25	
Ozone		
1-hour average (US)	>0.12	Primary and Secondary
1-hour average (CA)	>0.09	
8-hour average (CA)	>0.08	Primary and Secondary
Lead		
Quarterly average (US)	>1.5 µg/m ³	Primary and Secondary
Monthly average (CA)	≥1.5 µg/m ³	
Particulate (PM₁₀)		

AAM (US)	>50 µg/m ³	Primary and Secondary
AAM (CA)	>20 µg/m ³	Secondary
24-hour average (US)	>150 µg/m ³	Primary and Secondary
24-hour average (CA)	>50 µg/m ³	Secondary
Particulate (PM_{2.5})		
AAM (US)	>15 µg/m ³	Primary and Secondary
AAM (CA)	>12 µg/m ³	Secondary
Sulfur Dioxide (SO₂)		
AAM (US)	>0.03	Primary
24-hour average (US)	>0.14	Primary
24-hour average (CA)	>0.04	Primary
3-hour average (US)	>0.50	Secondary
1-hour average (CA)	>0.25	Secondary
<p>(California standards are provided where California standards are different than National standards)</p> <p>* Concentration in units of air, by volume.</p> <p>AAM = Annual Arithmetic Mean.</p> <p>PM₁₀ refers to particles with diameters of 10 micrometers or less.</p> <p>PM_{2.5} refers to particles with diameters of 2.5 micrometers or less.</p> <p>ppm = parts per million; µg/m³ = micrograms per cubic meter.</p> <p>US = Federal (or National) Standard; CA= California Standard.</p>		

Carbon Monoxide (CO)

Carbon Monoxide is produced by the incomplete combustion of fossil fuels. It is a colorless, odorless and toxic gas. Gasoline powered automobiles are a major source of carbon monoxide, primarily due to inefficient fuel usage in internal combustion engines. Other sources of carbon monoxide emission include many industrial operations.

Health problems associated with elevated carbon monoxide levels include the following: heart diseases, such as congestive heart failure; decreased exercise capacity in angina pectoris patients; adverse effects on conditions that require high oxygen supply such as fetal development, chronic hypoxemia, anemia, and diseases involving the heart and blood vessels; impairment of time interval estimation and visual function.

Nitrogen Dioxide (NO₂)

Nitrogen dioxide is a reddish-brown gas generated by the combination of nitric oxide with oxygen. It is one of the oxides of nitrogen that can exist in the atmosphere. In general, oxides of nitrogen (NO_x) are the primary receptors of ultraviolet light initiating the photochemical reactions that produce smog. Oxides of nitrogen contribute to other air pollution issues such as high levels of fine particulate matter, poor visibility, and acid deposition.

Significant sources of nitrogen dioxide include incomplete combustion in motor vehicle engines; power plants, refineries and other industrial processes. Aircraft, railroads, and ships are also substantial emission sources.

Potential health risks related to nitrogen dioxide in human beings consist of the following: altered or elicited sensory responses; impaired pulmonary function and increased incidence of acute respiratory disease including infections and respiratory symptom in children; breathing difficulty in healthy and bronchitic groups.

Ozone

The Earth's upper atmosphere, from 10 to 30 miles above the Earth's surface, naturally contains ozone. This colorless and odorless gas creates a natural protective layer that shields us from the sun's harmful ultraviolet rays. However, this beneficial ozone layer is slowly being destroyed by man made chemicals.

In the Earth's lower atmosphere, near ground level, ozone is created by the photochemical process. The process involves complex atmospheric reactions with oxides of nitrogen and volatile organic compounds, occurring in the presence of ultraviolet energy from sunlight, forming photochemical oxidant. Ozone and a group of chemicals called organic peroxy nitrates are primary components of photochemical oxidant. The significant source of ozone precursors (oxides of nitrogen and volatile organic compounds) are motor vehicles. Ground level ozone is a harmful pollutant. Generally, ozone levels peak during the summer and early fall.

Short-term and/long term exposure to ozone has been linked to a number of health risks. Short term ozone exposures could result in decreased pulmonary function in healthy individuals including altered breathing patterns, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue and immunological changes. Ozone exposure could increase frequencies of asthma attacks, chest discomfort, cough, and headache.

Long-term exposure to ozone could have adverse effect on public health. Some studies suggest that young adults raised in areas of higher air pollution have a greater degree of airway obstruction. Recent studies have shown an increase in risk of death from respiratory causes, primarily pneumonia and chronic pulmonary obstructive pulmonary disease. Furthermore, an association has been identified between elevated ambient ozone levels and increases in daily hospital admission rates and mortality.

Lead (Pb)

Old paints and coatings, plumbing, and a variety of other materials contain lead. According to the US EPA, this highly toxic metal could also occur in soils, household dust and drinking water when lead or lead solder is used in plumbing.

Significant health hazards could result when lead enters the bloodstream through ingestion and/ inhalation. Children are considered highly susceptible to the effects of lead. High levels of lead in children's bodies can cause: damage to the brain and nervous system, behavior and learning problems, slowed growth, hearing problems and headaches. The harmful effects of lead to adults include difficulties during pregnancy, high blood pressure, nerve disorders, digestive problems, other reproductive problems in both male and female, memory and concentration difficulties, muscle and joint pains. Lead poisoning can also cause anemia, lethargy, seizures and death.

Particulate Matter (PM)

Particulate matter refers to solid particles and liquid droplets in the atmosphere. Various man-made and natural sources release PM directly or emit other pollutants that react in the atmosphere to form particulate matter. These particles, both solid and liquid, vary in size. Particles between 2.5 and 10 micrometers in diameter are referred to as "coarse" particles, while particles with diameter less than 2.5 micrometers are referred to as "fine" particles.

Crushing or grind operations, and dust from paved or unpaved roads are known sources of coarse particles. Fine particles are end-products of some industrial processes and all types of combustion associated with motor vehicles, power plants, wood burning, etc.

Both fine and coarse particulates are considered pollutants of concern given that they can be inhaled into and accumulate in the respiratory system. Health hazards associated with particulates include aggravated respiratory system such as asthma and respiratory infections. Recent studies indicate a correlation between long-term exposure to air pollution dominated by fine particles and increased mortality rates, reduction in life-span, and the possibility of an increased incidence of cancer.

Sulfur Dioxide (SO₂)

Sulfur dioxide is primarily formed from the combustion of fuels that have high sulfur content. Minor sources of this pollutant include chemical plants, sulfur recovery plants, and metal processing. Sulfates are generated when a reaction with sulfur dioxide and oxygen occurs in the presence of sunlight. The use of natural gas in power plants and boilers has been associated with recent reductions in sulfur dioxide levels.

Exposure to sulfur dioxide could result to increased frequencies of acute respiratory symptoms (airway constrictions in asthmatic cases and severe breathing difficulty), and decreasing ventilatory functions in minors. Excessive high level exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

Criteria Air Pollutant Attainment Status in SOCAB, SSAB and MDAB

Based on the current RCIP, the attainment status for criteria air pollutants in each of the Riverside County air basins is briefly described as follows.

Ozone

The SOCAB, SSAB and MDAB are designated as non-attainment areas for federal and state ozone standards. Additionally, the U.S. Environmental Protection Agency has redesignated the Riverside County portion of the Salton Sea Air Basin as a “Severe-15” ozone non-attainment area for the 8-hour federal ozone standards for 1997 (0.08 ppm) and the lower 2008 standard (0.075 ppm). This extends the attainment deadline to 2019 for the 1997 8-hour ozone standard and establishes a new attainment date for the 2008 8-hour ozone standard of December 31, 2027.

Carbon Monoxide

The SOCAB exceeds the federal carbon monoxide standards and is therefore classified as a non-attainment area. However, in the past years, the Riverside County area of the SOCAB has not exceeded either federal or state carbon monoxide standards. Both SSAB and MDAB have been classified as attainment areas for federal and state carbon monoxide standards.

Nitrogen Dioxide

In the past years, the state and federal nitrogen dioxide standards have not been exceeded in the SOCAB. This particular air basin is designated as a maintenance area under federal standards. A maintenance area designation means that an area was once classified as non-attainment but has recently demonstrated achievement of air quality standards. Under the state standards, SOCAB is designated as an attainment area.

The SSAB and MDAB are designated as attainment areas for both federal and state nitrogen dioxide standards.

Nitrogen dioxide was monitored at the Palm Springs air monitoring station between 2009 and 2011. The maximum one-hour concentration was 0.05 ppm compared to the state standard of 0.18 ppm and the federal standard of 0.100 ppm (effective April 7, 2010). The annual average concentration was the highest in the year 2010 and reached

8.5 parts per billion (ppb). The federal standard is 54.4 ppb and the state standard is 30 ppb.

Carbon dioxide (CO₂) is the primary component of GHG emissions. CalEEMod estimates that CO₂ emissions will comprise 92.27 percent of the Preferred Project's mitigated carbon dioxide equivalent (CO_{2e}) emissions over the long term. Biological CO₂ emissions would comprise 5.95 percent and Non Biological CO₂ would represent 86.32 percent of the operational GHG emissions with the Preferred Project. Methane (CH₄) emissions would represent 0.36 percent of the operational GHG emissions. Nitrous oxide (N₂O) emissions would be negligible. The global warming potential of each of these greenhouse gases is taken into account by converting emissions of CO₂, CH₄, and N₂O into CO₂ equivalent (CO_{2e}) emissions, which are often expressed in units of metric tons (MT) per year.

Sulfur Dioxide

The SOCAB, SSAB and MDAB are all classified as attainment areas for both federal and state sulfur dioxide standards.

Lead

The SOCAB, SSAB and MDAB are all classified as attainment areas for both federal and state lead standards.

Particulate Matter

Both SOCAB and SSAB are designated as non-attainment areas for state and federal PM₁₀ standards. The Coachella Valley State Implementation Plan was developed in 2004 to address the concerns of that region. SSAB is designated as unclassified for PM_{2.5} state standards while the U.S. EPA designated the South Coast Air Basin (where PM_{2.5} concentrations exceed the national annual and 24-hour standard by a substantial margin) nonattainment for the national PM_{2.5} standards but designated the Coachella Valley portion of Riverside County as attainment.

B. Existing Conditions

Local Climate and Air Quality

The proposed North City Extended Specific Plan site is located within the Coachella Valley region of Riverside County, California. (See Exhibit 2.3-1 Regional Location Map) The Coachella Valley is an arid desert region with a climate characterized by low annual precipitation, low humidity, hot days, and very cool nights. Desert regions are typically

windy because minimal friction is generated between the moving air and the low, sparse vegetation. This allows the wind to maintain its speed crossing the desert plains.

Additionally, the rapid daytime heating of the air closest to the desert surface leads to convective activity and the exchange of surface air for upper air, which accelerates surface winds during the warm part of the day. Rapid cooling at night in the surface layers during the winter months results in a high frequency of calm winds.

During periods of low inversion and low wind speeds, photochemical smog created in the Los Angeles/Orange County areas is transported downwind into Riverside County, San Bernardino County, and the Coachella Valley.

Peak oxidant levels occur in the late afternoon and evening (between 4 p.m. and 8 p.m.), when pollutants are blown through the San Geronio Pass. The highest oxidant concentrations in the Coachella Valley are located in areas nearest to the South Coast Air Basin, and levels decrease steadily as the air mass moves easterly from Banning to Palm Springs and then Indio.

Surface-based inversions in the Coachella Valley are predominant at night throughout the year and typically persist into the day during the winter months. Inversion conditions are linked to degraded air quality given that the surface air is prevented from rising and dissipating the air pollutants accumulated throughout the day.

Radiation inversions are prevalent at night throughout the year. These inversions limit the mixing in the lower atmosphere to a height of 200 to 2,000 feet. Radiation inversions persist through much of the day in winter but dissipate early in the day during summer.

Local Ambient Air Quality

The Coachella Valley, including the project site, is located within the Salton Sea Air Basin which in turn is under the jurisdiction of the South Coast Air Quality Management District. As aforementioned, the Salton Sea Air Basin has been designated by the California Air Resources Board as non-attainment for ozone and PM₁₀. The violations of the air quality standards for ozone are primarily due to pollutant transport from the South Coast Air Basin. The Salton Sea Air Basin also has been designated by the U.S. EPA as non-attainment for ozone (1-hour standard) and as serious non-attainment for ozone (8-hour standard) and for PM₁₀.

The Coachella Valley portion of the Salton Sea Air Basin has been designated by the U.S. EPA for criteria pollutants as follows:

Table 3.3-2
U.S. EPA Criteria Pollutants
For the Coachella Valley

Pollutant	US EPA Designation
Carbon Monoxide	Attainment
Lead	
Nitrogen Dioxide	
PM _{2.5}	
Sulfur Dioxide	
Ozone	Serious Nonattainment
- 1-hour standard	
- 8-hour standard	
PM ₁₀	Serious Nonattainment

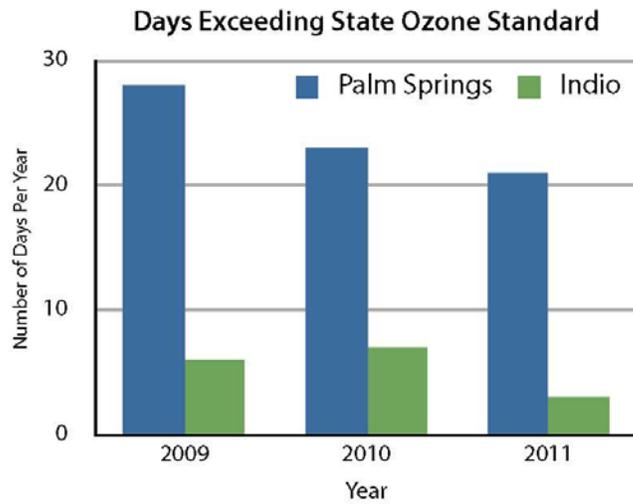
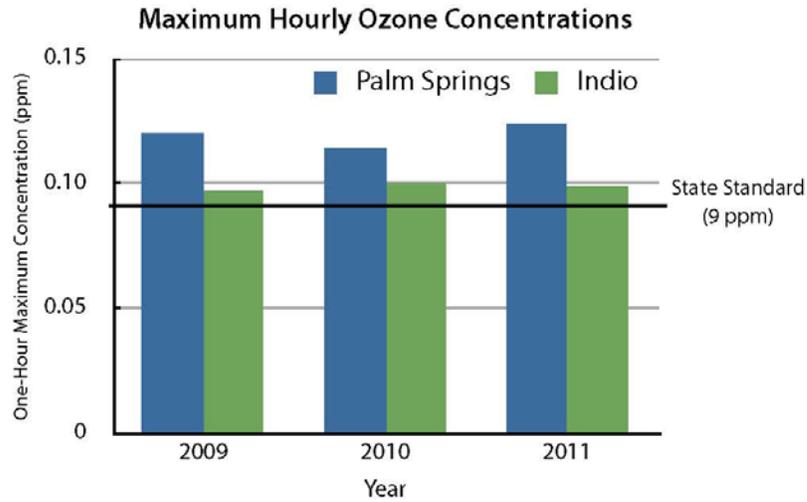
Monitoring Stations

The South Coast Air Quality Management District (SCAQMD) operates and maintains air quality monitoring stations at various locations. The Coachella Valley is located within Source Receptor Area (SRA) 30. There are two SRA 30 monitoring stations: Coachella Valley 1 is in the Palm Springs area and Coachella Valley Station 2 is in the Indio area. Air monitoring data from these local stations are shown in Exhibit 3.3-2 for ozone data and Exhibit 3.3-3 for PM₁₀ data.

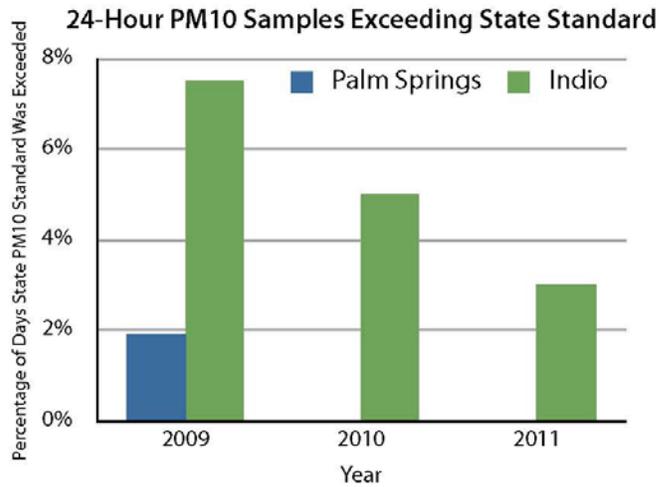
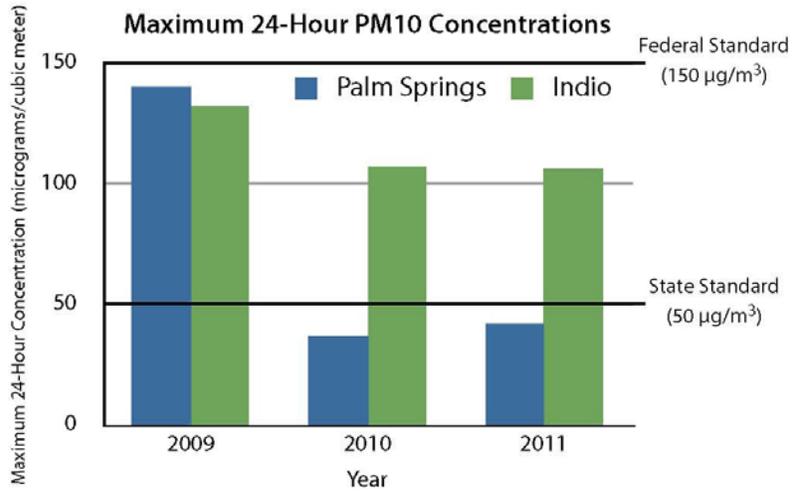
Ozone

Ozone air quality trends for the Coachella-San Jacinto area indicate a downward trend in the number of days exceeding the national 1-hour ozone standard since 1976. This has occurred despite the fact that population growth in the Coachella Valley over this period has been dramatic. Stage 1 episode levels have been reached since 1989. The health advisory level has not been reached since 1999 in the Coachella Valley.

**Exhibit 3.3-2
Coachella Valley
2006 – 2008 Ozone Data**



**Exhibit 3.3-3
Coachella Valley
2006 – 2008 PM10 Data**



Atmospheric ozone in the Coachella Valley is both directly transported from the SCAB by the prevailing sea breezes and formed from precursors emitted upwind. During 2011, the maximum 1-hour concentration measured was 99 percent of the former federal standard. In 2011, the 1997 federal 8-hour standard was exceeded on 18 days during the summer months. The newer and more stringent 2008 federal 8-hour ozone standard was exceeded on 54 days during the summer months. The highest concentration in the Coachella Valley was 129 percent of the current federal standard.

In 2011, the Coachella Valley exceeded the federal 8-hour ozone standards (both the 1997 standard (0.08 ppm) and the lower 2008 standard (0.075 ppm)). For both ozone standards, the Coachella Valley is classified as a “severe” ozone nonattainment area. During 2011, the maximum 1-hour concentration measured was 99 percent of the former federal standard. The state 1-hour and 8-hour standards for ozone were exceeded on 25 days and 78 days, respectively in the Coachella Valley.

Ozone levels exceeded the state one-hour standard (0.09 ppm) on 72 (6.6 percent) of the days monitored in Palm Springs and 16 (1.5 percent) of the days monitored in Indio. The maximum one-hour ozone concentration measured was 0.124 parts per million (ppm) in Palm Springs and 0.100 ppm in Indio. The state one-hour ozone standard was exceeded by 3.3 percent in Palm Springs and 11 percent in Indio.

The 8-hour average ozone concentrations monitored in Indio exceeded the national standard (0.075 ppm) on 62 days (6 percent of the days monitored) during the three-year interval from 2009 through 2011. The highest 8-hour average ozone level found in Indio (0.090 ppm) exceeded the federal standard by 20 percent. By comparison, the 8-hour average ozone concentrations monitored in Palm Springs exceeded the federal standard on 154 days (14 percent of the days monitored). The highest 8-hour average ozone concentration monitored in Palm Springs (0.099 ppm) exceeded the national standard by 32 percent.

Particulate Matter (PM₁₀)

PM₁₀ in the Coachella Valley comes mostly from locally generated fugitive dust produced by both human activities (on-road and off-road vehicles, construction activities and farming) and natural occurrences (sand and dust storms when winds exceed 25 mph). The highest PM₁₀ concentrations are typically found in the summer, when hot dry weather produces more dust or result from unusual circumstances such as wildfires or celebrations involving fireworks. The PM₁₀ concentrations in Palm Springs and Indio peaked in 2006 and 2007, when construction activities peaked.

The Coachella Valley does exceed the PM₁₀ standard on days when high wind events cause the transport of windblown dust from disturbed and natural desert areas. The two days during 2011 on which the PM₁₀ standard was exceeded were associated with

high-wind natural events and have been flagged for exclusion from the federal database. After excluding high-wind natural event days, no days have exceeded the federal 24-hour PM₁₀ standard (150 µg/m³) at Indio or Palm Springs since the mid 1990s.

The Coachella Valley is currently designated by the CARB as nonattainment for PM₁₀. It is designated “serious” nonattainment of the 24-hour average PM₁₀ NAAQS by the U.S. EPA. The SCAQMD has requested that the U.S. EPA redesignate the Coachella Valley from nonattainment to attainment of the PM₁₀ NAAQS. That request is currently pending.

During 2011, the maximum PM₁₀ concentration (24-hour average without excluded high-wind days) was 77 percent of the federal standard (150 µg/m³) and 238 percent of the state standard (50 µg/m³). The annual average PM₁₀ concentration in 2011 was 65 percent of the revoked federal PM₁₀ standard (50 µg/m³) and 151 percent of the state standard (20 µg/m³).

Excluding high-wind event days, the state 24-hour PM₁₀ standard was exceeded on 19 days in the Coachella Valley during 2011 (5.2 percent of the days sampled). The state annual standard (20 µg/m³) was exceeded in 2011.

Figure 3-4 depicts the percentage of PM₁₀ samples exceeding the state 24-hour standard as well as the maximum 24-hour PM₁₀ concentrations in the Coachella Valley. As shown therein, the PM₁₀ concentrations sampled exceeded the California 24-hour standard on only one of the 176 days monitored in Palm Springs. The PM₁₀ concentrations exceeded the California 24-hour standard on 18 of the 358 days monitored in Indio. The maximum 24-hour PM₁₀ concentration monitored in Palm Springs was 140 micrograms per cubic meter (µg/m³) or 2.8 times the state standard of 50 µg/m³. In Indio, the maximum 24-hour PM₁₀ concentration monitored was 132 µg/m³ or 2.6 times the state standard.

The annual average PM₁₀ concentration for all three years exceeded the state standard of 20 µg/m³ in Indio during all three years. The annual average PM₁₀ concentration for 2009 in Palm Springs exceeded the state standard. The highest annual average PM₁₀ concentration monitored in Palm Springs was 22.6 µg/m³, which exceeded the standard by 13 percent. The highest annual average PM₁₀ concentration monitored in Indio was 32.5 µg/m³ or 1.6 times the state standard.

Other Criteria Pollutants

Fine Particulate Matter (PM_{2.5})

The Coachella Valley does not exceed the federal 24-hour or annual standards for PM_{2.5}.

In 2011, the maximum concentration (24-hour average) in Indio on an exceptionally high-wind day was 99.7 percent of the federal standard. The second highest value was 74 percent of the federal standard and occurred in Palm Springs. The annual average concentration in 2011 was 48 percent of the federal standard.

The annual state standard (12 $\mu\text{g}/\text{m}^3$) was not exceeded in the Coachella Valley. The maximum value was 60 percent of the standard and measured in Palm Springs. With fewer combustion sources than the SCAB, increased vertical mixing, and horizontal dispersion in the desert area, PM_{2.5} concentrations found in the Coachella Valley have remained relatively low compared to levels in the SCAB. The PM_{2.5} standards were not exceeded at the Palm Springs monitoring station between 2009 and 2011. The highest 24-hour concentration measured at the Indio monitoring station was 35.4 $\mu\text{g}/\text{m}^3$ in 2011. The highest 24-hour concentration measured at the Palm Springs monitoring station was 26.3 $\mu\text{g}/\text{m}^3$ in 2011. When rounded down to 35 $\mu\text{g}/\text{m}^3$, the 24-hour PM_{2.5} concentration monitored in Indio would not exceed the federal 24-hour standard for PM_{2.5} (>35 $\mu\text{g}/\text{m}^3$). The federal standard for PM_{2.5} is 15 $\mu\text{g}/\text{m}^3$ (annual arithmetic mean). The highest PM_{2.5} annual arithmetic mean in Indio was 7.9 $\mu\text{g}/\text{m}^3$ in 2009. The highest annual arithmetic mean in Palm Springs was 6.7 $\mu\text{g}/\text{m}^3$ in 2009.

Nitrogen Dioxide

Nitrogen dioxide was monitored at the Palm Springs air monitoring station between 2009 and 2011. The maximum one-hour concentration was 0.05 ppm compared to the state standard of 0.18 ppm and the federal standard of 0.100 ppm (effective April 7, 2010). The annual average concentration was the highest in the year 2010 and reached 8.5 parts per billion (ppb). The federal standard is 54.4 ppb and the state standard is 30 ppb. During 2011, the maximum annual average NO₂ concentration was 15 percent of the federal standard and 27 percent of the state standard. The maximum 1-hour average NO₂ concentration was 44 percent of the new federal standard and 25 percent of the state standard.

Carbon Monoxide

Carbon monoxide levels did not exceed state or federal standards in 2011 within the Coachella Valley between 2009 and 2011. The highest CO concentration measured in Palm Springs during these three years was 0.70 ppm (8-hour average). This value represents 7.8 percent of the 9.0 ppm state and federal standard. The highest one-hour average carbon monoxide concentration monitored during these three years in the Coachella Valley was 2.0 ppm in Palm Springs. This concentration represents ten percent of the 20 ppm state standard and 5.7 percent of the 35 ppm federal standard.

Other Pollutants

PM₁₀ sulfate was monitored in the year 2011 in both Indio and Palm Springs. The maximum 24-hour concentration was 4.4 µg/m³ in Palm Springs and 5.7 µg/m³ in Indio. The state sulfate standard is 25 µg/m³. During 2011, the maximum 24-hour average sulfate concentration was 23 percent of the state standard. There is no federal standard for sulfate.

Sulfur dioxide and lead are not currently monitored in the Coachella Valley. No major lead sources are located within the Coachella Valley. Lead concentrations in previous years have been below the state and federal standards. National sulfur dioxide standards were last exceeded in the 1960's and the state standards were last exceeded in 1990 in Los Angeles County. These pollutants are not of concern to the SCAQMD or the CARB in the Coachella Valley.

Existing Sensitive Receptors

A sensitive receptor is a person in the population who is particularly susceptible or more susceptible than the population at large to health effects due to exposure to air contaminants. Sensitive receptors and the facilities that house them are of particular concern if they occur near localized carbon monoxide sources, toxic air contaminant, or odors.

SCAQMD has designated the following land uses as sensitive receptors: residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Currently, neither the vacant project site nor adjacent undeveloped lands to the north, south, east or west contain sensitive land uses as identified above. The proposed development will potentially generate additional sensitive receptors in the vicinity (directly and indirectly.)

If sensitive receptors are located adjacent to a major intersection, carbon monoxide (CO) "hot spots" may occur during peak use. High levels of carbon monoxide are also linked with traffic congestion, and with idling or slow-moving vehicles, depending on the background CO concentration. Therefore, if a project has the potential to negatively impact levels of service at major intersections with nearby sensitive receptors, the project must quantify and if necessary, mitigate potential impacts. The air quality impact study for the project states that "because ambient carbon monoxide concentrations in the Coachella Valley are quite low, it is unlikely that a CO "hot spot" exists locally."

Blow sand

Blow sand, the most severe form of wind erosion, occurs when barren sand or sandy

loam soils are exposed to high winds, in the absence of moisture. Blowsand can cause substantial property damage and expensive clean-up procedures. It contributes to high-suspended particulate levels and associated respiratory problems for sensitive receptors. See Exhibit 3.3-4 for reference.

The project site is within the area designated by the Coachella Valley Association of Governments (CVAG) as a "Blowsand Hazard Zone." This determination is made within the *Blowsand Control and Protection Plan* (June 1977). This zone is defined as "... all land, by nature of its location or soil characteristics subject to real or potential sand accumulation and/or abrasion, or land which may cause sand damage to adjacent property."

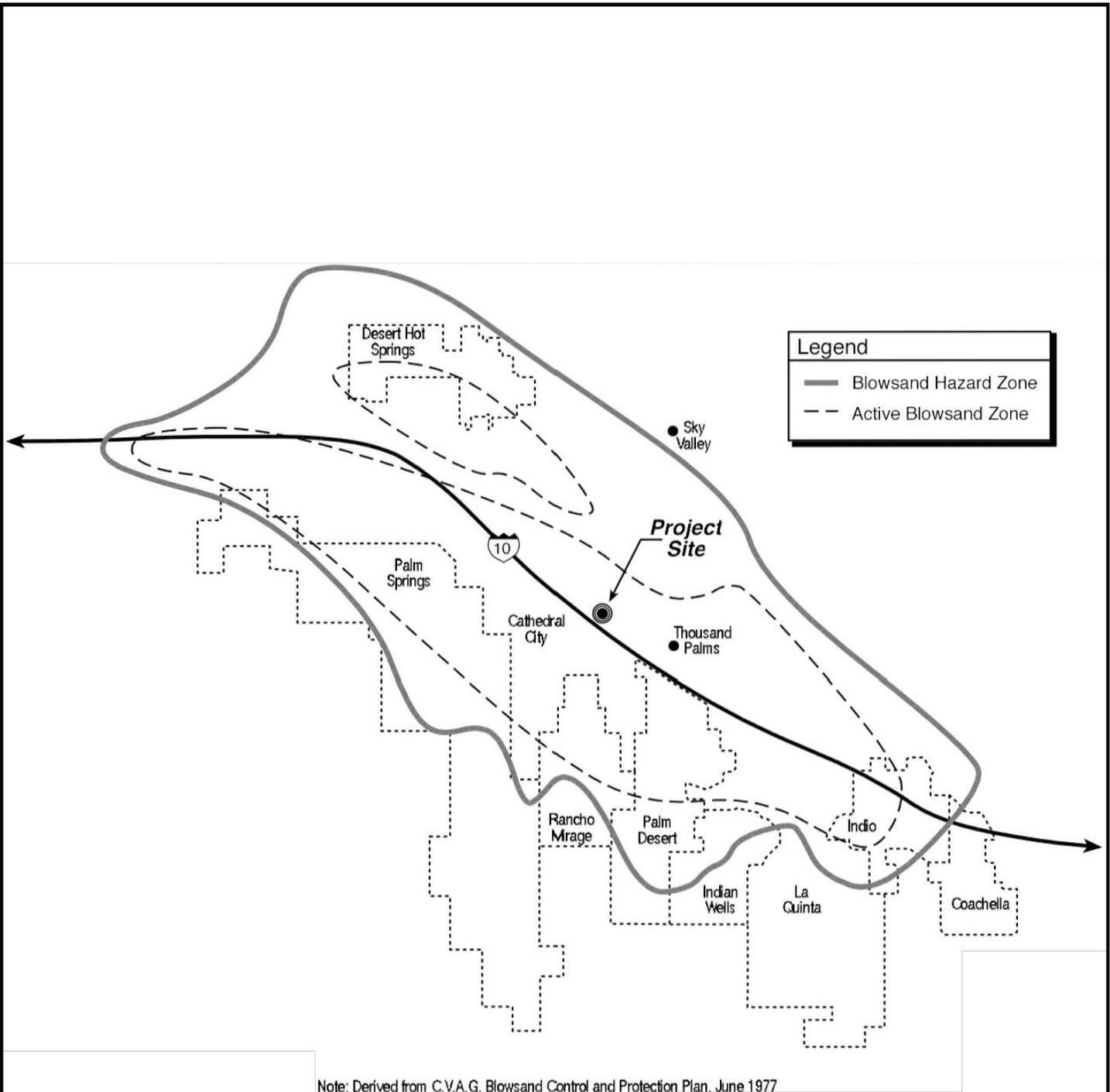
Within the blowsand hazard zone is an "Active Blowsand Zone." Blowsand reduction measures are required for projects located within the "Active Blowsand Zone". Vegetative planting has been the most effective method of direct blowsand control and protection. Other possible methods include: walls, screens, fences, ground covers, soil stabilizers, and watering techniques. The project site is located in the "Active Blowsand Zone."

Valley Fever

Valley fever (*Coccidioidomycosis*) is a fungal disease/infection found only in the hot, arid regions of North and South America. In the United States, the majority of Valley Fever cases are found in Arizona, California, Nevada, Utah, and west Texas. Fully two-thirds of the cases occur in Arizona, while most of the rest of the cases occur in San Joaquin Valley in California and the balance scattered throughout the endemic area, including the Coachella Valley. Exposure rates to the disease in Coachella Valley and most of southern California is approximately 5 to 10 percent of the population. In parts of Arizona and San Joaquin Valley, over 50 percent of the population has been exposed to the fungus.

The *coccidioides immitis* fungus is the infectious agent or cause of Valley Fever. The fungus thrives in soils in areas that have low annual rainfall, high summer temperatures, and moderate winter temperatures. Fungus growth is highly successful in alkaline soils which have high contents of carbonized organic materials and high salt concentrations, specifically calcium sulfate and borates.

Valley fever is a reportable disease. Under Title 17, California Code of Regulations, Section 2500, physicians are required to report diagnosed diseases of public health importance which include Valley Fever cases to the local Department of Health. In the County of Riverside, reports are submitted to the Riverside County Department of Health Disease Control Branch.



Coachella Valley Blowsand Region

North City Extended Specific Plan
Environmental Impact Report

Exhibit 3.3-4

Page 3.3-24

Valley Fever Cases Reported in Riverside County and Cathedral City

The risk of Valley Fever varies primarily by location. The disease does occur in Riverside County. The Riverside County Department of Public Health provides various information regarding infectious diseases, including Valley Fever (*Coccidioidomycosis*). The number of reported Valley Fever cases from 1995 to 2006 as provided by the County Department of Public Health is shown in Table 3.3-3.

**Table 3.3-3
1995 – 2008 Valley Fever Cases
Reported in Riverside County and Cathedral City**

Year	Riverside County
1995	37
1996	36
1997	17
1998	13
1999	22
2000	27
2001	30
2002	29
2003	26
2004	48
2005	50
2006	50
2007	55
2008	42

Soils Characteristics as a Risk Factor

There are certain soil types which are more prone to harbor Valley Fever spores than others. In the Phoenix and Bakersfield areas, where Valley Fever is common, soils have the tendency to be a fair loamy balance between silts and sands. As mentioned, Valley Fever is more common in dry regions, where the spores appear to thrive better in the more alkaline soils occurring in those regions. However, the spores do not grow in or on rocks, which are common in the desert southwest.

Unlike the loamy soils of the Phoenix and Bakersfield areas, the soils of the Coachella Valley and the Specific Plan area, in general, tend to be stony sand and in geologic

terms, these soils are considered relatively young and have not adequate time to produce as much organic material in comparison to the soils presently found in the Phoenix Valley or California's San Joaquin Valley floors.

Organic material develops in soil through the degradation of previous generations of living things (primarily plants). All living things, including the Valley Fever fungus, need a source of organic material to live. Another soil type known to harbor the spores of *coccidioides immitis* fungus is Bedonite. It is described as a fine, alkaline soil commonly found in desert environments.

In theory, it is possible to test a particular patch of soil to determine the presence of the Valley Fever fungus. However, as stated by the Kern County Department of Health "The existence of the fungus in most soil areas is temporary. There is no effective way to detect and monitor [the fungus] in soils. Thus, controlling the growth of the fungus in the environment to reduce risk is not currently an option."

Construction Activity as a Risk Factor

Construction activities involve disturbances to land surfaces that often stir up dust; because of this, construction has been considered to increase the potential for human exposure to the Valley Fever fungus. In the Coachella Valley, there is no clear link between the number of reported Valley Fever cases and the number of building permits in any specific year. According to the Riverside County Health Department records, Valley Fever cases in the Coachella Valley peaked in 1995 and in 1999, while building permits have peaked more recently. Although, the number of reported cases in Riverside County peaked at 50 in 2005, majority of the cases occurred outside the Coachella Valley; of the 50 cases reported, six cases were from the Coachella Valley.

In conclusion, while it can be assumed that grading activities could increase the chance for the fungus to be released from the soil, implementing proper dust suppression and soil watering will reduce the risk.

Regulatory Setting

Federal Clean Air Act Requirements

Section 110 of the federal Clean Air Act mandates each State to adopt a State Implementation Plan (SIP) that provides for implementation, maintenance and enforcement of the primary and secondary national air quality standards in that state. Proposed projects are required to comply with the SIP. The November 1990 amendments to CAA incorporate more stringent sanctions for failure to attain or to meet interim milestones of the National Ambient Air Quality Standards (NAAQS) applicable dates.

The California Clean Air Act

The California Clean Air Act (CCAA) was adopted in 1988 and amended in 1992. In general, CCAA policies and standards are more stringent than the federal Clean Air Act. Under the CCAA, areas designated as serious and above nonattainment must revise their AQMP to include specified reduction strategies and to meet milestones in implementing emission controls and achieving better air quality.

Air Quality Management Plan (AQMP)

The South Coast Air Quality Management District is the lead agency responsible for regional effort to attain federal and state Ambient Air Quality Standards (AAQS). SCAQMD's primary responsibilities include developing and implementing the AQMP and emissions reduction from industries, some mobile sources, and consumer products. The AQMP is intended to establish a comprehensive program to lead the basin into compliance with all national and state air quality standards. Every three years, SCAQMD updates the AQMP for inclusion in the State Implementation Plan.

On June 1, 2007, the 2007 AQMP was adopted by the AQMD Governing Board. Preparation of this AQMP involved the joint effort between the California Air Resources Board (CARB) and the Southern California Association of Governments (SCAG). The Plan sets forth a comprehensive program that will lead the region into compliance with the federal 8-hour ozone and PM_{2.5} air quality standards. As part of the Plan, the District is requesting the EPA to redesignate the ozone and PM_{2.5} designations of the SCAB and the Coachella Valley portion of Salton Sea Air Basin. Through this request, the District is also seeking an extension of the attainment dates for both pollutants of concern. The Plan contains significant new scientific data, emission inventories, ambient measurements, control strategies, and air quality modeling. The 2007 AQMP and the State Strategy for the 2007 State Implementation Plan were adopted by the CARB Board as part of the SIP on September 27, 2007.

State Implementation Plan for PM₁₀ in the Coachella Valley

The Coachella Valley is classified by the Environmental Protection Agency as a "serious" nonattainment area for PM₁₀, which means that the valley does not comply with national health-based standards for particulate matter. In response to the EPA designation, the SCAQMD *Final 2002 Coachella Valley PM₁₀ State Implementation Plan* (CVSIP) was prepared. The SCAQMD, CVAG, and Coachella Valley governments oversee the implementation and monitoring program of the CVSIP. The CVSIP contains control measures required to meet state and federal PM₁₀ standards. Large-scale blow-sand events, which can produce high levels of PM₁₀ through natural processes, are not targeted for control.

The EPA excludes these conditions if man-made dust sources are controlled and a system for notifying the public of high wind forecasts is in place. The CVSIP focuses on man-made dust producing activities and the reduction of blowsand intrusion into populated areas.

In the 1990 CVSIP, local governments were asked in to develop ordinances, monitor progress, and create a County Service Area (CSA) or similar funding mechanism to implement the CVSIP. These measures and the resulting dust control programs significantly reduced PM₁₀ levels in the early 1990s, and permitted the Coachella Valley to attain the 24-hour PM₁₀ standard. In 1996, the SCAQMD asked the EPA to re-designate the Coachella Valley as a PM₁₀ attainment area, when the 3-year average PM₁₀ concentration dropped below the annual average standard of 50 micrograms per cubic meter of air. A PM₁₀ maintenance plan for the Coachella Valley was developed as a separate plan from the 1997 AQMP. After years of demonstrating attainment, however, a building boom, drought conditions, and other factors led to higher PM₁₀ levels in 1999 through 2002 that did not demonstrate attainment of the national annual average PM₁₀ standard.

Pursuant to the federal Clean Air Act, an area can request an extension of up to five years to attain the PM₁₀ NAAQS if certain requirements are met (including a SIP that demonstrates expeditious attainment of the standards).

The 2002 CVSIP addresses the recent rise in PM₁₀ levels above the standard by establishing additional controls needed to demonstrate expeditious attainment of the standards. With the most stringent measures available for dust control, the 2002 CVSIP has been approved by the U.S. EPA and will prevent the federal government from imposing its own plan on the Coachella Valley. Additionally, each local jurisdiction has since adopted new and more stringent local dust control ordinances, dust control guidance, and enforcement agreements.

Accelerated population growth contributed to the dramatic increase in land development projects in Coachella Valley in the early to mid portion of this decade. However, the number of public complaints regarding fugitive dust emissions at building and development sites and farms has also increased. In 2001, SCAQMD responded by assigning a full-time air quality inspector to the Coachella Valley to enforce fugitive dust regulations and educate businesses and local governments on SCAQMD requirements regarding PM₁₀. Monthly dust control classes for builders and government personnel are offered by AQMD staff.

SCAQMD Rules and Regulation

The SCAQMD is responsible for controlling stationary air pollution sources. The Air District also establishes “Permit to Construct” and “Permit to Operate” requirements,

inspects emissions sources, and enforces rules and regulations through educational programs and fines. The SCAQMD Rules and Regulations can be accessed via internet at <http://www.aqmd.gov/rules/rulesreg.html>.

Also, refer to the North City Extended Specific Plan Air Quality Impact Study (Technical Appendices Appendix C) for further discussions of Rules applicable to the proposed project.

City of Cathedral General Plan

The 2009 General Plan Update incorporates a series of objectives, policies, and implementation programs that address air quality. The General Plan policies include City cooperation with the South Coast Air Quality Management District and other appropriate agencies. The use of mass transit, carpooling and other transportation options, such as pedestrian and bike paths are encouraged to reduce vehicular miles traveled. The City also encourages the development of “pedestrian-friendly” sidewalks and street crossings and efficient and safe bikeways. General Plan policies provide opportunities for mixed used projects such as the integration of residential units and commercial services. General Plan policies also require that State Energy Efficiency Standards (Title 24) be implemented and enforced and encourage the use of passive design concepts to increase energy efficiency.

City of Cathedral City Municipal Code

The City has adopted a Transportation Demand Management (TDM) Ordinance (Chapter 9.102 of the *Cathedral City Municipal Code*) which applies to new and change-of-use non-residential developments employing 100 or more persons. Ordinance 355 requires new developments which are owned and managed as one unit to submit a TDM Plan prepared by a traffic engineer or other qualified professional demonstrating how the development will reduce the number of project generated vehicle trips by ten percent. Eighteen strategies are identified therein that would reduce the number of trips made by private automobiles and increase the use of non-motorized transportation modes.

Ordinance 527 – Public Nuisance

Chapter 13.80 Public Nuisance (Ordinance 527) of the *Cathedral City Municipal Code* establishes minimum requirements regarding on-site emissions of odors, smoke, dust and other forms of air pollution that are detrimental to surrounding properties.

Ordinance 583 – Fugitive Dust Control

Chapter 8.54 Fugitive Dust Control (Ordinance 583) of the *Cathedral City Municipal Code* 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 control measures to be implemented for each fugitive dust source during any dust-generating activity on-site from the *Coachella Valley Fugitive Dust Control Handbook* (SCAQMD; May, 2003) must be prepared by a qualified person and submitted to the City of Cathedral City 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.

C. 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 an Air Quality perspective.

Would the project:

- a) Conflict with or obstruct implementation of the applicable air quality plan?
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is graded as non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- d) Expose sensitive receptors to substantial pollutant concentrations?
- e) Create objectionable odors affecting a substantial number of people?

The proposed North City Extended project occurs within the boundaries of the Salton Sea Air Basin. The SCAQMD adopts, implements, and enforces air quality regulations within the Salton Sea Air Basin. The agency reviews and comments on environmental documents for projects that may generate significant adverse air quality impacts. The SCAQMD provides recommendations to the lead agency which address and mitigate potential adverse air quality impacts resulting from projects both during and after construction.

The lead agency has the final decision when determining the significance of air quality impacts. The City of Cathedral City is the lead agency with respect to land use decisions and discretionary permits. These decisions must be based upon several considerations including the following:

- 1) What is the intensity and type of project?
- 2) What is the location of the project? (i.e. upwind of sensitive receptors or in areas with high pollutant concentrations)
- 3) Will the project cause an exceedance of any air quality standard?
- 4) Will the project make a substantial contribution to an existing exceedance of an air quality standard?
- 5) Is the project inconsistent with the AQMP or State Implementation Plan?
- 6) Will the project emit toxic air contaminants (TACs)?
- 7) Will the mitigation measures that are attached to the project mitigate the air quality impacts to the maximum extent feasible?

Thresholds of Significance

In order to determine impacts to air quality, lead agencies utilize recommended thresholds for short-term construction related emissions and long-term operational emissions established by the SCAQMD (See Table 3.3-4). A project should be considered significant, if it has the potential to exceed the recommended thresholds. However, it should be noted that the final determination of whether or not a project is significant is within the purview of the lead agency, in accordance to Section 15064 (b) of the CEQA Guidelines.

Table 3.3-4
Emissions Significance Threshold Criteria^a
(Pounds/Day)

Pollutant	CO	ROG	NOx	SOx	PM10
Operational Emissions^b - Pounds/Day	550	75	100	150	150
Construction Emissions - Pounds/Day	550	75	100	150	150
- Tons/Quarter	24.75	2.5	2.5	6.75	6.75

a. SCAQMD, *CEQA Air Quality Handbook*; November, 1993.

b. Projects in the Coachella Valley with peak (highest daily) operation-related emissions that exceed any of these emissions thresholds should be considered significant. A daily operational and construction threshold of 3 pounds per day of lead and 55 pounds per day of PM2.5 also apply.

D. Project Impacts Found Not To Be Significant

Air quality impacts associated with the proposed NCE Specific Plan residential project were assessed based on future project buildout conditions. Implementation of the proposed NCE Specific Plan project will generate air pollutants emitted by stationary

sources and mobile sources. Stationary sources include emissions from construction activities and natural gas combustion, emissions at power plants due to the electrical demands of the proposed development. Mobile sources consist of exhaust emissions resulting from short-term construction activities and long-term vehicular travel associated with the proposed project.

Short-Term Air Quality Impact

The short-term air quality impacts resulting from project development are considered not significant. Short-term impacts on air quality will occur during the construction activities required to implement the proposed project. According to the Specific Plan Air Quality Study these adverse impacts will include:

- diesel exhaust emissions from the construction equipment used as well as the vehicles used to transport the off-highway construction equipment required;
- emissions from the commute vehicles of construction workers;
- particulate emissions (fugitive dust) during clearing, grading and excavation for utilities and internal roadways;
- exhaust emissions from the heavy vehicles used to transport building materials to the site;
- emissions from the off-road diesel equipment used during grading and construction activities; and
- off-gasing emissions associated with asphalt as well as from architectural coatings used on buildings.

Estimated Project-Related Emissions

The California Emissions Estimator Model (CalEEMod Version 2011.1.1) was utilized to estimate short-term construction-related emissions of criteria air pollutants and greenhouse gas emissions that would be associated with the construction activities necessary to implement the Preferred Project. Default construction parameters incorporated in the CalEEMod were assumed for some construction activities.

To the extent that they are currently available, site-specific construction details were used as input parameters for CalEEMod. The project site is undeveloped and relatively flat. Cut and fill earthwork quantities are expected to be balanced within the project site. Scrapers and dozers will be used to level the ground and move any excess cut material from one area on-site (such as the retention basins) to other areas within the site where it will be used as fill material to ensure proper contouring for storm drainage. No import or export of excess material is expected to be necessary in conjunction with site grading activities. The project is expected to be constructed over a period of fifteen years.

The unmitigated emissions shown in Table 3.3-5 reflect the fact that the City of Cathedral City will use its discretionary permit authority to place conditions of approval on the proposed project that require compliance with all applicable policies, rules, regulations and ordinances. Mitigation measures during construction are relatively standard throughout all Jurisdictions in the Coachella Valley related to specific construction activities and the generation of fugitive Dust.

Standard mitigation required of all developments by applicable rules and regulations was assumed (i.e. the watering of exposed surfaces twice daily and the reduction of vehicle speeds to 15 mph or less on unpaved surfaces).

Construction activities undertaken to implement all proposed portions of the project will cause temporary increases in localized ROG, NO_x, CO, SO₂ and PM₁₀ emissions, and concentrations in the project vicinity. The primary sources of construction related emissions on-site will be: (1) NO_x emitted by diesel-powered heavy-duty off-road mobile construction equipment during clearing and grading; (2) ROG off-gassing associated with the application of architectural coatings during individual home construction; and (3) PM₁₀ generated during site grading operations. The onsite hauling of materials would generate particulates and NO_x from diesel fuel combustion as well as particulate emissions associated with the unpaved surfaces over which the trucks would be moving.

Exhaust emissions during the construction activities envisioned on site would vary daily, as required construction equipment and activity levels change. The resulting air pollutant concentration increases will depend on several factors including the soil composition and moisture content, the amount of grading required and underway at any one time, wind speeds, the number, and type of machinery used at any given point in time, and the construction schedule (the scheduling of concurrent construction processes and phases).

Table 3.3-5
Peak Unmitigated Short-Term Construction Emissions Estimates
Associated With Construction of the Preferred Project
(Pounds/Day)

Emission Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}	CO _{2e}
Highest Phase from Site Grading, Trenching and Building Activities	22.92	181.84	139.75	0.26	103.19	17.36	24,328.27
SCAQMD Threshold	75	100	550	150	150	55	None
Threshold Exceeded	No	Yes	No	No	No	No	–

Emission Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}	CO _{2e}
Highest Phase from Architectural Coatings and Asphalt Paving	562	17.81	20.62	0.03	17.49	1.84	3,116.00
SCAQMD Threshold	75	100	550	150	150	55	None
Threshold Exceeded	Yes	No	No	No	No	No	–

To determine whether or not project-related construction activities would exceed the quarterly significance threshold criteria, the unmitigated quarterly construction emissions estimates associated with the proposed project were estimated, as shown in Table 3.3-5.

Factors that would influence whether the SCAQMD quarterly threshold criteria are exceeded will depend upon the construction schedule and the type and number of construction equipment that is active onsite over the course of any given quarter.

Current research regarding the health effects of particulate exposure suggests that the most adverse effects derive from ultra-small diameter particulate matter comprised of chemically reactive pollutants (such as sulfates, nitrates or organic material). Construction activities generate many larger particles which will remain suspended for a relatively short period of time. Relatively little construction activity particulate matter is in the PM_{2.5} size range, which has demonstrated adverse health effects. The fugitive dust created by construction activities (primarily PM₁₀ generated by soil disturbance) is more chemically benign than urban atmospheric PM_{2.5} and is more readily filtered by human breathing passages.

These larger dust particles may settle on parked cars, swimming pools, outdoor landscaping, and street furniture, creating a soiling nuisance in the neighboring Little Tuscany residential tracts to the east, but should exhibit less potential for adverse health hazards than urban atmospheric PM_{2.5}. The nuisance potential will tend to be highly localized and in very close proximity to the project site. To minimize the potential for this type of construction-related impact, regular watering to stabilize disturbed

surfaces on-site (particularly during periods of high wind) and other fugitive dust control measures will be implemented, as specified in the “Fugitive Dust Control Plan” to be submitted to and approved by the City of Cathedral City, prior to the initiation of earth-moving activities onsite.

Summary of Short-Term Air Quality Impacts

Air pollutant emissions generated by construction activities are difficult to accurately quantify, since the type and amount of equipment that will be used and the acreage that may be disturbed on any given day is not known with any reasonable certainty. Therefore, the emphasis in the environmental process has been on minimizing the emissions as fully as possible through comprehensive mitigation strategies, even though the exact emissions cannot be precisely quantified.

The proposed project has the potential to exceed the SCAQMD daily and quarterly construction emission thresholds of significance during on-site construction activities (See 3.3-5: Peak Unmitigated Short-Term Construction Emissions Estimates). The magnitude of the quarterly emissions indicates that mitigation to a level of insignificance may be feasible through compliance with applicable policies, rules, regulations, and ordinances in addition to careful scheduling of construction activities.

To be effective, construction schedules should be carefully coordinated to ensure that only the construction equipment required for any particular building activity is operational onsite at any given time. The schedule should minimize the area disturbed on-site at any given time. The application of architectural coatings should occur over a long period of time. Building materials should be used which require very little in the way of architectural coatings, such as those delivered to the site pre-primed or painted outside of the Salton Sea Air Basin.

Criteria Air Pollutant Emission Projections

At buildout, the daily operations of the proposed project development will generate a variety of air pollutants. Emission projections were made for the project buildout year with CalEEMod Version 2011.1.1. The input assumptions utilized and model output sheets are provided in the Air Quality Impact Study provided in the appendix of this EIR.

Operational Emissions

Operational emissions associated with project development consist of area source, energy use and mobile source emissions. Mobile emissions include vehicle emissions associated with vehicle trips, vehicle emissions and road dust. Area source emissions, which represent a small fraction of the project-related operation emissions, are associated with use of hearths, consumer products, area architectural coatings and

landscaping equipment. Energy use emissions are associated with building electricity and natural gas (non-hearth) usage for space heating, space cooling, water heating, ventilation, lighting, appliances and electronics.

As shown in 3.3-6, the projected emissions increases associated with four of the six criteria pollutants would exceed the SCAQMD thresholds of significance by a wide margin. The development permitted by the annexation and NCESP would have a significant long-term impact on air quality based upon operational emissions of the following criteria air pollutants: reactive organic gases, oxides of nitrogen, carbon monoxide, and PM₁₀. This is a significant impact that requires mitigation.

**Table 3.3-6
Estimated Project Buildout
Operational Air Pollutant Emissions
(Year 2025 Pounds/Day)**

Emissions Source	ROG	NO_x	CO	SO_x	PM₁₀	PM_{2.5}	CO₂
Summer Day Total of Area Sources, Energy Use, and Mobile Sources	724.99	1,541.87	2,231.39	5.68	542.94	43.02	604,497.22
Winter Day Total of Area Sources, Energy Use, and Mobile Sources	710.44	1,481.97	2,370.24	5.40	543.46	43.56	578,374.98
SCAQMD Threshold	75	100	550	150	150	55	None
Threshold Exceeded	Yes	Yes	Yes	No	Yes	No	--

Carbon Monoxide “Hot Spot” Analysis

Future carbon monoxide levels in the project vicinity during peak hour traffic were assessed with the CALINE4 computer model at the intersection most heavily used by project-related traffic that has adjacent residential development occupied by sensitive receptors.

A project has a significant impact if it interferes with the attainment of the state 1-hour or 8-hour carbon monoxide standards by either exceeding them or contributing to an existing or projected violation.

Proposed Project Consistency with Relevant Planning Programs

Air Quality Management Plan

The purpose of a consistency finding is to determine whether or not a project is consistent with the assumptions and objectives of regional air quality plans. Based on this determination, conclusions can be drawn regarding whether or not a specific project will interfere with the region's ability to comply with federal and state air quality standards.

The consistency determination fulfills the CEQA goal of fully informing local agency decision makers of the environmental costs of projects under consideration early enough to ensure that air quality concerns are fully addressed. This allows decision makers to contribute to the clean air goals in the AQMP and the PM10 SIP.

The adopted 2007 AQMP provides numbered control measures for stationary and mobile sources of air pollutants. The control measures are identified by a three-letter abbreviation, a control measure number and a description. The abbreviations referenced below include Best Available Control Measures for Fugitive Dust Sources (BCM), Multiple Component Sources (MCS), Emission Growth Management (EGM), and Mobile Source Programs (MOB).

BCM-02 - PM Emission Hot Spots – Localized Control Program:

This proposed control measure would establish a localized program to supplement the regional approach to address PM hot spots through a cooperative effort with local agencies to reduce emissions from direct sources of PM. Because the project site is located within an area designated as an "active blowsand hazard," the Project appears to be affected by this control strategy. The Project will comply with City Municipal Codes and District Rules and Regulations regarding particulate matter.

MCS-02 - Urban Heat Island:

This proposed measure seeks to provide incentives for voluntary actions to reduce VOC or NOx by lowering the ambient temperature through the use of lighter colored roofing and paving materials. According to the Project Specific Plan, subdued earth colors drawn from a palette based on the desert rocks, sand, and flora are to be utilized for the residential roofs. In lieu of asphalt only decorative pavers will be used on the internal roads of the project site.

MCS-03 - Energy Efficiency and Conservation:

This proposed control measure seeks to provide incentives for businesses to use energy efficient equipment in the District and increase the effectiveness of energy conservation programs. It is recommended, that future residents of the proposed Project consider

the use of energy-efficient appliances (including washers/dryers, dishwashers, refrigerators). Energy Star appliances are highly recommended.

EGM-01 - Emission Reductions from New or Redevelopment Projects:

The purpose of this proposed control measure is two-fold: (1) compliance with the “all feasible measures” requirement of the state law, and (2) capturing emission reduction opportunities during project development phase. The Project will comply with City Municipal Codes and District Rules and Regulations.

MOB-07 - Concurrent Reductions from Global Warming Strategies (All Pollutants):

Achieving the AB32 greenhouse gas reduction targets would require significant development and implementation of energy efficiency technologies and extensive shifting of energy production to renewable sources. In addition to reducing GHG emissions, such strategies could concurrently reduce emissions of criteria pollutants associated with fossil fuel combustion. The proposed Specific Plan includes designs and features considered to reduce GhG emissions.

For example, the North City Extended Specific Plan would incorporate the applicable principles and recommendations established by the *Sustainable Sites Initiative*, which establishes standards for site development that will ultimately be integrated into the Leadership in Energy and Design (LEED) rating system. In addition, new residential development should follow Cathedral City’s *Volunteer Green Building Program for Residential Construction* (Ordinance Number 657).

When a project is inconsistent, local governments can consider project modifications or mitigation measures to eliminate the inconsistency.

State Implementation Plan for PM10 in the Coachella Valley

The proposed project will adhere to the provisions of the Cathedral City Municipal Code to ensure that fugitive dust emissions are minimized during construction activities. This is a control measure outlined in the Coachella Valley PM10 SIP. Through the construction specifications, the project proponent will implement feasible PM10 guidelines such as discontinuing grading when winds exceed 25 miles per hour. A PM10 Fugitive Dust Control Plan will be developed by the project proponent and submitted to the City of Cathedral City for review and approval, prior to the issuance of grading permits. It appears, therefore, that the proposed project is consistent with the Coachella Valley PM10 SIP.

SCAQMD Rules and Regulations

The project proponent will comply with all applicable SCAQMD “Rules and Regulations”

Cumulative Impacts

Any project that requires a General Plan Amendment or would provide directly or indirectly for increased population growth, above that projected in the adopted AQMP, would have a significant cumulative adverse air quality impact.

Cumulative impacts on air quality were addressed in the carbon monoxide “hot spot” analysis. The year 2035 ambient traffic volumes modeled with the California Line Source Dispersion Model included the growth in background traffic volumes expected to occur in the project vicinity as well as the additional traffic that will result from cumulative development in the area. The projected cumulative impact on air pollutant concentrations at the intersections carrying the most project-related traffic is not expected to be significant.

The cumulative impact of the proposed development on ambient air quality during construction, when added to construction-related impacts of other cumulative developments, may exceed the SCAQMD thresholds of significance. Adherence to the SCAQMD “Rules and Regulations” and compliance with locally adopted AQMP and PM₁₀ SIP control measures will help reduce the pollutant burden of each cumulative development. Appropriate mitigation measures for cumulative impacts (such as the requirement of “Fugitive Dust Control Plans” prior to the issuance of grading permits) are required by Cathedral City and implemented through enforcement of the *Cathedral City Municipal Code*.

If the demand for the proposed land uses is not met at the project site, it will be met elsewhere in the Coachella Valley and have the same cumulative regional impact. These considerations should be taken into account by the Lead Agency in determining whether or not to make a Statement of Overriding Considerations or support a finding of a less-than significant cumulative impact, since the proposed project does not appear to provide directly or indirectly for increased population or employment growth above that projected in the adopted AQMP.

Exposure to Objectionable Odors

Any future on-site development is anticipated to include residential, commercial or industrial uses and probable odors are those that are commonly found in these settings; therefore future development will not create objectionable odors. Short-term odor impacts associated with future construction, including diesel fumes, will dissipate quickly and will not pose a significant impact. Less than significant impacts are anticipated from Project implementation concerning the exposure of people to objectionable odors.

Valley Fever

The risk for contracting Valley Fever associated with the construction of the proposed NCE Specific Plan project is considered low. The NCE Specific Plan project site is located within the lower alluvium of Edom Hill and the Indio Hills to the north. The geographical region within which the project site is located is known as the Colorado Desert, a subdivision of the Sonoran Desert.

The Valley Fever fungus, *coccidioides immitis*, does not grow inside rocks. In general, the fungus grows in soils with moist conditions at a depth of four to twenty inches. It is suggested that the top two feet of over excavated topsoil, where possible, be deposited at the base of proposed fill areas, under street sections, or under slabs; by doing so this would remove the potentially contaminated soil from future human contact. Given the described existing conditions at the project site, an assumption can be made that the NCE Specific Plan site has a low potential of harboring *coccidioides immitis* than other sandy or loamy sites. Nonetheless, no site in southern California can be totally ruled out.

In summary, the potential to contract Valley Fever associated with the construction of the NCE Specific Plan is expected to be low given the following reasons:

- The low risk of infection in the Coachella Valley as evidenced by Riverside County Health Department records
- The existing conditions at the project site which includes non-stratified to crudely stratified cobbles and boulders in a matrix of silty fine- to course-grained sand
- Implementation of standard conditions and mitigation measures which address dust suppression is anticipated to further reduce the potential of contracting Valley Fever

E. Potentially Significant Impacts

Construction activities undertaken to implement the proposed project would cause localized emissions of both NO_x and ROG in the project vicinity at levels projected to exceed the SCAQMD mass daily significance thresholds.

The SSAB is a non-attainment area for ozone and PM₁₀. ROG and NO_x are ozone precursors, therefore, the emission of these pollutants over the short term and long term constitutes the emission of ozone. PM₁₀ emissions associated with the operation of the Preferred Project are projected to exceed the SCAQMD mass thresholds of significance over the long term. Therefore, the NCESP would substantially contribute to a cumulatively considerable net increase in the emissions of pollutants for which the SSAB is designated nonattainment.

Although the proposed project is consistent with the City's air quality goals and policies, a change of zone would be required to increase the development density. Consequently, the project would not be consistent with the population and employment growth assumptions used in developing the regional *Air Quality Management Plan*. As a result, the long-term operational air quality impacts associated with the Preferred Project may prevent the Coachella Valley from meeting the ambient air quality standards and should be considered cumulatively considerable.

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

The inclusion of mitigation measures in the project is required to minimize to the greatest extent feasible the potential air quality impacts attributable to the proposed project. The City of Cathedral City must take affirmative steps to determine that approved mitigation measures are implemented subsequent to project approval. A mitigation monitoring and reporting plan must be prepared, pursuant to Public Resources Code 21081.6, for any mitigation measures incorporated in the project or imposed as a condition of approval.

The City of Cathedral City will use its discretionary permit authority to place conditions of approval on the proposed project that require compliance with all applicable policies, rules, regulations and ordinances. The following measures reflect policies, rules, or regulations that apply to the proposed development in the City of Cathedral City.

SC 3.3-1: During all grading and earth disturbing activities, the project developer shall comply with the provisions of Chapter 8.54 of the Cathedral City Municipal Code which establishes minimum requirements for construction activities to reduce fugitive dust and PM10 emissions. Prior to the issuance of any grading permits associated with the project, the developer shall prepare and submit to the City of Cathedral City for approval, a plan to control fugitive dust through implementation of reasonably available dust control measures. The plan shall specify the fugitive dust control measures to be employed.

SC 3.3-2: 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 clean up of construction-related dirt on approach routes to the site including: watering measures, chemical stabilizers, wind fencing, covering haul vehicles, bed liners in haul vehicles, wheel washers, and high wind measures;

- Rule 403.1 (Coachella Valley 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 clean up of construction-related dirt on approach routes to the site including: watering measures, chemical stabilizers, wind fencing, covering haul vehicles, bed liners in haul vehicles, wheel washers, and high wind measures;
- 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.

SC 3.3-3: As a condition of approval, the project developer will comply with City requirements regarding planned bikeways on and/or adjacent to the site. In addition to compliance with applicable rules, regulations and ordinances, the following measures shall be employed to reduce the potential for adverse cumulative air quality impacts during construction.

SC 3.3-4: During the grading, earth disturbing and construction activities the project developer shall suspend earth-moving activities during first and second stage ozone episodes or when winds exceed 25 MPH, per the Coachella Valley PM10 State Implementation Plan and SCAQMD Rule 403.1.

SC 3.3-5: 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.

SC 3.3-6: During grading, earth disturbing and construction activities the project developer should 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.

SC 3.3-7: During grading, earth disturbing and construction activities the project developer shall ensure that all trucks maintain at least two feet of freeboard.

SC 3.3-8: 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 off before leaving the site.

SC 3.3-9: 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.

SC 3.3-10: 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.

SC 3.3-11: During grading, earth disturbing and construction activities, the project developer shall ensure that construction operations affecting off-site roadways shall be scheduled for off-peak traffic hours and shall minimize obstruction of through-traffic lanes.

MM 3.3-1: The architectural coatings used within the project should give priority to a combination of low-VOC (< 50 grams of VOC per liter), zero-VOC, and super-compliant (< 10 grams of VOC per liter) with an average of 35 grams or less of VOC per liter to reduce the projected emissions below 75 pounds per day.

MM 3.3-2: Low emission building materials such as pre-primed and sanded wood molding and trim products and pre-primed wallboard shall be given priority for construction materials.

MM 3.3-3: Construction activities should be prioritized to occur first on the upwind portion of the project site to reduce the potential for blowsand and fugitive dust impacts in the downwind areas.

MM 3.3-4: Tier 3 and Tier 4 grading equipment if more than one set of default equipment to avoid exceeding the SCAQMD threshold for short-term construction NOx emissions.

MM 3.3-5: The construction specifications shall state that only the construction equipment required for any particular building activity shall be operational on-site at any given time to reduce NOx emissions during construction activities.

MM 3.3-6: To minimize potentially significant impacts of blowsand exposure on future sensitive receptors that locate within the project site, the Specific Plan should incorporate design standards and development guidelines detailing appropriate techniques to be implemented to control and reduce wind erosion and blowsand over the long term. Permanent blowsand abatement elements should be implemented on-site to protect and stabilize the soil within the project site. Appropriate techniques to prevent the accumulation of blowsand on-site should be incorporated in the project design to minimize future damage from and exposure to blowsand.

MM 3.3-7: The incorporation of a Climate Action Plan in the North City Extended Specific Plan includes provisions for specific design features and development standards to achieve sustainable decreases in greenhouse gas emissions at the individual project level that could reduce this impact to less than significant.

MM 3.3-8: The following measures shall be implemented to reduce the impact of the air quality near Interstate 10 on all future sensitive receptors located on-site within 500 feet of the near edge of the freeway to the maximum extent feasible.

- Fixed non-openable windows shall be installed on the residential and hotel building faces with line-of-sight exposure to Interstate 10.
- Active or passive filtration shall be installed in the HVAC systems of residential and hotel buildings with ventilation from the side of the building facing away from Interstate 10.
- Intervening buildings or sound barriers shall be used to shield outdoor activity areas (swimming pools, playgrounds, parks, etc.) where sensitive receptors will be found.
- For properties adjacent to I-10, an average setback of 75 feet (minimum of 40 feet) is required to provide space for a public parkway and serve as a buffer between new development and I-10 traffic.

MM 3.3-9: Provided that the proposed gasoline dispensing station on-site will have a throughput below 3.6 million gallons per year, the toxic impact on sensitive receptors (including transient lodging) should be mitigated by locating sensitive receptors a minimum of 50 feet from the perimeter of the service station.

MM 3.3-10: The significance of many of the short-term and long-term air quality impacts cannot be determined without more detailed information regarding the number, type, and emissions of the construction equipment that will be used for each phase of development. Cathedral City may require additional air quality studies to ensure that the appropriate mitigation is applied for future development on-site.

G. Level of Significance after Mitigation

Standard Conditions and Mitigation Measures provided above are expected to reduce potential impacts to air quality to the maximum extent feasible.

H. Resources

Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA documents – Final June 29, 2007, prepared by the Association of Environmental Professionals,

http://www.califaep.org/userdocuments/File/AEP_Global_Climate_Change_June_29_Final.pdf, accessed November 26, 2007.

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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.

Soil Quality Indicators: pH, prepared by the United States Department of Agriculture (USDA) <http://soils.usda.gov/sqi/publications/files/indicate.pdf>, accessed November 7, 2007.

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Approved Standards, prepared by California Building Standards Commission http://www.bsc.ca.gov/prpsd_stds/default.htm, accessed April 3, 2009,

California Air Resource Board, Senate Bill 97 background.
<http://www.arb.ca.gov/cc/localgov/ceqa/ceqa.htm>, accessed April 3, 2009

3.4 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 Cathedral City Annexation (July 2012), the Biological analysis in the North City Specific Plan EIR (May 2009), the Biological Element from the City of Cathedral City Comprehensive General Plan (Amended June 2009), Zoning Map Amendment, and the Downtown Precise Plan Amendment Draft Environmental Impact Report (April 2002).

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 Recirculated Draft Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan Public Review Draft (2007).

A. Regional Setting

The proposed North City Extended Specific Plan and Annexation project site is located in the northwest portion of the Coachella Valley, in Riverside County and the southern portion of California. The Indio Hills, Edom Hill and Little San Bernardino Mountains to the north and the sweeping valley views to the southwest 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 occurs at an 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.

Exhibit 3.4-1
USGS

Development in the Cathedral City planning area is influenced by the topography of the Santa Rosa Mountains, Indio Hills, and the low-lying desert floor. The southerly city boundary closely follows the toe of slope of the Santa Rosa Mountains, and the City's oldest residential community is built upon an alluvial plain that emanates from Cathedral Canyon. Development in the northern portion of the planning area has been limited, partially due to the constraining topography of Flat Top Mountain and Edom Hill, a lack of available utilities and other urban infrastructure, and the erosive effects of strong winds that characterize this portion of the valley. Given these constraints, most development has occurred on the central valley floor, south of Interstate-10.

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.

The proposed project is found in land east of the northern portion of the Cathedral City planning area which is designated for a variety of land uses, including Open Space and Conservation (Mountainous and Desert Areas) in the Indio Hills, and Industrial/Manufacturing around Varner Road, between the Indio Hills and Interstate-10. South of Interstate-10 and north of Ramon Road, land use designations include low-density (2-5 du/ac) and medium-density (8-14 du/ac) residential development. Approximately 80 acres immediately north of Ramon Road are designated for Resort Hotel uses. These lands consist of largely undeveloped desert land.

According to the Cathedral City General Plan EIR, seven distinct natural plant communities have been identified in the Cathedral City planning area, including the following: 1) Desert Dunes and Sand Fields, 2) Desert Saltbush Scrub, 3) Mesquite Hummocks, 4) Sonoran Mixed Woody Scrub and Succulent Scrub, 5) Dry Desert Wash Woodland, 6) Sonoran Creosote Bush Scrub, and 7) Desert Fan Palm Oasis Woodland. 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. The subject property is adjacent to the City's eastern boundary which indicates the presence of Active Desert Sand Fields.

The Cathedral City EIR further states that Active Desert Sand Fields are areas of active sand movement, in which accumulated sand is not of sufficient depth to form the classic formations that characterize dune systems. "Active" refers to high winds, which continually amass and remove sand from the sand fields, allowing for limited vegetation, which generally appears in clusters. Although Active Desert Sand Fields lack dune formation, they typically contain smaller hummocks of sand that collect behind individual shrubs or clumps of vegetation.

This blowsand habitat is critical to the long term survival of a number of special-status species, including the Coachella Valley Fringe-toed Lizard, Flat-tailed horned lizard, Flat-seeded spurge and Coachella Valley milk-vetch. The Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) provides regulations for addressing listed species. The project is currently located within the Riverside County Integrated Project (RCIP.) The RCIP includes guidance relative to the physical development and land uses for the unincorporated areas of Riverside County. The umbrella of the RCIP includes both the County's General Plan and the CVMSHCP.

The subject property is identified as part of the Western Coachella Valley Area Plan within the General Plan and is designated as Industrial Park Commercial and Manufacturing-Service. Furthermore, the Specific Plan area is located within the CVMSHCP but is not located within a Conservation Area. This HCP also indicates that the property is intended to contain light Industrial Uses.

According to the Cathedral City General Plan EIR, the Coachella Valley is home to many highly 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, and Coachella Valley milk-vetch. 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.

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 annexation area is indirectly affected by Three Conservation Areas within the CVMSHCP. These three Conservation Areas include: Willow Hole Conservation Area, Edom Hill Conservation Area and Thousand Palms Conservation Area. Each of these areas includes primarily undeveloped portions north of the subject property. The Conservation Areas mentioned above indicate that Sonoran Creosote Bush Scrub habitat, Burrowing Owl, Le Conte's Thrasher, Coachella Valley milk-vetch, Coachella Valley Round-Tailed Ground Squirrel and the Palm Springs Pocket Mouse may be found within the vicinity of the Subject Property.

Exhibit 3.4-2
CVMSHCP Conservation Area in Project Vicinity

Areas adjacent to the subject property are tribal properties and 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.

The Subject Property is adjacent to Sections 2, 10 12 and 14 which are designated as Valley Floor Planning Area in the THCP. According to the Natural Plant Communities Exhibit for the THCP, the subject property includes a mix of Sonoran Mixed Woody and Succulent Scrub, Stabilized and Partially Stabilized Shielded Sand Fields. PA2 is identified as Urban.

THCP properties adjacent to the Subject Property fall within the Valley Floor Planning Area and require payment of the Tribal Habitat Conservation fee at time of development. This would support the mapping of the CVMSHCP that indicates that the area (including the subject property) is considered appropriate for development. The subject property is not subject to the THCP fee. Notification of the Tribe will be required as part of the entitlement process and will instigate coordination with the Tribe relative to adjacency topics.

B. Existing Conditions

The project site encompasses approximately 591.38 acres and is currently vacant. No signs of previous development, other than roadway and storm drain features, were found on the subject property.

The project specific Biological Assessment describes the onsite range in elevation from 240 to 300 feet above sea level. Decline in elevation occurs from the northwest to the southeast. Varner Road exhibits a rise in elevation as skirts the edge of Edom Hill.

The assessment further indicates that the topography consists of recently stabilized sand hummocks that rise from two to four feet above their base. The hummocks have been formed by shrubs that interrupt the flow of sand carrying wind coming from the west, off of the White River Floodplain. The vegetation reduces the wind velocity and

results in sand deposits or “hummocks” on the leeward or easterly side of the shrubs. The environment of the project site is included as part of the sand fields habitat of the valley floor described in the Cathedral City Comprehensive General Plan.

There are no naturally occurring springs or permanent aquatic habitats within the project site boundaries. In spite of the presence of small erosional cuts and dry pans, no blue line stream corridors (streams or dry washes) are shown on the U.S. Geological Survey maps for the project site. Additionally, botanical indicators of blue line stream corridors were not found on the property. Accordingly, per the Biological Analysis, there appear to be no biological justifications for requiring streambed alteration permits from State or Federal government agencies.

The project specific Hydrology Analysis referenced in this EIR indicates that onsite storm flows are not concentrated in a defined channel or wash. In fact storm water sheet flows over a wide and dispersed area across the property. However, due to the undetermined flow of offsite storm water, recently changed by the Bob Hope Drive I-10 Interchange CWA Section 404 Consultation with The US Army Corps of Engineers, Regional Water Quality Control Board and California Department of Fish and Wildlife will be required relative to potential impacts to Waters of the U.S. prior to approval of the proposed regional flood control measures. For further discussion and mitigation measure see section 3.8 Hydrology and Water Quality of this DEIR for further discussion.

The western and northern boundaries of the project site consist of relatively undisturbed creosote scrub/stabilized sand hummock habitat. Interstate 10, a busy freeway, forms the southern portion of the annexation area. Tamarisk trees, planted as a windbreak, run parallel with the freeway on the project site. Light industry and commercial establishments are found on property adjacent to the eastern boundary of the project.

The Biological Study states that smoothing of unpaved road surfaces to yield tracks was done regularly to determine if important wildlife corridors existed on or throughout the site. Tracks of coyote and black-tailed jackrabbit were found at least once in all of the unpaved roadways sampled. In every instance tracks traversed roadways then veered to the left or right prior to reaching site boundaries. Occasionally, tracks crossed unpaved roads perpendicularly. No wildlife corridors could be detected through either observation or sign.

C. 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 Game or U.S. Fish and Wildlife Service?
- b) Result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or 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?

D. Project Impacts Found Not To Be Significant

According to the Biological Assessment prepared for the project (Cornett, 2012), field surveys were initiated on June 19, 2012. Dates of biological surveys were June 19, 23, 24 and 30; July 3-8 and 11-12, 2012. Night surveys were conducted on the evenings of June 19, 20 and 21, 2012.

Survey dates coincided with the most favorable times of year to find plants in bloom (or fruit) and animals during their active seasons. Surveys were conducted by walking east/west transects at 10-yard intervals throughout the project site and at 10, 100, 200, 400 and 800 yard intervals beyond and around the project boundaries. No surveys were conducted south of the Interstate 10 or east of Rio del Sol. The freeway and commercial/residential areas were considered impediments to the presence and or movement of plant and animal species. The survey protocol was established by the U.S. Fish & Wildlife Service for determining the presence or absence of burrowing owl and officially threatened desert tortoise.

Animal and plant surveys were conducted simultaneously. In addition, fifty live-animal traps (which capture animals unharmed) for large and small mammals were set within the project site for twenty-four hour periods on June 19, 20 and 21 2012. Both day and night live-trapping was conducted.

In order to determine if large animal corridors existed on the subject property, special attention was given to observing and identifying animal tracks. Also sand sifting and smoothing was conducted on several onsite unpaved roadways to identify prominent tracks. Road kills on Interstate 10 and on Varner Road were monitored on most site visits. This monitoring included portions of Interstate 10 and Varner Road corresponding with the east/west width of the project boundaries.

Plant Survey Results

According to the site specific Biological Analysis, a single plant association or “community” was found on the site. The Sonoran creosote bush scrub community dominates the vegetation of the entire project site. This is also the pervasive plant community throughout the Colorado Desert of southeastern California.

The Sonoran Creosote Bush Scrub community was represented on site by the creosote bush (*Larrea tridentate*), the California dalea (*Psoralea arborescens*), Emory’s dalea (*Dalea emori*), and to a lesser extent cattle spinach, (*Atriplex polycarpa*), burrobush (*Ambrosia dumosa*), and Wingscale (*Atriplex canescens*.)

An estimated 10% of the project site has been disturbed by activities including roadway clearing and off-road-vehicle use. This disturbance has provided the opportunity for weed species propagation. Some of the weed species found onsite included Sahara mustard (*Schismus barbatus*), croton (*Croton californicus*) and Schismus grass (*Schismus barbatus*.)

The Inventory of Rare and Endangered Vascular Plants of California, published by the California Native Plant Society (2001), the *CNDDB Special Plant List* (2012) or the

Endangered, Threatened, and Rare Plants of California (2012) lists four sensitive plant species that conceivably could occur on the project site. These are the glandular ditaxis (*Ditaxis clariana*), the ribbed cryptantha (*Cryptantha costata*), flat-seeded spurge (*Chamaesyce clariana*), and Coachella Valley milk-vetch (*Astragalus lentiginosus coachellae*). Only one of these species, the Coachella Valley milk-vetch, is officially listed or proposed to be listed at this time. The remaining species are not proposed to be listed by either state or federal governments at this time.

The Coachella Valley milk-vetch is an uncommon, spring-blooming ephemeral herb that can be found on sandy soils in the Coachella Valley. Six individuals of this subspecies were found offsite on adjacent property to the west in 2003 and two were identified again on this adjacent property in 2008. Because the annexation area has suitable habitat for the presence of the milk-vetch, and the presence of the species on the adjacent property, it is very likely that the species occurs in the annexation area. This species is presently listed as endangered by the federal government.

A complete list of vascular plant species found within the project boundaries can be found in Table 1 of the Biological Assessment (Appendix D).

Animal Survey Results

The project site is composed of species typical of the Colorado Desert subdivision of the Sonoran Desert.

Arthropods

Encountered invertebrates included the white-lined sphinx moth (*Hyles lineata*), common carabid beetle (*Calosoma semilaeve*), sand scorpion (*Paruroctonus mesaensis*), eleodes beetle (*Eleodes armata*), and harvester ant (*Pogonomyrmex californicus*).

Three 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*), Coachella Valley Jerusalem cricket (*Stenopelmatus cahuilensis*) and Coachella Valley grasshopper (*Spaniacris deserticola*). The United States Fish and Wildlife service has listed as endangered the Casey's June Beetle (*Dinacoma cayeyi*).

None of these four species were found on the subject property. The Biological Analysis states that the three species found on the *Special Animals* list mentioned above may be present.

Reptiles

Encountered reptiles included the side-blotched lizard (*Uta stansburiana*), western whiptail (*Cnemidophorus tigris*), desert iguana (*Dipsosaurus dorsalis*), coachwhip (*Masticophis flagellum*) and western shovel-nosed snake (*Chionactis occipitalis*). Two individuals of the officially threatened Coachella Valley fringe-toed lizard, *Uma inornata*, were observed on the site.

According to the Cathedral City GP, 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.

The project specific Biological Study states that the proposed project can be expected to result in the elimination of creosote scrub habitat including the native plant and animal species that 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.

The City GP further indicates that the Coachella Valley fringe-toed lizard, flat-tailed horned lizard, and occasionally the desert tortoise, may inhabit sand dunes and fields in areas north of Interstate-10, in and around the Willow Hole-Edom Hill Preserve, currently encompassed in the CVMSHCP Willow Hole Conservation Area and the Edom Hill Conservation Area. As discussed the subject property is not located within a Conservation Area as defined by the HCP.

A concerted effort was made to locate sign of the officially listed desert tortoise (*Gopherus agassizi*). However, no evidence of the desert tortoise was found and no direct observations were made. This results in the conclusion that this species does not currently occur on the subject property.

Additionally an intensive effort was made to locate individuals or sign of the flat-tailed horned lizard (*Phrynosoma mcalli*.) The City GP refers to the subject property as core habitat for this species, however no individuals were observed and no sign (scat) was found. Still during this study the habitat of the project site was found of be suitable. The flat-tailed horned lizard is a very cryptic species, so the inability to detect the lizard does not necessarily indicate that it is absent. This lizard is a considered a Species of Special Concern by the State.

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*) and the red-tailed hawk (*buteo jamaicensis*.)

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*).

No observations of LeConte's Thrasher were recorded during surveys. This species is closely associated with the presence of golden cholla in the Coachella Valley. This cactus species is nearly absent from the site so it was concluded that the LeConte's thrasher does not occupy the site.

Burrowing Owl

Five observations of the burrowing owl were recorded during the biological survey. One of the observations was confirmed as a juvenile. The locations are shown in Figure 3, page 6 of the site specific biological assessment (Appendix D). No active burrows were found on the annexation property during the survey. The burrowing owl is protected by the Migratory Bird Treaty Act of 1918 in the United States. The subject property is considered potential habitat for this species.

Loggerhead Shrike

The loggerhead shrike was observed on two occasions within the property boundaries. No nests were identified on the site; however the surveys were conducted after the breeding season. This species is likely a resident within the area and/or vicinity of the subject property. This species is not officially listed as threatened or endangered however it a Species of Special Concern in the State of California.

Mammals

Mammals recorded onsite included the black-tailed jackrabbit (*Lepus californicus*,) Palm Springs ground squirrel (*Spermophilus tereticaudus cholorus*,) desert kangaroo rat (*Dipodomys deserti*) and coyote (*Canis latrans*).

The City of Cathedral City Comprehensive General Plan identified the site as core habitat for the Palm Springs Pocket Mouse, (*Perognathus longimembris bangs*.) However no individuals of this species were found onsite.

The Coachella Valley ground squirrel (*Spermophilus tereticaudus chlorus*) was found over most of the project site, primarily near the areas with paved roads. This mammal is contained within the California Department of Fish and Game *Special Animals Report* (2012) and is considered a Species of Special Concern by the State of California. In the

past it was considered as a candidate species for listing by the United States Fish and Wildlife Service.

Based on the results of the biological investigation and survey, no plants, 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. The federally threatened Coachella Valley fringe-toed lizard was observed within the site boundaries, which is covered under the MSHCP. Two animal species considered to be Species of Special Concern by the State of California were encountered: The loggerhead shrike and Coachella Valley ground squirrel. Less than significant impacts are anticipated related to this issue.

The proposed project can be expected to result in the elimination of creosote scrub habitat including the native plant and animal species that 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.

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 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.

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

There are no blue-line stream courses, as depicted on the United States Geological Survey map. Riparian areas identified in the North City Specific Plan are identified approximately 1.5 miles upstream from the project. Development will have no impact on these resources, as they are located upstream and at a higher elevation. No impacts are anticipated related to federally protected wetlands or riparian habitat.

E. Potentially Significant Impacts

The plant and animal survey was conducted onsite and on adjacent property. The Biological Study indicated that the federally endangered Coachella Valley milk-vetch likely occurs on-site as it has been found in the past on adjacent parcels.

The federally threatened Coachella Valley fringe-toed lizard was observed within the site boundaries. The flat tailed horned lizard was not observed but the habitat is considered suitable for the state Species of Special Concern.

The habitat also appears to be suitable for the Coachella Valley Jerusalem cricket and the Coachella Valley giant sand-reader cricket as well. The Palm Springs ground squirrel was considered to be widespread across the study area and common in some areas.

Each of the above species is “covered” under the Coachella Valley Multiple Species Habitat Conservation Plan. Mitigation for impacts to this species 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 remaining species are those not covered under the CVMSHCP (Loggerhead Shrike and Burrowing Owl) or species that are only partially covered (Desert Tortoise.)

The Desert Tortoise is a 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 annexation 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 identified several times within the annexation area. Furthermore, the habitat is considered suitable considering the hundreds of onsite rodent burrows. The species commonly enlarges the 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. Mitigation Measures are provided below.

Loggerhead Shrike

The loggerhead shrike is a state Species of Special Concern. It was observed on the subject property during surveys and is known to nest in similar habitat within one mile of the project site. Therefore, if construction activities are expected between February 1 and July 1, breeding surveys should be conducted 30 days prior to construction related site disturbance. If a nest is found, a buffer should be established in which construction activities are prohibited. The width of the buffer should be determined by an experience biologist. Following implementation of this Mitigation, impacts are expected to be less than significant relative to the Loggerhead Shrike.

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

SC 3.4-1: The project proponent shall pay the associated CVMSHCP for each phase of development prior to issuance of a Building Permit. 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 3.4-1: The project developer shall ensure that the following mitigation measures are implemented to reduce potential impacts to Burrowing Owl during construction activities:

1. A preconstruction survey should take place at least 30 days prior to project grading to determine the location of active burrows on and within 550 yards of an approved project site. If no active burrows are found in the survey area, grading shall commence providing a biological monitor is onsite.
2. A biological monitor, with the authority to halt or redirect grading, should be present whenever grading or construction vehicles are present and operating on an approved project site. The function of the monitor is to protect burrowing owls that arrive on or near the project site after the clearance survey and during the construction period.

3. The breeding season of the western burrowing owl is from February 1 through August 31 of each year. No construction disturbances of any kind should occur within 500 meters (550 yards) of an active burrow during this time period. Thus on a project site, grading should take place from September 1 until January 30 of each year to avoid restriction or cancellation of grading because of the presence of burrowing owls during the breeding season.
4. Resident owls present on or near the project site outside the breeding season may be relocated to other sites by a permitted biologist. Relocation details can be found in the Staff Report on Burrowing Owl Mitigation prepared by the California Department of fish and Game..

MM 3.4-2: The project developer shall ensure that the following mitigation measures are implemented to reduce potential impacts to Loggerhead Shrike during construction activities:

1. If construction activities are expected between February 1 and July 1, breeding surveys should be conducted 30 days prior to construction related site disturbance.
2. If a nest is found, a buffer should be established in which construction activities are prohibited. The width of the buffer should be determined by an experience biologist.

G. 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.

H. Resources

Biological Assessment and Impact Analysis of the Proposed Cathedral City Annexation, James W. Cornett, Ecological Consultants. July 2012.

Biological Resources of the City of Cathedral City Comprehensive General Plan, Zoning Map Amendment and Downtown Precise Plan Amendment, Draft Environmental Impact Report, Terra Nova Planning and Research Inc. April 2002.

Final Program Environmental Impact Report for the North City Specific Plan, Cathedral City, California, HDR Engineering, Inc. May 2009.

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

Recirculated Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan Public Review Draft, Coachella Valley Mountains Conservancy, (March, 2007).

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>
(November 2012.)

3.5 CULTURAL RESOURCES

The discussion within this section is based on a variety of information sources. These sources include two Historical/Archaeological Resources Survey Reports prepared by CRM TECH dated August 21, 2012 (Appendix E), Cultural Resources elements from the City of Cathedral City Comprehensive General Plan, Zoning Map Amendment and Downtown Prewise Plan Amendment EIR (July 31, 2002 and Amended November 18, 2009), and Final Program Impact Report, May 2009.

A. Regional Setting/Site History

The subject properties are located adjacent to and easterly of the incorporated city limits of Cathedral City, northerly of the Interstate 10/Union Pacific Railroad, and westerly of the unincorporated community of Thousand Palms. Due to the site's lack of a permanent water source and general exposure to the frequently harsh winds in the center of the Coachella Valley, the native Cahuilla Indians did not establish any type of permanent settlements in this part of the Valley. It is likely that the few prehistoric remains associated with the subject property and surrounding area were the result of trekking between the permanent settlements located primarily in the Indian Canyon areas of Palm Springs and food source areas located along the San Andreas Fault areas along the base of the Indio Hills. These areas also had access to surface water on occasion that attracted small and medium sized game that the natives hunted for food and by-products.

From the "Cultural Resources Technical Report, Cathedral City General Plan" dated July 2, 2001, and also prepared by CRM TECH, the following:

"In light of the findings from the various avenues of research, this study concludes that the foothills and canyons along the base of the San Jacinto Mountains and the mesquite dunes between Seven Palms Valley and Edom Hill are highly sensitive for prehistoric archaeological resources. The balance of the planning area on the level valley floor, in contrast, demonstrates low sensitivity for prehistoric archaeological resources." That area cited lies between 3 to 6 miles to the north and northwest of the subject property.

B. Existing Conditions

The project site, approximately 591.38 acres in size, is located immediately adjacent to Interstate 10 with 492 acres located westerly of the new Bob Hope Drive interchange and 9 acres located just easterly of that interchange. The site is mostly southerly of Varner Road with a small portion to the north. The property is undeveloped but has been impacted by the construction of both Interstate 10 in the early 1960's and more recently with the construction of the new Bob Hope Drive on and off ramps. The

property was earlier impacted by the construction of Varner Road (formerly U.S. Highway 99/70/60 in the late 1920's, by Rio Del Sol probably in the 1940's, and most recently with the construction of a new freeway interchange in 2009 to 2012.

The subject property was surveyed by CRM TECH between June and August of 2012. The summary of their report cites a single prehistoric Isolate (33-011396) from historic records as well as several historic sites on the property. The Isolate, a single prehistoric potsherd, was previous recorded in the project area but was not found during the site reconnaissance by the archaeology team. The other recorded resource is Varner Road which no longer retains sufficient historical integrity to relate to the period of significance for Site 33-008408, namely the early to mid-20th century, and was found not to contribute to the significance of the site in general. CRM Tech concludes that the portion of the road within the site does not constitute an "historical resource."

The only other artifacts discovered during the investigation of the site are two domestic refuse deposits dating to the 1930'-1940' era and an isolated glass bottle dating to circa 1900. These features are identified as 33-0200983, 33-0200984, and 33-0200985, respectively "but none of them appears to meet CEQA's definition of a 'historical resource.'"

The discovery of paleontological resources is virtually unknown in the western Coachella Valley and is unlikely due to the nature of the geography of the area. The western portion of the valley is at the higher elevation and has been over-deposited with deep sediments from drainage runoff and Aeolian sand deposits. The potential would increase proportionate to the depth of excavation. While deep excavation is not normal with typical low rise development, future construction with subsurface parking could unearth paleontological deposits.

C. Threshold Criteria

Thresholds of significance are 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 cultural resources perspective. Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?
- b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

- d) Disturb any human remains, including those interred outside of formal cemeteries?

The western area of the Coachella Valley has proven to have an extremely low sensitivity to paleontological resources but has the potential to be uncovered during excavation activities. Surface investigation by CRM TECH did not reveal any surface resources other than those listed for pre-historic and historic archaeology research. The monitoring required for archaeology and cultural resources should include person(s) qualified for paleontology review.

D. Project Standards Found Not To Be Significant

Based on the results of their investigation, CRM TECH, recommends “a finding of No Impact regarding cultural resources. No further cultural resources investigation is recommended for the project unless development plans undergo such changes as to include areas not covered by this study. However, if buried cultural materials are encountered during future earth-moving operations associated with the project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.”

E. Potentially Significant Impacts

According to PRC §5020.1(j), “‘historical resource’ includes, but is not limited to, any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.”

More specifically, CEQA guidelines state that the term “historical resources” applies to any such resources listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the Lead Agency (Title 14 CCR § 15064.5(a)(1)-(3)).

Regarding the proper criteria of historical significance, CEQA guidelines mandate that “a resource shall be considered by the lead agency to be ‘historically significant’ if the resource meets the criteria for listing on the California Register of Historical Resources” (Title 14 CCR §15064(a)(3)). A resource may be listed in the California Register if it meets any of the following criteria”:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California history and cultural heritage.
- (2) Is associated with the lives or persons important in the past.

- (3) Embodies the distinctive characteristics of a type, period, region, or method on construction, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.(c))

The study concludes that there are no Significant Impacts that are expected as a result of the development of the subject property assuming the inclusion of on-site monitoring during grading operations.

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

SC 3.5-1: Approved Native American cultural resource monitor(s) as well as archaeological monitors shall be present during all ground disturbing activities. 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.

SC 3.5-2: In compliance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the Riverside County Coroner must be notified immediately. If the coroner determines that the remains are not recent and may be Native American, in accordance with Public Resource Code 5097.94, the coroner will notify the Native American Heritage Commission (NAHC) within 24 hours of the find. The NAHC will then determine, in consultation with the property owner, the disposition of the human remains.

No known burial grounds or cemetery occurs on the project site. Although known resources are to be avoided, excavation is likely to occur to a greater depth and area. Should human remains be discovered during construction of the proposed project, the project contractor would be subject to the Tribe’s “Treatment of Human Remains Policy” (ACBCI Tribal Historic Preservation Organization and Policies, 2004) which is consistent with State law regarding the discovery and disturbance of human remains. In that circumstance the Cultural Monitor has the authority to halt destructive activities in the immediate area.

SC 3.5.3: A qualified paleontologist shall monitor all grading that includes initial cutting to a depth of 10 feet below existing ground surface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays, and to remove samples of sediments, which are likely to contain the remains of small fossil

invertebrates and vertebrates. If any paleontological resources are identified during these activities, the following activities shall occur:

- All recovered specimens shall be prepared to a point of identification and permanent preservation, including washing sediments to recover small invertebrates and vertebrates.
- Specimens shall be identified and curated into an established, accredited, professional museum repository with permanent retrievable storage.
- The paleontologist shall have a written repository agreement in hand prior to the initiation of mitigation activities.
- At the end of the monitoring period, the paleontological monitor shall submit a letter report to the Director of Planning detailing the duration and results of the monitoring. A report of findings shall be prepared by the paleontologist. The report shall be submitted prior to the issuance of the Certificate of Occupancy.

G. Level of Significance with Mitigation

With the standard monitoring during grading operations, there will be no significant impacts as a result of the development of the subject property.

H. Resources

Historical/Archaeological Resources Survey Report/North City Extended SP/EIR Project prepared by CRM TECH, August 2012.

Due Diligence Historical/Archaeological Resources Survey Report/North City Extended Annexation Project prepared by CRM TECH, August 2012.

City of Cathedral City Comprehensive General Plan , Zoning Map Amendment and Downtown Precise Plan Amendment Draft Environmental Impact Report, prepared by Terra Nova Planning and Research, Inc. April, 2002.

Final Program Environmental Impact Report North City Specific Plan, Cathedral City, California, State Clearinghouse No. 2008041055, May 2008, prepared by HDR Engineering, Inc., May 2009

Draft Environmental Impact Report for the Rancho Mirage Comprehensive General Plan, SCH # 96051039, prepared by Terra Nova, July 1996

City of Rancho Mirage General Plan Update Draft Environmental Report, SCH# 2004081038, prepared by The Planning Center, May 2005.

3.6 GEOLOGY AND SOILS

The discussion within this section is based on a variety of information sources. These sources include the Geotechnical Feasibility and Infiltration Report for the Specific Plan (January 2013, in Appendix F), the General Plan for the City of Cathedral City (2009), the Riverside County Integrated Project (RCIP) General Plan Final Program Environmental Impact Report Volume 1 (October 2003), and the United States Soil Conservation Service's Soil Survey of Riverside County, California Coachella Valley Area (1980).

A. Regional Setting

Geologic Setting

The project is located in the northwest portion of the Coachella Valley. The valley is part of the Colorado Desert geomorphic province.

The Salton Trough is a significant feature of the Colorado Desert geomorphic province and the Coachella valley forms the northerly portion of this Trough. It is a structural depression that extends approximately 180 miles in a southeast trend from the San Gorgonio Pass to the Gulf of California. The Salton Sea is the lowest portion of this trough at approximately 225 feet below sea level.

The Coachella Valley contains a series of sedimentary deposits that are Miocene to recent age. The surrounding mountains expose mainly Precambrian metamorphic and Mesozoic granitic rocks. The Coachella Valley is bounded by the Little San Bernardino Mountains to the northwest, foothills of the San Bernardino Mountains to the northwest and the San Jacinto and Santa Rosa Mountains on the southwest and west.

The City of Cathedral 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 occurs at an 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.

Seismic

According to the RCIP EIR Geology and Slope Stability section, two of California's most active faults, the San Andreas and the San Jacinto Faults, pass through Riverside County.

Faults throughout Southern California have formed over millions of years and some of these are considered generally inactive with the present geologic conditions. Faults considered active are generally presumed to be the most likely to generate damaging earthquakes in the lifetimes of residents, buildings or communities.

Faults are considered active if they have shown displacement of the ground surface within approximately the last 11,000 years.

Southern California earthquakes occur as a result of movement between the Pacific and North American plates. Faults of the San Andreas system are used to delineate the boundary between the plates. Associated earthquakes occur in a broadly distributed zone that stretches from offshore to Nevada. Therefore, the San Andreas is one of a system of plate-bounding faults. Most of the movement between the plates occurs along the San Andreas Fault; which bisects Riverside County. The rest is distributed among northwest-trending, strike slip faults of the San Andreas system (including the San Jacinto fault). (County of Riverside TLMA, 2003)

The system of active fault zones that are present in the region are structural tectonic features responsible for shaping the formation of the existing land forms including the mountains that bound the northern and southern portions of the City.

The Alquist-Priolo Zones have been designated by the California Geologic Survey for the San Jacinto and San Andreas Fault zones in Riverside County. These faults have high rates of displacement and are rapidly accumulating strain energy to be released in earthquakes (County of Riverside TLMA, 2003).

A worst case scenario earthquake (the maximum credible earthquake [MCE]) for Riverside County is a magnitude of 7.9 based on the rupture of the entire southern segment of the San Andreas Fault from the Cajon Pass to the Salton Sea. While other scenarios will expose portions of Riverside County to intense ground shaking that is locally as severe as the MCE, the MCE exposes most of the County to very high-intensity ground shaking (County of Riverside TLMA, 2003).

The San Andreas Fault Zone within the Coachella Valley consists of the Garnet Hill Fault, the Banning Branch and the Mission Creek Branch that traverse along the northeast portion of the valley. The Banning Branch (.32 miles north of the subject property boundary) and Mission Creek Fault (2.15 miles northeast of the subject property boundary) have been understood to encompass the south and north branches, correspondingly, of the San Andreas Fault Zone. The Mission Creek Fault appears to align more directly with the general main trend of the area San Andreas Fault Zone and is generally considered to possess higher seismic potentials.

The Garnet Fault (approximately 1.9 miles northwest of the subject property boundary) is concealed by deep, rapidly deposited alluvium but its presence has been confirmed by a gravity anomaly survey, which indicates a trough of low gravity similar to those found along the Mission Creek and Banning Faults (Rubicon Geotechnical, 1992).

Damage as a result of earthquakes would be expressed by Modified Mercalli intensities. Modified Mercalli intensity is the amount of ground shaking at a particular site versus a Richter magnitude which indicates the size of an earthquake. An earthquake will have one Richter magnitude and many modified Mercalli intensities.

The region's potential seismic hazards include ground shaking, surface fault rupture, soil liquefaction and other secondary earthquake related hazards.

Soils

The soils in the area generally consist of granular alluvial deposits from the adjacent mountainous and hillside terrain. In general the alluvial valley fill grades from coarser to finer materials and become thicker rapidly with increasing distance from the mountain slopes.

Soils within the area are appropriate for a number of construction purposes. However the following geologic conditions are also commonly found throughout the area. Excavations have a possibility of occurring: excavations may be at risk of caving, and in some locations (particularly hillside and mountain areas), excavation may be complicated by the presence of rocks. Where unprotected soils are exposed, a potential exists for wind and/or water erosion. The soils within the area are non-plastic and the potential for expansion is low. The potential for corrosion of concrete by soils is low, but may be moderate to high for ferrous metals in contact with the ground.

B. Existing Conditions

Geologic Setting

The project ranges in elevation from 240 to 300 feet above sea level. Decline in elevation occurs from the northwest to the southeast. Varner Road exhibits a rise in elevation as skirts the edge of Edom Hill.

Oversized material is generally defined as rock larger than 6 inches in nominal diameter. Commonly, rocks of 3 inches or less in diameter are used in the foundation zone of fill pads. Per California Building Code, rocks larger than 12 inches in diameter are not allowed within the upper 10 feet of fill.

Seismic

Several active faults or seismic zones are found within .32 miles of the project site. The main seismic hazard to the site is strong ground shaking from earthquakes along the San Andreas fault. The Maximum Magnitude Earthquake (M_{max}) corresponds to the maximum earthquake believed to be tectonically possible.

This portion of Riverside County has not been mapped by the California Seismic Hazard Mapping Act. The 2002 Riverside County General Plan does not identify the site as being located within a fault rupture hazard area. The Geotechnical Report states that the site does not lie within a currently delineated State of California, Alquist-Priolo Earthquake Fault Zone. California Geological Survey maps do show well delineated fault lines that cross through this region, however no active faults are mapped in the immediate vicinity of the site. Active fault rupture is unlikely to occur at the project site.

Primary Hazard: According to the Geotechnical Reports for the all portions of the project, the site's main seismic risk is a potential earthquake along the San Andreas Fault located about .51 km (.32 miles) from the site. The Southern Segment of the San Andreas Fault has the longest elapsed time since rupture of any part of the San Andreas Fault (around 1690 AD).

Potential ground motion intensity can be estimated by the horizontal peak ground acceleration (PGA) measured in "g" forces. Earthquake magnitude and distance to the rupture zone as well as attenuation by rock and soil deposits, direction of rupture and type of fault, determine range ground motions. These parameters may vary considerably in the same general area.

Secondary Hazards

Soil Liquefaction: Liquefaction is the loss of soil strength from sudden shock (earthquake shaking) which causes the soil to develop into a fluid mass. Generally, groundwater levels must be within 50 feet of the ground surface elevation and the soils must also be susceptible to liquefaction. The depth to groundwater beneath the entire site exceeds 60 feet. No free groundwater was encountered in the exploratory borings of the Geotechnical analysis for the project. Additionally, the project is not contained within the Riverside County designated liquefaction hazard zone.

Ground Subsidence: The potential for seismically induced localized ground subsidence is considered to be low throughout the entire site. Strong earthquake shaking tends to cause dry sands to settle and densify. Relative density of soil, ground motion and earthquake duration determine the amount of subsidence. Seismic induced settlement may occur in uncompacted fill areas.

The site does lie within a “moderate” liquefaction and “susceptible” subsidence area established by the Riverside County General Plan.

Seiching

Ground motion from earthquakes has the potential to cause periodic oscillation of water contained in enclosed reservoirs. Its period is determined by the resonant characteristic and physical dimensions of the container. Movement could result in tipping or failure in reservoirs that are not constructed to current standards.

For further discussion see Section 3.9 Hydrology and Water Quality.

Potential hazards from slope instability, landslides or debris flows are considered low to moderate for the property. At the time that Planning Area development plans are available, detailed analysis of site specific geotechnical requirements may be required.

Potential hazards from debris flows during significant runoff events within defined drainages north and west of the Specific Plan site are considered moderate. The site specific Geotechnical report indicates that the site is relatively flat, and no risk exists on-site. Furthermore, any residual impacts would be mitigated to a level less than significant following implementation of mitigation measures discussed in Section 3.9 Hydrology and Water Quality.

For further discussion of mudflows see Section 3.9 Hydrology and Water Quality.

Lateral Spreading: According to the USGS, lateral spread or flow are terms referring to landslides that commonly form on gentle slopes and that have rapid fluid-like flow movement, like water (USGS, 2007.) Because the site has a low susceptibility to land slides and liquefaction, the potential for lateral spreading can be considered low, as well.

Flooding: The subject property is located within a FEMA designated 100-year flood plain. The project site may be in an area in which sheet flooding and erosion could occur. Appropriate project design, construction and maintenance can minimize the sheet flooding potential.

No defined washes are located onsite. Mitigation of flooding, erosion and debris flows is incorporated into project design. Storm Drain improvement plans will include collection and conveyance of storm flows.

Section 3.9 Hydrology and Water Quality contains an in depth discussion of potential flooding and erosion related to storm water. Any residual impacts would be mitigated to a level less than significant following implementation of mitigation measures.

Soils

The Geotechnical study and infiltration testing indicates that the site materials consist primarily of poorly-graded, gravelly sand, and silty sand, sand-silt mixture. The soils were visually classified to be in the low expansion category. The design of the storm water retention/distribution system will be required to identify an appropriate factor of safety to apply to reported infiltration rates. Maintenance of the retention/distribution system is crucial if no factor of safety is applied. The potential for reduction in the percolation rates of soils may be lessened by a silt and oil trap placed at influent points.

As mentioned previously, groundwater is believed to be found at a depth greater than 150 feet in the area. Groundwater is not expected to be a factor in design or construction at this site.

C. 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 Geotechnical and Soils perspective. Would the project:

- a) Expose people or structures to potential substantial adverse effects including the risk of loss, injury or death involving the following:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?
 - ii. Strong seismic ground shaking?
 - iii. Seismic-related ground failure, including liquefaction?
 - iv. Landslides?
- b) Result in substantial soil erosion or the loss of topsoil?
- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

- e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

D. Project Impacts Found Not To Be Significant

The following geotechnical constraints and impacts presented within the Geotechnical study and within this document are not expected to be significant:

- As discussed previously and in the initial study (Appendix A) the project does not lie within a currently delineated Alquist-Priolo fault zone or in an area subject to seismic related ground failure. No impacts related to known earthquake faults are expected.
- Other geologic hazards, including fault rupture, liquefaction, seismically induced flooding, landslides and lateral spreading are considered low or negligible on this site. Less than significant impacts are anticipated.
- The soils were visually classified to be in the low expansion category in accordance with the California Building Code. Less than significant impacts are anticipated related to expansive soils.
- The project will not utilize a septic system. Sewer services will be provided by the Coachella Valley Water District. No impacts are anticipated related to septic uses.

E. Potentially Significant Impacts

Design of grading and construction of Planning Areas will require individual review by the City, as each area will be designed and developed by individual land owners. The project's regional storm water retention basins will be submitted for review by the City of Cathedral City and the Coachella Valley Water District.

From a geotechnical perspective, the site is suitable for the proposed development. This is provided that the recommendations within the Geotechnical Reports are followed in the design and construction of the site.

Raw numbers (which do not include over-excavation) are analyzed throughout this document. Project improvement plans will provide more precise cut and fill quantities.

The following potentially significant geotechnical constraints and impacts are presented within the Geotechnical study:

- The primary geologic hazard is severe ground shaking from earthquakes originating on nearby faults. A major earthquake above magnitude 7 originating on the local segment of the San Andreas Fault zone would be the critical seismic event that may affect the site within the design life of the proposed development. Engineered design and earthquake resistant construction increase safety and allow development of seismic areas.
- The project site is in Seismic Zone 4, is of soil profile Type C, and is about .32 miles from a Type A seismic source as defined by the California Building Code. Engineered design and earthquake-resistant construction increase safety and allow development of seismic areas. A qualified professional should design any permanent structure constructed on the site. The minimum seismic design should comply with the 2010 edition of the California Building Code.
- The underlying geologic condition for seismic design is Site Class - C
- The soils are susceptible to wind and water erosion. Preventative measures to reduce seasonal flooding and erosion should be incorporated into the grading plans. Dust control should also be implemented during construction (see Section 3.3 Air Quality for further discussion.) Site grading should be in strict compliance with the requirements of the South Coast Air Quality Management District (SCAQMD).
- The upper matrix soils are estimated to be medium dense and dry. The soils within building and structural areas will require moisture conditioning and compaction. The treatment of native soil is dependent upon the location of cuts and fill.
- Ground subsidence from seismic events or hydroconsolidation is a potential hazard in the Coachella Valley area. Adherence to the grading and structural recommendations in the Geotechnical Reports should reduce potential settlement problems from seismic forces, heavy rainfall or irrigation, flooding and the weight of the intended structures.
- Hazards from seasonal flooding and debris flows are considered moderate to none. Any residual impacts would be mitigated to a level less than significant following implementation of mitigation measures discussed in Section 3.9 Hydrology and Water Quality.
- Using the Cal/OSHA standards and general soil information obtained from the field exploration, classification of the near surface on-site soils will likely be characterized as Type C.

Actual classification of site specific soil type per Cal/OSHA specifications as they pertain to trench safety should be based on real-time observations and determinations of exposed soils during grading and trenching operations.

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

The site is suitable for the proposed development provided the following recommendations primarily contained within the site specific Geotechnical Report are followed in the design and construction of the project.

Geotechnical

SC 3.6-1: 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 2010 edition of the California Building Code using the seismic coefficients given in the Geotechnical Report.

SC 3.6-2: Design Level Geotechnical Engineering Report(s) shall be prepared for grading and construction activities.

SC 3.6-3: Site grading shall be in strict compliance with the requirements of the South Coast Air Quality Management District. Dust control shall be implemented throughout all phases of construction. (Further discussion contained in Section 3.3 Air Quality).

Site Development and Grading

SC3.6-4: Additional site specific geotechnical investigations may be necessary based on site specific design proposals. Local variation in soil conditions may warrant adjustments such as increasing depth recompaction and over-excavation. A representative of the soils consultant shall observe site clearing and the bottoms of excavations before placing fill.

SC 3.6-5: 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 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.

SC 3.6-6: 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.

SC 3.6-7: Prior to issuance of a Grading Permit, the developer of the roads and infrastructure, and structures shall prepare a Storm Water Pollution Prevention Plan and a PM10 Fugitive Dust Control Plan. These plans shall be implemented throughout all construction activities.

SC 3.6-8: The grading contractor shall work in accordance with the Grading Ordinance of the City of Cathedral City, throughout all grading activities.

MM 3.6-1: The project contractors shall adhere to the recommendations contained within the site specific Geotechnical Feasibility and Infiltration Report throughout grading and construction activities.

MM 3.6-2: Future Planning Area developers shall be required to have a project specific Geotechnical analysis.

MM 3.6-3: Individual developers of the NCESP area shall be required to submit plans including on-site provisions for capture of incremental storm water associated with project impervious surfaces prior to project approvals. The incremental storm water flowing off-site shall be equal to predevelopment conditions. Plans shall be reviewed and approved by the City.

G. Level of Significance after Mitigation

Following implementation of the Standard Conditions and Mitigation Measures discussed in this section and throughout this document, the North City Extended project is expected to result in less than significant impact related to Geology and Soils.

H. Resources

Riverside County Integrated Project General Plan Final Program Environmental Impact Report Volume 1 (October 2003)

United States Soil Conservation Service's Soil Survey of Riverside County, California Coachella Valley Area, United States Department of Agriculture (1980)

USGS, <http://earthquake.usgs.gov/learning/glossary.php?term=lateral%20spread%20or%20flow> (August, 14 2012.)

USGS, National Earthquake Information Center, http://vulcan.wr.usgs.gov/Glossary/Seismicity/description_earthquake.html (July 18, 2006)

RJR Engineering, Geotechnical Engineering Update Report Environmental Impact
Assessment Proposed 567 Acre Specific Plan Development Area of Varner Road and Bob
Hope Drive County of Riverside, California

3.7 GREENHOUSE GAS EMISSIONS

This Section of the EIR provides information and evaluation of Greenhouse Gas (GHG) impacts as they relate to the proposed North City Extended Specific Plan and Annexation project.

Analysis involved the review of various information sources which include the County of Riverside Integrated General Plan (RCIP 2003), and the Riverside County Integrated Project General Plan Final Program Environmental Impact Report, Volume I (October 2003). Air Quality, Open Space and Conservation and Energy and Mineral Resources Elements from the City of Cathedral City Comprehensive General Plan (Amended June 2009,) Document review also includes the City of Cathedral City Comprehensive General Plan, Zoning Map Amendment and Downtown Precise Plan Amendment Draft Environmental Impact Report (April 2002,) The Air Quality analysis in the North City Specific Plan EIR (May 2009,) The North City Extended Specific Plan Air Quality Impact Study and Greenhouse Gas Emission Analyses prepared for the proposed project and can be found in the Technical Appendices of this EIR. (See Appendix C) A complete listing of resources utilized is included at the end of this analysis.

A. Regional Setting

As mentioned previously in the Air Quality Resources Section, pollution consists of many substances produced by a variety of sources, both natural and man-made. Most air pollutants are actually wasted energy in the form of unburned fuels or by-products of the combustion process. The burning of fossil fuels is a major generator of air pollution. Motor vehicles produce air pollutants by emitting photochemically reactive hydrocarbons (unburned fuel), carbon monoxide, and oxides of nitrogen. These primary pollutants chemically react in the atmosphere with sunlight and the passage of time to form secondary pollutants such as ozone.

Greenhouse Gases (GHG)

GhG are gases that trap heat in the atmosphere, similar to how a greenhouse would retain heat. Sources of GhG are natural processes and human activities. The following are common GhG: aerosols, carbon dioxide, chlorofluorocarbons, hydrofluorocarbons, methane, ozone, perfluorocarbons, sulfur hexafluoride, water vapor. A separate discussion on global climate change and greenhouse gases is provided in this air quality impact analysis. Human activities (such as burning carbon-based fossil fuels) create water vapor and CO₂ as byproducts, thereby impacting the levels of GHG in the atmosphere.

Sources of Air Pollutants

Two main sources of air pollutant emissions are classified as mobile sources and stationary sources. Mobile sources are generally divided into two categories: on-road and non-road sources. On-road sources generally comprise motorized vehicle such as automobiles, motorcycles and trucks. Non-road sources include trains, boats, jet skis and all terrain vehicles.

The RCIP indicates that motor vehicles are the primary source of air pollutants in Riverside County. Deterioration of air quality in the County has been linked to the County's land use pattern, geographical proximity to Orange and Los Angeles Counties, and subsequent auto-generated traffic.

Stationary sources are subdivided into two subcategories: point sources and area sources. Examples of point sources are power plants and refinery boilers, while area sources include small emission sources such as residential water heaters and architectural coatings. As stated in the RCIP, agricultural and industrial land uses are generally the main stationary pollution sources. However, poor air quality in the region has also been linked to most urbanized land areas and their associated activities.

In addition to mobile and stationary emission sources, atmospheric conditions including wind speed, wind direction, temperature and rainfall also affect air quality. Further, a substantial percentage of air pollution has historically been generated in the Los Angeles area which in turn is transported into the County.

Global Climate Change

Global climate change (GCC) can be described as a change in the average weather of the earth which can be measured by changes in wind pattern, storms, precipitation, and temperature. See section

The baseline by which these climate changes are measured is derived from historical records that identify temperature changes in the past, such as during previous ice ages. Most scientists accept that climate change is caused largely by greenhouse gases (GhG.)

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GhGs needed to stabilize global temperatures and climate change impacts. IPCC indicate that the range of global mean temperature changes from 1990 to 2100, given six scenarios, could range from 1.1°C to 6.4°C. IPCC further concludes that under all scenarios, the global average temperature and sea level are expected to rise.

Greenhouse Gases (GhG)

GhG are gases that trap heat in the atmosphere, similar to how a greenhouse would retain heat. Sources of GhG are natural processes and human activities. The following are common GhG:

- aerosols
- carbon dioxide
- chlorofluorocarbons
- hydrofluorocarbons
- methane
- ozone
- perfluorocarbons
- sulfur hexafluoride
- water vapor

Naturally occurring concentrations of GhG in the atmosphere regulates the earth's temperature. Without the natural heat trapping effect of GHG, the earth's surface would be about 34 degrees Centigrade (°C) cooler (CAT 2006). However, emissions from human activities which include electricity production and vehicle use are believed to raise the amount of GhG in the atmosphere above natural concentrations.

Climate change is driven by forcing and feedbacks. A feedback is "an internal climate process that amplifies or dampens the climate response to a specific forcing" (NRC 2005). Radiative forcing is the difference between the incoming energy and outgoing energy in the climate system.

The global warming potential (GWP) is the potential of a gas or aerosol to trap heat in the atmosphere; it is the "cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas" (EPA 2006a).

The GWP and atmospheric lifetimes vary with each GhG component. The reference gas for GWP is carbon dioxide which has a GWP value of 1. Table 3.7-1 shows estimates of the lifetime and GWP of various greenhouse gases. In general, on a molecule per molecule comparison basis, a higher GWP value represents a greater global warming effect. For example, during the 100-year time horizon, nitrous oxide (GWP 310) has a greater global warming effect than methane (GWP 21) and carbon dioxide (GWP 1).

Table 3.7-1
Lifetime and Global Warming Potential (GWP)
Of Various Greenhouse Gases (GhG)

Species	Chemical formula	Lifetime (years)	Global Warming Potential (Time Horizon)		
			20 years	100 years	500 years
Carbon dioxide (CO ₂)	CO ₂	variable §	1	1	1
Methane *	CH ₄	12±3	56	21	6.5
Nitrous oxide	N ₂ O	120	280	310	170
HFC-23	CHF ₃	264	9100	11700	9800
HFC-32	CH ₂ F ₂	5.6	2100	650	200
HFC-41	CH ₃ F	3.7	490	150	45
HFC-43-10mee	C ₅ H ₂ F ₁₀	17.1	3000	1300	400
HFC-125	C ₂ H ₂ F ₅	32.6	4600	2800	920
HFC-134	C ₂ H ₂ F ₄	10.6	2900	1000	310
HFC-134a	CH ₂ FCF ₃	14.6	3400	1300	420
HFC-152a	C ₂ H ₄ F ₂	1.5	460	140	42
HFC-143	C ₂ H ₃ F ₃	3.8	1000	300	94
HFC-143a	C ₂ H ₃ F ₃	48.3	5000	3800	1400
HFC-227ea	C ₃ H ₇ F ₇	36.5	4300	2900	950
HFC-236fa	C ₃ H ₂ F ₆	209	5100	6300	4700
HFC-245ca	C ₃ H ₃ F ₅	6.6	1800	560	170
Sulphur hexafluoride	SF ₆	3200	16300	23900	34900
Perfluoromethane	CF ₄	50000	4400	6500	10000
Perfluoroethane	C ₂ F ₆	10000	6200	9200	14000
Perfluoropropane	C ₃ F ₈	2600	4800	7000	10100
Perfluorobutane	C ₄ F ₁₀	2600	4800	7000	10100
Perfluorocyclobutane	c-C ₄ F ₈	3200	6000	8700	12700

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3.7 Greenhouse Gas Emissions

Perfluoropentane	C5F12	4100	5100	7500	11000
Perfluorohexane	C6F14	3200	5000	7400	10700

§ Derived from the Bern carbon cycle model.
* The GWP for methane includes indirect effects of tropospheric ozone production and stratospheric water vapour production.
Source: http://unfccc.int/GhG_emissions_data , accessed November 21, 2007

Senate Bill 97 and Assembly Bill 32 –State of California Legislation

The Global Warming Solutions Act of 2006 (AB-32) seeks to reduce GhG emissions in California to 1990 levels by the year 2020. Implementation of *The Governor’s Executive Order S-3-05* would reduce greenhouse gas (GhG) emissions in California 80 percent below 1990 levels or 90 percent below current levels by the year 2050. Efforts are being made around the globe to stabilize the global climate by capping GhG concentrations at 450 ppm.

To achieve the 2020 goal, the California Air Resources Board plans to use both voluntary and regulatory measures to reduce GhG emissions. One measure known as the “cap-and-trade” program went into effect January 2013. It would establish a cap on GHG emissions for California’s largest emitters (facilities with emissions of > 25,000 MT of CO2-equivalent).

Although the SCAQMD has adopted an interim significance threshold for GhG emissions, it applies only to those industrial (stationary source) projects where the SCAQMD is the lead agency. Pursuant to Senate Bill 97, greenhouse gases (GhG) and their effects are subject to CEQA, because GHG are thought to contribute to global climate change. California law requires the Governor’s Office of Planning and Research (OPR) to develop guidelines under CEQA for the feasible mitigation of GhG before July 1, 2009. These guidelines must be adopted by January 1, 2010. In the interim, an OPR *Technical Advisory* addressing CEQA and climate change was released on June 19, 2008 providing preliminary guidance in addressing climate change for lead agencies.

California Legislation

The OPR also asked the CARB to develop recommendations for GhG significance thresholds, since the California Air Resources Board (CARB) is responsible for monitoring and tracking GHG emissions. Significance thresholds are necessary for lead agencies to determine whether a project’s direct or indirect impact on climate change would be significant. Significant impacts would be disclosed in an EIR so that feasible mitigation measures to reduce the impact could be imposed.

On October 24, 2008 the CARB released a Preliminary Draft Staff Proposal entitled *Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases Under CEQA*. The CARB proposed one GHG threshold for stationary source (industrial) projects and another for residential and commercial projects that meet specific performance standards. On December 9, 2008, the CARB released proposed performance standards for residential and commercial projects. Comments are being solicited on the proposed performance standards at public workshops, prior to the submittal of proposed recommendations for review and adoption by the CARB board.

The CARB interim GhG significance threshold for stationary/industrial sector projects is 7,000 metric tons of CO₂ equivalent emissions per year for projects which meet specified construction and transportation performance standards. By comparison the SCAQMD interim GhG significance threshold for permitting activities related to industrial projects is 10,000 metric tons of CO₂ equivalent emissions per year (including construction emissions amortized over 30 years and added to operational GHG emissions).

An interim screening level of 3,000 metric tons of CO₂ equivalent emissions per year was identified by the SCAQMD for new residential and commercial projects but not recommended for use at this time. Although CARB has not identified an interim GHG significance threshold for residential or commercial sector projects to date, it is recommended that a threshold be developed based on the implementation of stringent performance standards or equivalent mitigation measures addressing energy use, transportation, water use, waste and construction. Residential and commercial sector projects will only be presumed to have a less-than-significant effect on the environment if:

- 1) Specific performance standards in references such as the California Energy Commission's *Tier II Energy Efficiency Standards* and GHG-reducing programs such as LEED, GreenPoint Rated, and the *California Green Building Code* are met and;
- 2) Total net emissions are below a specified ceiling.

California Environmental Quality Act (CEQA)

Based upon the *State CEQA Guidelines*, air quality analyses have traditionally focused on the air quality impacts associated with criteria pollutants and toxic air contaminants. However, following the passage of the California Global Warming Solutions Act of 2006 (Assembly Bill 32), environmental documents for projects in California are required to analyze greenhouse gases (GHG) and assess the potential significance of GHG emission impacts. As mentioned previously, there is currently no statewide threshold for GHG emissions for use in making a determination regarding the significance of environmental effects related to GHG emissions in the environmental review process.

B. Existing Conditions

Local Climate and Air Quality

As discussed previously, the proposed North City Extended Specific Plan and Annexation is located within the Coachella Valley region of Riverside County, California. (See Exhibit 2.3-1 Regional Location Map) The Coachella Valley is an arid desert region with a climate characterized by low annual precipitation, low humidity, hot days, and very cool nights. Desert regions are typically windy because minimal friction is generated between the moving air and the low, sparse vegetation. This allows the wind to maintain its speed crossing the desert plains.

Additionally, the rapid daytime heating of the air closest to the desert surface leads to convective activity and the exchange of surface air for upper air, which accelerates surface winds during the warm part of the day. Rapid cooling at night in the surface layers during the winter months results in a high frequency of calm winds.

During periods of low inversion and low wind speeds, photochemical smog created in the Los Angeles/Orange County areas is transported downwind into Riverside County, San Bernardino County, and the Coachella Valley.

Peak oxidant levels occur in the late afternoon and evening (between 4 p.m. and 8 p.m.), when pollutants are blown through the San Geronio Pass. The highest oxidant concentrations in the Coachella Valley are located in areas nearest to the South Coast Air Basin, and levels decrease steadily as the air mass moves easterly from Banning to Cathedral City and then Indio.

Surface-based inversions in the Coachella Valley are predominant at night throughout the year and typically persist into the day during the winter months. Inversion conditions are linked to degraded air quality given that the surface air is prevented from rising and dissipating the air pollutants accumulated throughout the day.

Radiation inversions are prevalent at night throughout the year. These inversions limit the mixing in the lower atmosphere to a height of 200 to 2,000 feet. Radiation inversions persist through much of the day in winter but dissipate early in the day during summer.

Local Ambient Air Quality

The Coachella Valley, including the project site, is located within the Salton Sea Air Basin which in turn is under the jurisdiction of the South Coast Air Quality Management District.

Existing Sensitive Receptors

As discussed in the Air Quality Resources Discussion a sensitive receptor is a person in the population who is particularly susceptible or more susceptible than the population at large to health effects due to exposure to air contaminants. Sensitive receptors and the facilities that house them are of particular concern if they occur near localized carbon monoxide sources, toxic air contaminant, or odors.

SCAQMD has designated the following land uses as sensitive receptors: residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

Currently, neither the vacant project site nor adjacent undeveloped lands to the north, south, or west contain sensitive land uses as identified above. However, implementation of the proposed NCE Specific Plan project could have impacts to existing sensitive receptors because light industrial land uses occur immediately to the east of the project site.

Federal Clean Air Act Requirements

Section 110 of the federal Clean Air Act mandates each State to adopt a State Implementation Plan (SIP) that provides for implementation, maintenance and enforcement of the primary and secondary national air quality standards in that state. Proposed projects are required to comply with the SIP. The November 1990 amendments to CAA incorporate more stringent sanctions for failure to attain or to meet interim milestones of the National Ambient Air Quality Standards (NAAQS) applicable dates.

The California Clean Air Act

The California Clean Air Act (CCAA) was adopted in 1988 and amended in 1992. In general, CCAA policies and standards are more stringent than the federal Clean Air Act. Under the CCAA, areas designated as serious and above nonattainment must revise their AQMP to include specified reduction strategies and to meet milestones in implementing emission controls and achieving better air quality.

Air Quality Management Plan (AQMP)

The South Coast Air Quality Management District is the lead agency responsible for regional effort to attain federal and state Ambient Air Quality Standards (AAQS). SCAQMD's primary responsibilities include developing and implementing the AQMP and emissions reduction from industries, some mobile sources, and consumer products. The AQMP is intended to establish a comprehensive program to lead the basin into

compliance with all national and state air quality standards. Every three years, SCAQMD updates the AQMP for inclusion in the State Implementation Plan.

On June 1, 2007, the 2007 AQMP was adopted by the AQMD Governing Board. Preparation of this AQMP involved the joint effort between the California Air Resources Board (CARB) and the Southern California Association of Governments (SCAG). The 2007 AQMP and the State Strategy for the 2007 State Implementation Plan were adopted by the CARB Board as part of the SIP on September 27, 2007.

Also, refer to the North City Extended Specific Plan Air Quality Impact Study (Technical Appendices Appendix C) for further discussions of Rules applicable to the proposed project.

City of Cathedral City General Plan

The 2009 General Plan Update incorporates a series of objectives, policies, and implementation programs that address air quality. The General Plan policies include City cooperation with the South Coast Air Quality Management District and other appropriate agencies. The use of mass transit, carpooling and other transportation options, such as pedestrian and bike paths are encouraged to reduce vehicular miles traveled. The City also encourages the development of “pedestrian-friendly” sidewalks and street crossings and efficient and safe bikeways. General Plan policies provide opportunities for mixed use projects such as the integration of residential units and commercial services. General Plan policies also require that State Energy Efficiency Standards (Title 24) be implemented and enforced and encourage the use of passive design concepts to increase energy efficiency.

City of Cathedral City Municipal Code

The City of Cathedral City Municipal Code addresses air quality issues associated with proposed developments through the Cathedral City Transportation Demand Management (TDM) Ordinance, which applies to new (or change of use) nonresidential developments employing 100 or more persons. The intent of a development’s TDM plan is to reduce vehicular trips by 10 percent through specific strategies such as: alternate work schedules, telecommuting, bicycle facilities, shuttles, vanpools, etc.

C. 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 Greenhouse Gas Emissions perspective. Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?

The proposed North City Extended Specific Plan and Annexation project occurs within the boundaries of the Salton Sea Air Basin. The City of Cathedral City is the lead agency with respect to land use decisions and discretionary permits.

The determination of whether a project may have significant effect on the environment calls for careful judgment consistent with the provisions in section 15064 on the part of the public agency involved. The judgment shall be made as a result of a good-faith effort, based to the extent possible on scientific data to describe, calculate or estimate the amount greenhouse gas emissions resulting from a project. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.

Thresholds of Significance

The determination of the significance of greenhouse gas emissions calls for the use of a model or methodology to quantify greenhouse gas emissions resulting from the project or to rely on a qualitative analysis or performance based standards.

Greenhouse gases are defined as those naturally occurring and anthropogenic chemical compounds within the atmosphere that absorb and reflect infrared radiation emitted by the Earth's surface. A numerical metric known as the "Global Warming Potential" (GWP) is a measure of how much a given mass of greenhouse gas is estimated to contribute to global warming relative to carbon dioxide (whose GWP is defined as 1.0.)

D. Project Impacts Found Not To Be Significant

Air quality impacts associated with the proposed NCE Specific Plan mixed use project were assessed based on future project buildout conditions.

Implementation of the proposed NCE Specific Plan project will generate air pollutants emitted by stationary sources and mobile sources. Stationary sources include emissions from construction activities and natural gas combustion, emissions at power plants due to the electrical demands of the proposed development. Mobile sources consist of exhaust emissions resulting from short-term construction activities and long-term vehicular travel associated with the proposed project.

Estimated Short -Term Project-Related Emissions

The California Emissions Estimator Model (CalEEMod Version 2011.1.1) was utilized to estimate short-term construction-related emissions of criteria air pollutants and greenhouse gas emissions that would be associated with the construction activities necessary to implement the Preferred Project. Default construction parameters incorporated in the CalEEMod were assumed for some construction activities. To the extent that they are currently available, site-specific construction details were used as input parameters for CalEEMod.

**Table 3.7-2
Peak Unmitigated Short-Term Construction Emissions Estimates
Associated With Construction of the Preferred Project
(Pounds/Day)**

Emission Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}	CO _{2e}
Highest Phase from Site Grading, Trenching and Building Activities	22.92	181.84	139.75	0.26	103.19	17.36	24,328.27
SCAQMD Threshold	75	100	550	150	150	55	None
Threshold Exceeded	No	Yes	No	No	No	No	–

Highest Phase from Architectural Coatings and Asphalt Paving	562	17.81	20.62	0.03	17.49	1.84	3,116.00
SCAQMD Threshold	75	100	550	150	150	55	None
Threshold Exceeded	Yes	No	No	No	No	No	–

Greenhouse Gases

CalEEMod produced estimates of the daily greenhouse emissions during the grading, trenching, building construction, paving, and architectural coating activities required to implement the Preferred Project. Greenhouse gas emissions are projected to be highest during the building construction phase, followed by the site grading activities. Greenhouse gas emissions would total 24,328 pounds per day of equivalent CO₂ (CO_{2e}) during the building construction process. A total of 22,371 pounds per day of equivalent CO₂ emissions are projected to be emitted during the site grading phase. In both phases the greenhouse gas emissions would be primarily from off-road diesel engines. During paving activities, 3,116 pounds of CO_{2e} per day would be emitted. By the time architectural coatings are being applied, GHG emissions would decrease to 789 pounds of CO_{2e} per day.

The daily CO_{2e} emissions during each type of construction activity identified above can be multiplied by the number of days required to complete each type of construction activity to determine the total construction-related greenhouse gas emissions during the fifteen-year construction process. A total of 26,458 metric tons) of CO_{2e} emissions are projected to result from all of the activities required to construct the Preferred Project over the scheduled fifteen-year construction period. If construction activity levels from year to year were to remain relatively constant, the average annual GHG emissions would be approximately 1,764 metric tons of CO_{2e} per year.

Operational Emissions

The State of California has not adopted significance thresholds for GHG emissions. However, various thresholds are being considered to reduce net GHG emissions based on the implementation of stringent performance standards or equivalent mitigation measures addressing energy use, transportation, water use, waste disposal, and construction. In the absence of significance thresholds for GHG emissions, project-related GHG emissions during construction activities should be considered potentially significant so that feasible mitigation measures to control GHG emissions and reduce the potential impact of the Preferred Project on climate change can be imposed by the City of Cathedral City.

Carbon dioxide (CO₂) is the primary component of GHG emissions. CalEEMod estimates that CO₂ emissions will comprise 92.27 percent of the Preferred Project's mitigated carbon dioxide equivalent (CO_{2e}) emissions over the long term. Biological CO₂ emissions would comprise 5.95 percent and Non Biological CO₂ would represent 86.32 percent of the operational GHG emissions with the Preferred Project. Methane (CH₄) emissions would represent 0.36 percent of the operational GHG emissions. Nitrous oxide (N₂O) emissions would be negligible. The global warming potential of each of these greenhouse gases is taken into account by converting emissions of CO₂, CH₄, and N₂O into CO₂ equivalent (CO_{2e}) emissions, which are often expressed in units of metric tons (MT) per year.

With the design features incorporated in the project design, the Preferred Project would generate an estimated 604,479.22 pounds/day of CO_{2e} on summer weekdays as a result of the operational use of motor vehicles, energy, and area sources (see Table 4-3). Operational GHG emissions on winter weekdays are projected to be 4.32 percent lower than on summer weekdays. With the CalEEMod, the Preferred Project's unmitigated and mitigated annual average GHG emissions were determined for five different source categories including: area sources, energy use, mobile sources, waste disposal, and water usage. As shown in Table 4-4, the design features incorporated in the Preferred Project would significantly reduce its long-term GHG emissions.

Design features incorporated in the Preferred Project would encourage the use of public transportation and non-motorized transportation modes and reduce VMT. Numerous design features would reduce energy and water usage as well as waste disposal. These features would reduce the Preferred Project annual GHG emissions by approximately 13.0 percent.

Projects should only be presumed to have a less-than-significant effect on the environment if specific performance standards are met such that their GHG emissions would not prevent California from achieving the GHG reduction targets identified under AB 32 to reduce the state’s impact on climate change. As shown in Table 4-4, the Preferred Project would reduce its long-term operational GHG emissions by 13.0 percent through specific design features incorporated in the project as well as development standards and guidelines incorporated in the Specific Plan.

Global Climate Change and Greenhouse Gas

Climate change is a global issue. It is linked to the cumulative effects of decisions made by millions of individuals. Development projects, such as the SCE Mixed-use project, would not directly affect climate change. However, development projects have the potential to contribute to climate change on a cumulative basis.

The following project features are expected to reduce potential GhG emissions resulting from the development of the NCE Specific Plan project. These features are compliant with the 2006 CAT Report to the Governor.

**Table 3.7-3
North City Extended Specific Plan Proposed Project Design Features
To Reduce GHG Emissions**

Strategy to Reduce GHG Emissions	Proposed Project Design Features
Water use efficiency	NCE Specific Plan will strive to reduce water use through features such as low-flow appliances (including toilets, shower heads, washing machines), drought-tolerant landscape palette, weather-based irrigation controllers, and other water conservation measures.
Building energy efficiency	Residential construction shall comply with the energy use guidelines in Title 24 of the California Administrative Code.
Hydrofluorocarbon reduction	Consumer products installed in residences will comply with CARB’s Early Action Guidance regarding the reduction of GhG emissions.

Table 3.7-4
North City Extended Specific Plan Recommended Project Design Features
To Reduce GhG Emissions

Strategy to Reduce GhG Emissions	Recommended Project Design Features
Contribute to the achievement of 50% statewide diversion goal (waste management)	NCE Specific Plan future residents should consider separate recycling and waste receptacles to support 50% statewide solid waste diversion goal (AB939) During construction, require separation and recycling of construction waste.
Building energy efficiency	Residential construction should incorporate available energy saving techniques above the guidelines in Title 24 of the California Administrative Code.
Appliance energy efficiency	Future NCE Specific Plan residents should consider the use of energy-efficient appliances (including washers/dryers, dishwashers, refrigerators). Energy Star appliances are highly recommended
Green buildings initiative	Building design should incorporate additional green building designs/techniques that could increase its energy efficiency percent beyond Title-24 requirements. Techniques include natural daylighting and building orientation.
California solar initiative	If feasible, install photovoltaic cells or other solar options.
Education	Project Developer should provide educational materials for residential buyers discussing strategies for reducing GHG emissions associated with their homes.

E. Potentially Significant Impacts

Construction activities required to implement the Preferred Project would increase greenhouse gas emissions through the combustion of fossil fuels and contribute incrementally to global warming. Although there are no established significance thresholds for greenhouse gas emissions during construction activities, these emissions are considered potentially significant because they will occur over twenty years and may contribute to California not achieving the greenhouse gas reduction targets identified under AB 32 to reduce the state’s impact on climate change.

The project-related long-term increase in greenhouse gas emissions through the combustion of fossil fuels, energy usage, water usage, and waste disposal has been reduced 13 percent through the project design and development standards. The project would contribute incrementally to global warming and may contribute to California’s inability to achieve the greenhouse gas reduction targets identified in AB 32 to reduce the state’s impact on climate change. The incorporation of a Climate Action Plan in the

North City Extended Specific Plan would establish specific design features and development standards to achieve sustainable decreases in greenhouse gas emissions at the individual project level and could reduce this impact to less than significant.

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

The inclusion of mitigation measures in the project is required to minimize to the greatest extent feasible the potential air quality impacts attributable to the proposed project. The City of Cathedral City must take affirmative steps to determine that approved mitigation measures are implemented subsequent to project approval. A mitigation monitoring and reporting plan must be prepared, pursuant to Public Resources Code 21081.6, for any mitigation measures incorporated in the project or imposed as a condition of approval.

The City of Cathedral City will use its discretionary permit authority to place conditions of approval on the proposed project that require compliance with all applicable policies, rules, regulations and ordinances. The following measures reflect policies, rules, or regulations that apply to the proposed development in the City of Cathedral City. *See Section 3.3 (Air Quality) for a list of Standard Conditions and Mitigation Measures related to Air Quality*

G. Level of Significance After Mitigation

Standard Conditions and Mitigation Measures provided in the Air Quality Section of this report will reduce project impacts to the maximum extent feasible.

H. Resources

[http://www.califaep.org/userdocuments/File/AEP Global Climate Change June 29 Final.pdf](http://www.califaep.org/userdocuments/File/AEP_Global_Climate_Change_June_29_Final.pdf), accessed 2013.

City of Cathedral City Comprehensive General Plan, Zoning Map Amendment and Downtown Precise Plan Amendment, Draft Environmental Impact Report, Terra Nova Planning and Research Inc. April 2002.

Final Program Environmental Impact Report for the North City Specific Plan, Cathedral City, California, HDR Engineering, Inc. May 2009.

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

NCE Specific Plan Specific Plan Air Quality Impact Study, prepared by Endo Engineering, August 2013.

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.

Approved Standards, prepared by California Building Standards Commission
http://www.bsc.ca.gov/prpsd_stds/default.htm, accessed 2013,

California Air Resource Board, Senate Bill 97 background.
<http://www.arb.ca.gov/cc/localgov/ceqa/ceqa.htm>. accessed 2013

3.8 HAZARDS AND HAZARDOUS MATERIALS

The purpose of this section is to address and identify the potential project impacts related to hazardous materials as a result of on-site or off-site activities. Discussion within this section is based on a variety of information sources. These sources include the General Plan for Cathedral City (July 2002), Cathedral City Environmental Impact Report and the North City Specific Plan EIR (May 2009).

A. Regional Setting

Hazardous Materials

The State of California defines hazardous materials as substances that are toxic, ignitable or flammable, reactive and/or corrosive, which have the capacity of causing harm or a health hazard during normal exposure or an accidental release or mishap. Hazardous wastes require special handling and disposal due to their potential to damage public health and the environment. Individual circumstances, including the substance type and quantity used, and the nature of the activities and operations, affect the likely occurrence and severity of consequences from a hazardous situation. Federal, state and local laws regulate the use and management of hazardous or potentially hazardous materials.

The Federal Resource Conservation and Recovery Act (RCRA) defines a hazardous waste as any solid, liquid, or contained gaseous material that is either disposed, incinerated or recycled. A hazardous material may become hazardous waste upon its accidental release into the environment. All hazardous waste must be discharged into a Class I landfill. No Class I landfill is currently operated within Riverside County. Hazardous waste generated within Riverside County and disposed of off-site is transported to Kern County or Santa Barbara County, where active Class I landfills are located. Some waste is also transported out of the State.

The County of Riverside Department of Environmental Health, has a Regional Household Hazardous Waste Collection Program (HHW), that provides household waste collection facilities for residents of the County to dispose of materials at no charge. This type of waste includes deodorizers, cleaners, bleach, floor wax, spot remover, drain cleaner, furniture polish, aerosol cans, latex paints, oil paints, weed killer, fertilizer, antifreeze, pesticides, pool chlorine, household and auto batteries, garden chemicals, motor oil and propane tanks. The nearest Permanent HHW collection facility is located in Palm Springs.

The Department of Environmental Health also maintains antifreeze, battery, oil and latex paint (ABOP) collection sites. 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).

Many types of businesses can be producers of hazardous waste. Small businesses like dry cleaners, auto repair shops, medical facilities or hospitals, photo processing centers and metal plating shops are usually generators of small quantities of hazardous wastes. Generators of large quantities of hazardous waste include chemical manufacturers, large electroplating facilities and petroleum refineries.

All significant spills, releases or threatened releases of hazardous materials must be immediately reported. The County of Riverside is designated as the Administering Agency for hazardous materials in Cathedral City.

Riverside County, along with Cathedral City and other cities within the County have jointly developed the Riverside County Hazardous Waste Management Plan (HWMP) to address the disposal, handling, processing, storage and treatment of hazardous materials and waste products. The Riverside County HWMP assures that adequate treatment and disposal capacity will be available to manage the hazardous wastes generated within the jurisdiction. (City of Cathedral Comprehensive General Plan Amended 2009).

Development activities have the potential to encounter previously unknown hazardous materials contamination from historical use of a property. Such contamination can be mediated by existing Federal, State, and local policies and procedures implemented by the designated local enforcement agency.

The City of Cathedral City participates in the National Pollutant Discharge Elimination System (NPDES), established by the Clean Water Act of 1972. The NPDES 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 convey pollutants such as bacteria, sediment, oil, grease, heavy metals, pesticides, fertilizers and other chemicals to the area's streams and other water bodies.

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.

According to the State Water Resources Control Board (SWRCB) construction sites over one acre in size are required 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 discussion found in Section III-8 Hydrology and Water Quality).

Hazardous materials associated construction activities are addressed by SCAQMD Rule 1403 (asbestos) and Rule 403.1 (fugitive dust) (further discussion can be found in Section 3.3 Air Quality).

Emergency Response and Evacuation Plan

The California Disaster and Civil Defense Master Mutual Aid Agreement (California Government Code Section 8554-8561) states: "Each party that is a signatory to the agreement shall prepare operational plans to use within their jurisdictions and outside their area." These plans include fire and non-fire emergencies related to natural, technological and war contingencies. The provisions of the California Emergency Services Act are reflected and expanded on by appropriate local emergency ordinances. Local emergency plans, including those of the City of Cathedral City, are considered extensions of the California Emergency Plan.

Cathedral City is a member of the Riverside County Emergency Services Organization. The City has developed its own Emergency Operations Plan to anticipate and plan for a variety of disasters. The plan utilizes the Standard Emergency Management Systems (SEMS). The SEMS plan is used to improve the coordination of State and local emergency response in California. Depending on the type of incident, several different agencies and disciplines may be called to assist with emergency response.

Agencies and disciplines that can be expected to be part of an emergency response team include medical, health, fire and rescue, police, public works and the coroner. The challenge is to accomplish the work at hand in the most effective manner, maintaining open lines of communication between the different responding agencies to share and disseminate information, and to coordinate efforts (Cathedral City General Plan 2002).

Wildland Fires

Large areas of southern California are particularly susceptible to wildfire due to the region's weather. Much of Riverside County is rated as a potential Wildland Fire Area by the State of CA, Department of Forestry & Fire Protection. Fire potential in Riverside County is typically greatest from August through October, when dry vegetation coexists

with hot, dry Santa Ana winds. The encroachment of residences into wildland areas also increases the wildfire risk. Urban areas, such as most of Cathedral City, with irrigated vegetation, which are not intermixed with wildlands, have a highly decreased risk of wildfire.

B. Existing Conditions

The proposed project site is currently vacant on approximately 591.38 acres located north of I-10 and West of Rio Del Sol Drive, in the Cathedral City Sphere of Influence. The site is primarily covered with natural desert terrain with a significant mountain range and open desert views and vistas in all directions. Development in the area primarily consists of freeway-oriented commercial uses, limited light industrial uses, and single family residential uses which are located easterly of Rio Del Sol in the Thousand Palms community.

Hazardous Materials

Based on information contained within the EnviroStor database, maintained by the Department of Toxic Substance Control (DTSC), the project site or surrounding properties are not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No current or historical agricultural land uses occur on the site; therefore, pesticide and/or herbicide residues are not a concern with regard to this site. Since there has been no previous development of the site, the potential for asbestos containing materials or the use, storage, or disposal of asbestos-containing materials on the site is improbable.

No above ground storage tanks, underground storage tanks, polychlorinated biphenyl (PCB) containing equipment, or storage of Chemicals/Hazardous Materials have been identified on the project site. The project site contains minimal dumping and no potentially hazardous materials related to dumping are expected to exist on the property.

Emergency Response and Evacuation Plan

The City of Cathedral City has adopted the 2010 California Building Code with City amendments. These provisions include construction standards in new structures, road widths and configurations designed to accommodate the passage of fire trucks and engines, and requirements for minimum fire flow rates for water mains. The construction requirements are a function of building size, type, material, purpose, location, proximity to other structures and the type of fire suppression systems installed. Site specific emergency response requirements include installation of approved automatic fire sprinklers in structures in excess of 3,000 square feet and minimum fire flow rates which are determined on density and intensity of uses.

The required minimum fire flow for commercial, industrial buildings, hotels, motel, hospitals and public assembly buildings is three thousand (3,000) gpm (gallons per minute) and higher. Additionally, fire hydrants must be within 250 feet of all portions of the building and must have outlets for engine and hose connections. Standard fire flow for Multi-family uses is two-thousand five hundred (2,500) gpm for a two-hour duration. These fire flow minimum standards may be reduced up to fifty percent when all portions of a building are protected by an automatic sprinkler system. Other measures include the use of fire resistant construction materials such as stucco and fire resistant roof materials to reduce the degree of fire damage (Building Standard Commission).

Wildland Fires

Large areas of Southern California are susceptible to Wildfires all year round due to the regions weather, topography and native vegetation. Dry vegetation provides fuel for wild fires in the autumn when the area is impacted by Santa Ana winds that blow across the region in late fall. The Coachella Valley's hot dry summer and autumn weather is ideal to generate the dry vegetation that fuels most wildfires. Urban areas such as most of Cathedral City, with irrigated vegetation, have a highly decreased risk of wildfire. The California Board of Forestry (CDF) ranks fire hazard of wildland areas of the State using four main criteria: fuels, weather, assets at risk, and level of service. The Riverside County RCIP and Cathedral City Fire Department indicate that the proposed project is not within the Very High Fire Hazard Severity Zone.

Valley Fever

A complete discussion of the Valley Fever disease/infection is included in Section 3.3 Air Quality of this DEIR.

C. 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 Hazards and Hazardous Materials perspective. Would the project:

- a) Create a significant hazard to the public or the environment through the routing transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code 65962.5 and as a result, would it create a significant hazard to the public or the environment?
- e) For a project located within an airport land use plan or where such a plan has not been adopted, within two miles of a public airport result in a safety hazard for people residing or working in the project area?
- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

D. Project Impacts Found not to be Significant

The project site or its surrounding property is not located on a hazardous material site. The range of proposed uses includes commercial, light industrial, residential and mixed use components that may involve the transport of hazardous substances during and after construction. Federal State law requires detailed planning to ensure that hazardous materials are properly handled, used, stored and disposed of. The California Department of Toxic Substance Control (DTSC) incorporates the provisions of both federal and State hazardous waste laws. Enforcement of the City's and County's hazardous materials policies combined with State and Federal law will be incorporated throughout the life of the project. Potential project impacts related to hazardous materials are considered less than significant.

The proposed project site does not occur within one-quarter mile of an existing or proposed school, nor is it located on a site identified on a list of hazardous material sites compiled in accordance to Government Code 65962.5. The project is located 4 miles east of the Palm Springs International Airport and is not within the vicinity of a private air strip. No impacts are anticipated related to these issues.

The project is not expected to generate any hazardous waste beyond what is commonly found within household, retail, commercial and restaurant uses. Enforcement of the

CCMC 6.18 “Treatment and Abatement of Hazardous Substances”, and County’s hazardous material policies as well as the NPDES polices, will be maintained throughout the life of the project. Potential project impacts related to hazardous materials are considered less than significant.

Construction

Impacts associated with hazards and hazardous material that could result during project construction is considered short term and less than significant. Potential impacts are described below.

- Accidental spills of hazardous materials and offsite release caused by storm flows and non-storm flows may occur during proposed Project construction. Potential contamination of water will be mitigated by adherence to standard practices required by Federal, State and Local agencies such as NPDES regulations.
- Hazardous materials located during construction (dumped batteries, tires, etc.,) will be hauled off to an approved location or landfill
- Potential project impacts could include air pollutants (hazardous emissions) resulting from site grading and construction activities. Pollutants of concern include fugitive dust, vehicular emissions and architectural coating emissions. Impacts related to construction activities and potential contamination of air with hazardous materials will be mitigated by adherence to standard practices required by Federal, State and Local agencies such as the SCAQMD’s Coachella Valley State Implementation Plan (rule 403.1) for PM10 emissions and policies within the Air Quality Management Plan. Other mitigation measures addressing emissions from construction traffic, operational emissions, and architectural coating are discussed within Section 3.3 Air Quality, of this document.

Project Build-out

Impacts associated with hazards and hazardous materials during project buildout are expected to be less than significant.

- Proposed uses include commercial, light industrial and residential components. A variety of businesses within the industrial and commercial land use can produce hazardous waste. Small businesses like dry cleaners, auto repairs, fueling stations and medical facilities are usually generators of small quantities of hazardous wastes. Some business uses

within the NCESP may continue to involve the transport of hazardous substances after construction. Federal State law requires detailed planning to ensure that hazardous materials are properly handled, used, stored and disposed of. The California Department of Toxic Substance Control (DTSC) incorporates the provisions of both federal and State hazardous waste laws. Enforcement of the City's and County's hazardous materials policies combined with State and Federal law will be incorporated throughout the life of the project.

- The residential component of the project site is not expected to generate any hazardous waste beyond what is commonly found within household and lodging uses. Routine transport, use or disposal of hazardous materials is not anticipated with the residential component of the NCESP, therefore impacts are less than significant.

Emergency Response and Evacuation Plan

Development of the proposed project is not expected to impair implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project proposes 591.39 acres of retail commercial, office/services, light industrial and residential uses. The City's Municipal Code and the 2010 California Fire Code contain standards that address this type of construction. In addition, the project will be conditioned to adhere to the provisions of the local emergency plan and the California Emergency Services Act. Project design shall be reviewed by the Cathedral City Fire Department.

E. Potentially Significant Impacts

No potentially significant impacts to hazards and hazardous materials are anticipated with the development of the NCESP.

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

Less than significant impacts are anticipated related to hazards and hazardous materials provided the standard condition and recommendations contained within this EIR are followed during the construction and life of the project.

SC 3.8-1: All construction activities shall be conducted in compliance with standard regulations related to hazards and adherence to local, State and Federal agency policies including those of the South Coast Air Quality Management District, the State Water Resource Control Board and Colorado River Regional Water Quality Board.

SC 3.8-2: Individual project proponents 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.

SC 3.8-3: 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.

SC 3.8-4: All design and construction activities shall be conducted in compliance with standard regulations related to emergency response contained with the City's Municipal Code.

G. Level of Significance after Mitigation

Upon the execution of these recommended conditions, impacts related to hazards and hazardous materials would be less than significant.

H. Resources

Air Quality Management District, www.aqmd.gov, (November 2012)

City of Cathedral City Comprehensive General Plan, Zoning Map Amendment, And Downtown Precise Plan Amendment Draft Environmental Impact Report prepared by Terra Nova Planning & Research, Inc. April 2002

City of Cathedral City Comprehensive General Plan, prepared by Terra Nova Planning & Research, Inc. Amended November 18, 2009

Riverside County Integrated Project General Plan Final Program Environmental Impact Report Volume 1 (October 2003,)

Building Standards Commission (January 28, 2013) <http://www.bsc.ca.gov/>

Cathedral City Fire Department www.cathedralcityfire.org/# (December 2012)

3.9 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 Flooding and Hydrology Element of the Cathedral City Comprehensive General Plan (Amended June 2009), the Hydrology and Water Quality analysis in the North City Specific Plan EIR (May 2009), and the current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMS) for the project area. Document review also included the Riverside County Integrated Project General Plan Final Program Environmental Impact Report Volume 1 (October 2003), and the project specific Hydrology and Drainage Update Report (RJR Engineering Group, July, 2013).

A. Regional Setting

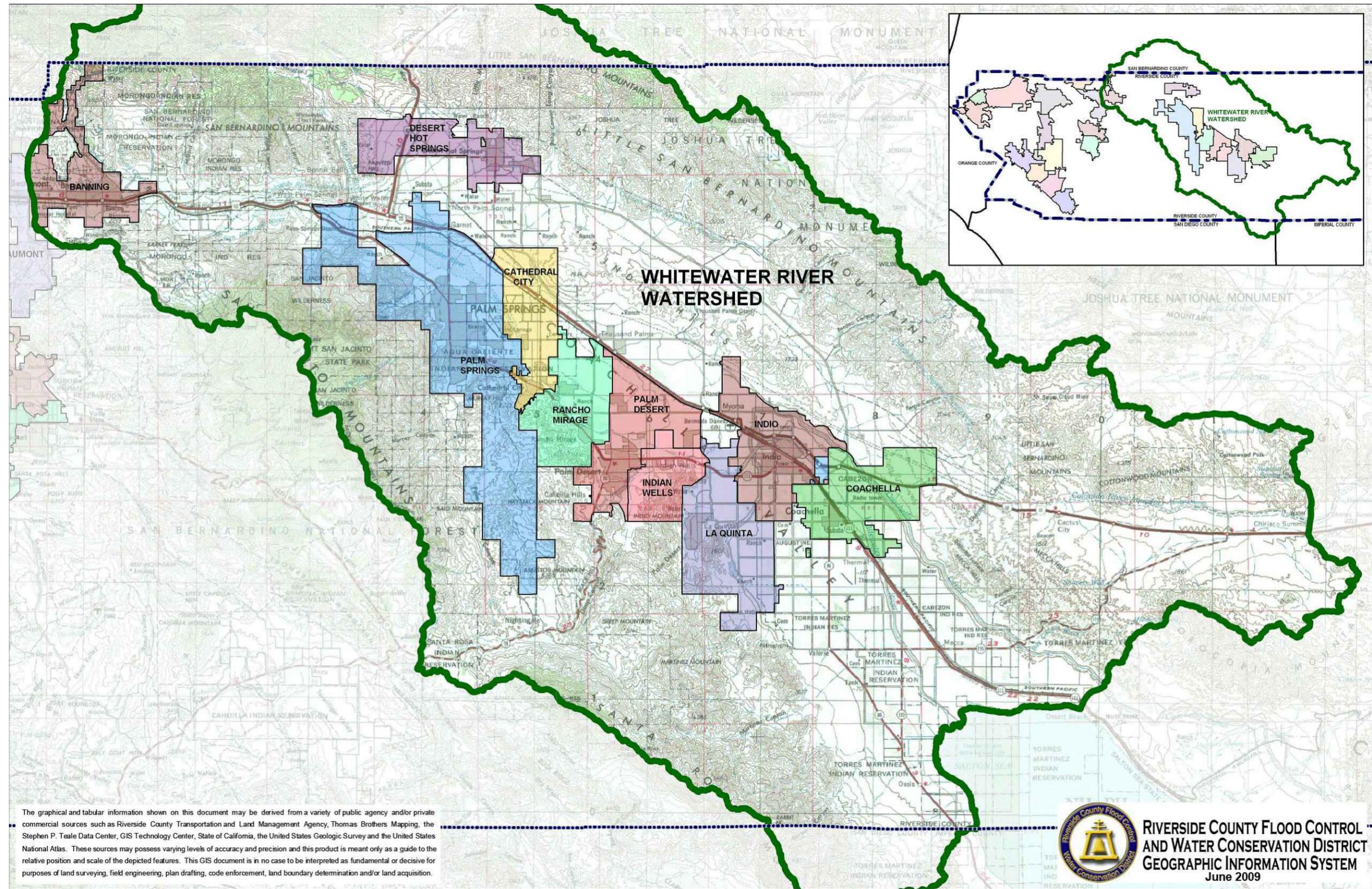
The high mountains flanking the Coachella Valley, particularly the San Jacinto range, have a powerful effect on the climatic and hydrologic conditions in the region. Capturing precipitation from strong Pacific storms that pass through, the mountains separate the semi-arid environment to the west from 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.

Due to the physical geography of the Coachella Valley, several established modes of drainage from the higher elevations around the Valley co-exist with urban development within 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 Cathedral City 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.



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.



RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
GEOGRAPHIC INFORMATION SYSTEM
 June 2009

White Water River Watershed Overview

North City Extended Specific Plan
 Environmental Impact Report

Exhibit 3.9-1
 Page 3.9-3

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 basin has a storage capacity of approximately 30 million acre-feet (AF.) The Coachella Valley is geographically separated. 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. Cathedral City, along with Palm Springs, Rancho Mirage, Indian Wells and Palm Desert are located in the West Valley. Water placed on the ground surface in the West Valley will percolate 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:

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

The proposed project is found within the Thousand Palms subarea of the Whitewater River Subbasin.

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

Water management in the Coachella Valley began as early as 1915. With groundwater levels falling, the need for a supplemental water source was recognized for the Valley to continue to flourish.

The Coachella Valley Stormwater District was formed in 1915 followed by formation of CVWD in January 1918. CVWD's first directors quickly 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 year 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.

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 CVWD, 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

CVWD and the Riverside County Flood Control District and Water Conservation District (RCFC) are responsible for the management of regional drainage within and in the vicinity of Cathedral City, including rivers, major streams and their tributaries, and areas of significant sheet flooding.

RCFC establishes requirements for surface drainage and flood protection for projects such as the NCESP which fall under their jurisdiction. Project applicants are required to meet the floodplain management ordinance, which ensures that any new construction within a floodplain area is done in a manner that reduces damage to public and private property. CVWD is designated to administer the flood management program in the eastern parts of the county, including the proposed project site.

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.

The project is located within the Riverine Drainage Area Corridor (RDAC) and is subject to the CVWD ordinance for the area. On January 24, 2003, the Board of Directors of CVWD adopted an ordinance that established stormwater management requirements for the RDAC in order to preserve the existing stormwater flow

attenuation for possible floodwaters from the tributary area. Projects within the area are required to develop plans which implement flood control retention basins in order to decrease flood hazard potential. The specific requirements of the ordinance components are as follows:

1. Developments larger than 5 acres will be required to design retention facilities to preserve natural storage such that the downstream hydrograph is not increased above the established in the FLO-2D model for the *“Existing Conditions” Flood Hazards along Interstate 10 Morongo Wash Bridges to Washington Street, Coachella Valley, California, by Exponent dated, August 26, 2002.*
2. Developments smaller than 5 acres and larger than one acre will be required to retain estimated natural losses based on a retention coefficient which is calculated by determining the difference in volume between upstream and downstream hydrographs and evenly distributing that difference over the geographic area on an acre-foot per acre basis.
3. Developments smaller than one acre will be required to comply with Ordinance 458 and are not permitted to construct diversions such as channels, levees, and block walls that will concentrate flows away from the development and onto the adjacent Riverine Drainage Area.

Local Regulatory Background

While CVWD and the RCFC have the primary responsibility for regional facilities, in close cooperation and coordination with Cathedral City, it is the City that remains directly responsible for the management of local drainage. The effectiveness with which the City and Districts manage drainage issues will have a direct effect on the scale, complexity and cost of future flood control facilities. The cost-effectiveness of prevention and on-site management should be actively integrated into community land use planning and regulation, recognizing significant physical and financial constraints in many areas of the city.

Both Districts are empowered with broad management functions, including flood control planning and construction of drainage improvements for regional flood control facilities, as well as watershed and watercourse protection related to those facilities. To carry out their mandates, the Districts also have powers of taxation, bonded indebtedness, land and water rights acquisition, and cooperative partnerships with local, state, and federal agencies. An elected Board acts as the official decision-making body of CVWD, while the Riverside County Board of Supervisors is the official decision-making body of that District.

Federal Regulatory Background

The Federal Emergency Management Agency (FEMA) maps 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. Exhibit 3.9-2 is the FIRM Community Panel (map, dated July 1999) for the Specific Plan Area. Each of the applicable 100-year flood zones are found in the study area and are briefly described below.

Zone AO: The flood insurance rate zone that corresponds to the 100-year floodplains that is determined in the Flood Insurance Study by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no Base Flood Elevations or depths are shown within this zone. Mandatory flood insurance purchase requirements apply.

Zone X: Zone X is the flood insurance rate zone that correspond to areas outside of the 100-year floodplains, areas of 100-year sheet flow flooding where average depths are less than 1 foot, areas of 100-year stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 100-year flood by levees. No Base Flood Elevations or depths are shown within this zone.

The majority of the site is in Zone AO, with Zone X found in the southeast portion of the property.

National Flood Insurance Program (NFIP) maps are based on existing, 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.

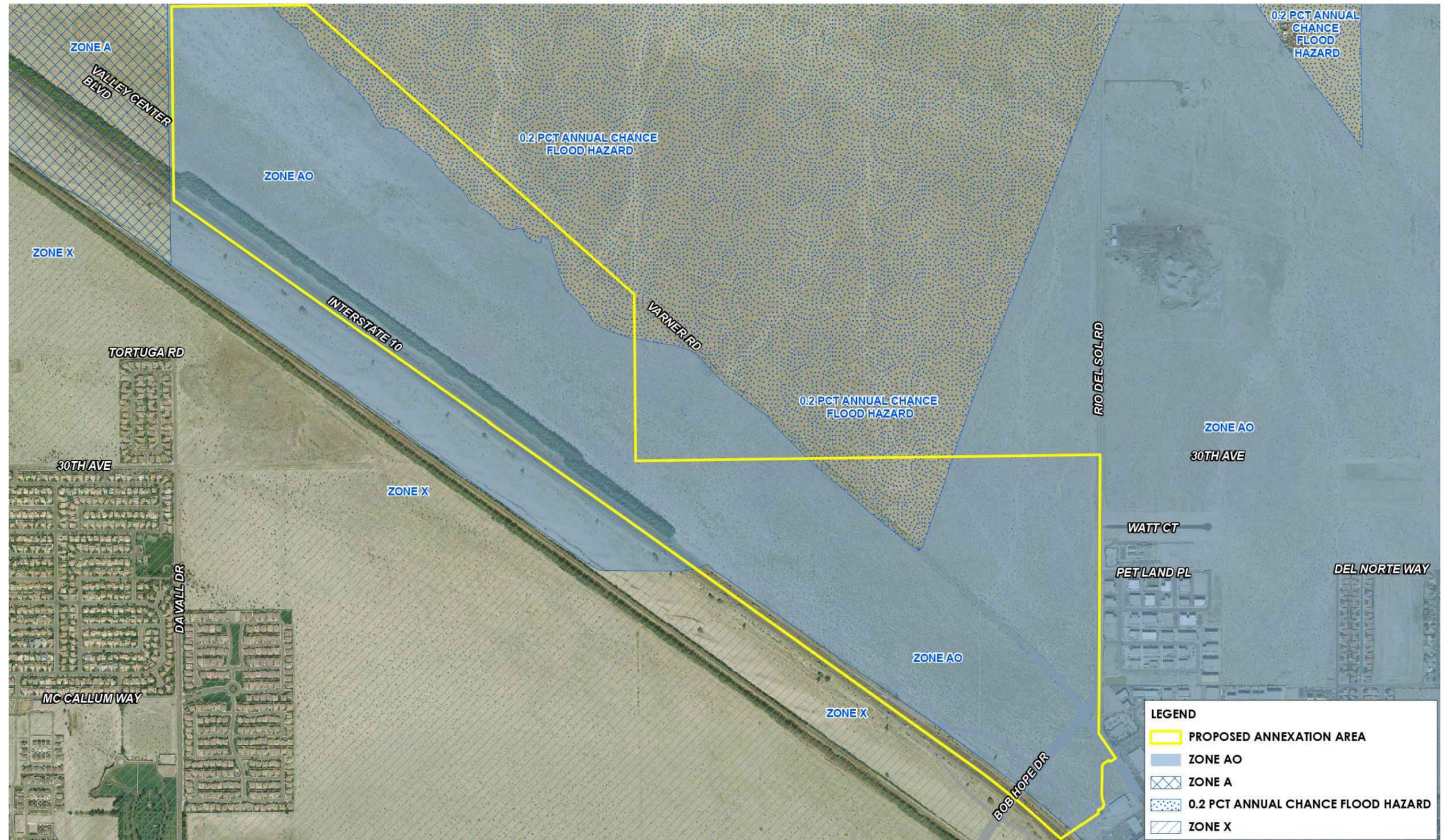
A Conditional Letter of Map Revisions (CLOMR) is FEMA's formal review and comment as to whether a proposed project complies with the minimum NFIP floodplain management criteria. If it is determined that it does, the CLOMR also describes any eventual revisions that will be made to the NFIP maps upon completion of the project. While obtaining a CLOMR may be desired, obtaining conditional approval is not automatically required by NFIP regulations for all projects in the floodway or 1-percent annual chance floodplain.

A CLOMR is required only for those projects that will result in a 1-percent annual chance water surface elevation increase of greater than 1.00 foot for streams with BFE's specified, but not floodway designated, or any 1-percent annual chance water surface elevation increase for proposed construction within a regulatory floodway.

The technical data needed to support a CLOMR request generally involve detailed hydrologic and hydraulic analyses and are very similar to the data needed for LOMR request.

In addition to the situations described above, property owners and developers who intent to place structures in the –percent annual chance floodplain may need to demonstrate to the lending institutions and local officials before construction that proposed structures will be above base elevation. If the project involves only the elevation of structured on natural high ground, they can request a Conditional Letter of Map Amendment (CLOMA) from FEMA.

If the elevation of structures on earthen fill is the sole component of the project (i.e., there is no associated channelization, culvert construction, etc., that would alter flood elevations) and there is no fill placed in the regulatory floodway, they can request from FEMA a CLOMR based on fill or a CLMOR-F. Until a LOMR is issued, this property remains in the floodplain and is subject to the community floodplain management ordinance and the mandatory flood insurance purchase requirements.



MSA CONSULTING, INC.

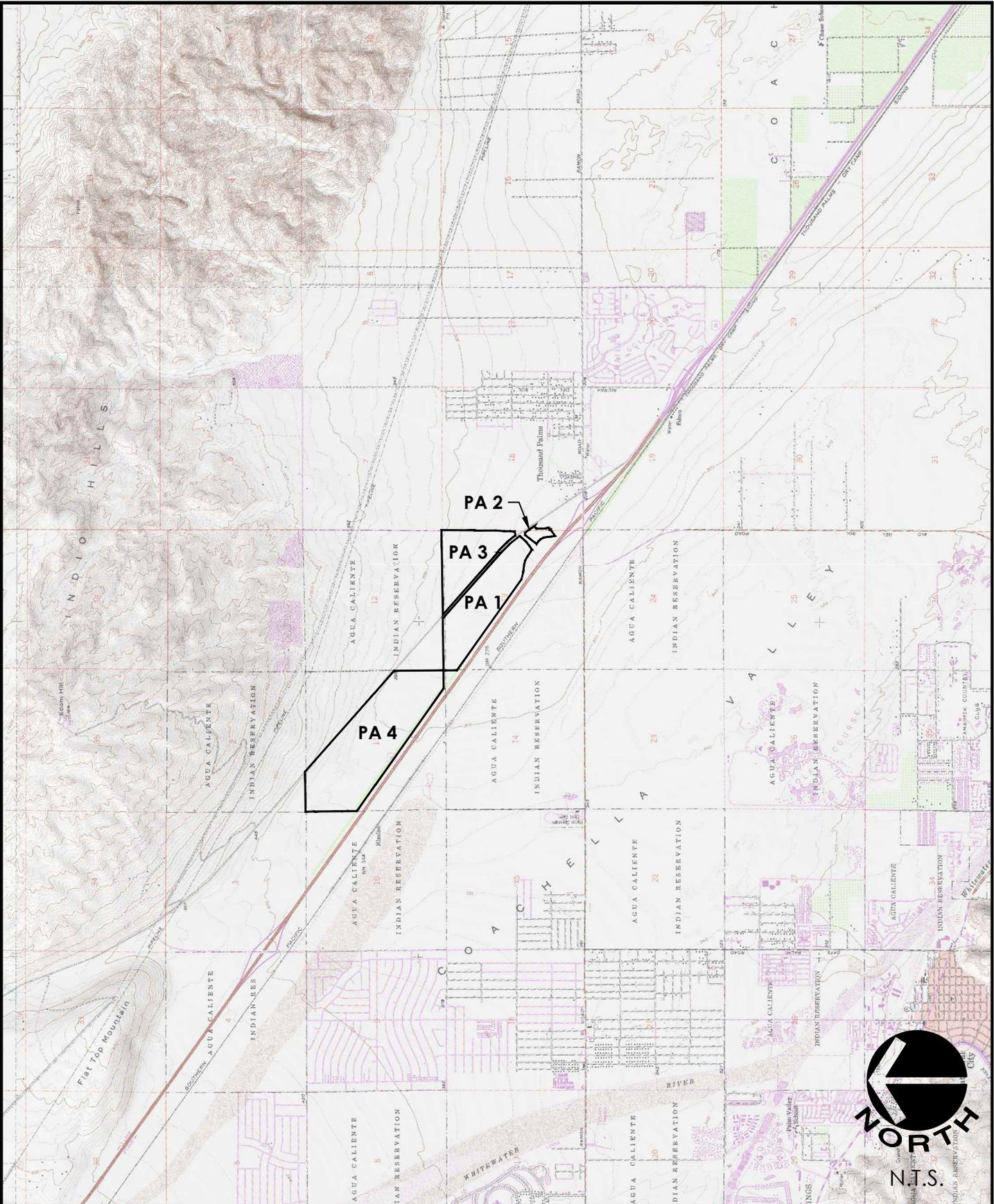
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FEMA

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 Environmental Impact Report

Exhibit 3.9-2
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USGS

North City Extended Specific Plan
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Exhibit 3.9-3

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Domestic Water

CVWD provides domestic water to the City of Cathedral City and is the water purveyor for the NCESP area. In General the Coachella Valley has a high level of water quality, indicated by the consistent 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, CVWD and Mission Springs Water District (MSWD) – 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 Pollutant Discharge Elimination System (NPDES)

With the increase in impervious urban surfaces comes the potential for non-point source pollution sources and contamination to storm water. The 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. This program is managed nationally by the United States Environmental Protection Agency (USEPA,) However California has adopted state NPDES permits. These permits are managed by the SWRCB and the RWQCB and supersede the national permits.

Development activities have the generalized potential to impact the quality and quantity of runoff to proximate receiving waters. Construction-related impacts are mitigated by complying with the Construction General Permit (State Water Resources Control Board Order No. 2009-0009-DWQ) under the National Pollution Discharge Elimination System (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 (Order No. R7-2008-0001 and NPDES No. CAS617002). Components such as source control, site design and treatment control Best Management Practices (BMPs) work to ensure that the proximate receiving waters (Whitewater River and Coachella Valley Stormwater Channel), are not adversely impacted by project pollutants. CVWD, RCFC and the City of Cathedral City are included within the list of Owner/Operators responsible for implementation of the MS4 Permit.

Refer to the Regional Setting discussion within Section 3.8 (Hazards and Hazardous Materials) for more discussion on non-point source pollution and the enforcement of NPDES in the City of Cathedral City.

B. Existing Conditions

According to the Preliminary Hydrology Report, research and calculations have been conducted previously to determine the 100 year flood plains within the Specific Plan area. Since CVWD has adopted the "Without Project" Hydrology Report, Thousand Palms Area, Whitewater River Basin, Riverside and San Bernardino Counties, California by Bechtel Corporation, March 1997, the information from within the accepted report has been used to model the extent of the existing flood plains. The base report was prepared for the US Army Corps of Engineers, Los Angeles District and is still being used as the basis for hydrology studies within the Thousand Palms Area, such as Cathedral City's north city area.

Land north of Interstate Highway 10 (I-10) and north of the NCESP area remains largely undeveloped. It is mainly composed of steep, eroding, sand covered slopes of the Indio Hills and natural drainage ways and washes that emanate from them. The Specific Plan property consists of primary gently sloping desert open spaces, which are significantly impacted by storm drainage from the west and north. The depth to groundwater exceeds 100' in this area.

The NCESP area is undeveloped and is dominated by natural desert terrain. There is no evidence that this area has been utilized for agricultural purposes. The site is located within the lower alluvial areas of the Indio Hills to the north and includes primarily Sonoran creosote bush scrub habitat. Recently stabilized sand hummocks are found along the I-10 right-of-way.

The Thousand Palms Area is the general nomenclature for all of the Coachella Valley north of Interstate 10 (I-10.) The area is bounded by the I-10 to the south, Morongo Wash/Mission Creek drainage divide to the west, and the southern flanks of the little San Bernardino Mountains to the north and east. Two watersheds within this Thousand Palms Area are found within the subject property: the Morongo Wash in the western portion and the Long Canyon/Willow Hole wash in the eastern portion.

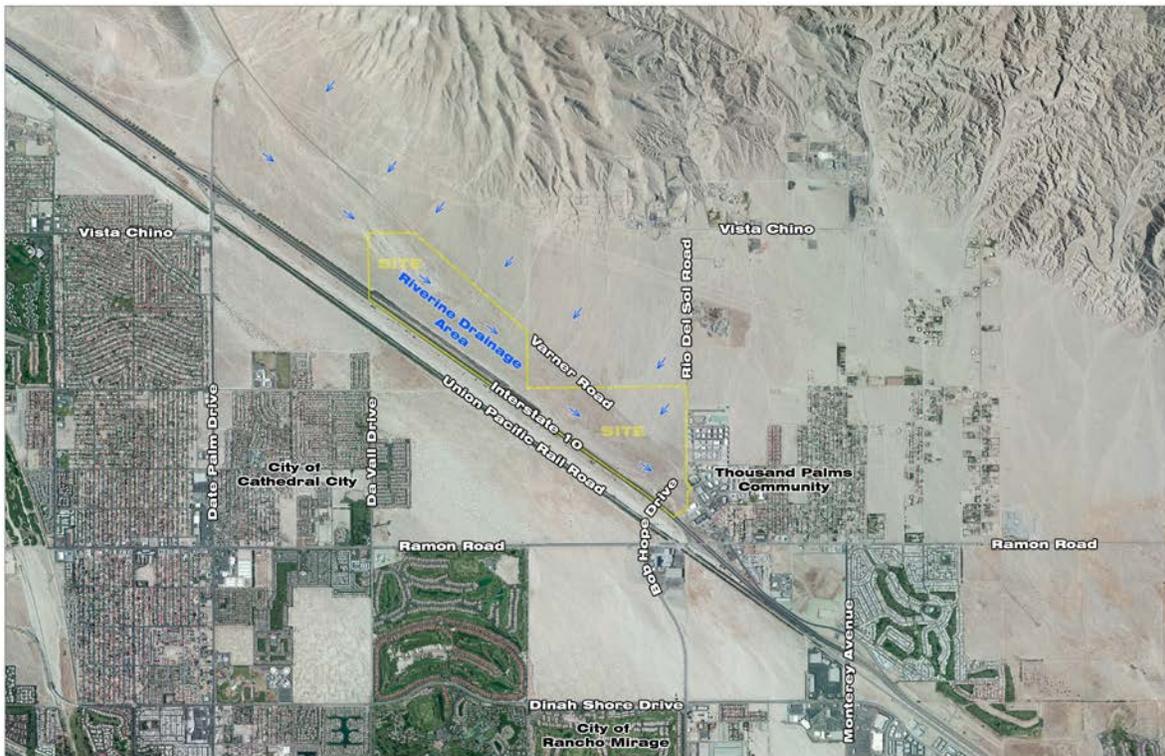
Tributary Watershed Area

The portion of the NCESP area that is found between Varner Road and I-10 had been identified by CVWD as a portion of the Thousand Palms RDAC. In this context riverine is used to characterize the area as relating to, formed by, or resembling a river. Except for periods during and immediately following rainstorms, there is little or no flow in most of the streams in the Study Area. Climatic and drainage area characteristics are not conducive to continuous runoff. Additionally, when storm flows do enter the project, they are not channelized but conveyed in a sheet flow condition across the NCESP area. The RDAC is a strip of land approximately 2,000 feet wide located north

and adjacent to Interstate 10. It extends from Palm Drive and Avenue 22 at the north to Adams Street at the south end. It extends from Palm Drive and Avenue 22 at the north to Adams Street at the south end. The tributary areas contributing to the storm flows include the Morongo Wash, Long Canyon and Wide Canyon. Portions of the corridor are also subject to alluvial fan flooding from the canyons to the north.

The project specific Hydrology and Drainage Update indicated that the previous “Without Project” Hydrology Report, Thousand Palms Area, Whitewater River Basin, Riverside and San Bernardino Counties, California by Bechtel for the U.S. Army Corps of Engineers (USACE), Los Angeles District (March 1997) used traditional USACE hydraulic models to obtain a 100 year peak hydrograph for the Thousand Palms Area. Based on this Study, the peak 100 year flow rate on the north side of Interstate 10 and Bob Hope Drive is approximately 4,660 cfs.

Figure 1 – General Site Overview



Tributary Watershed Area

The Hydrology and Drainage Update describes drainage as being conveyed by overland sheet flow from north to south, as well as from west to east. These flows are controlled by the existing topography and the interstate and railroad embankments. Historically, the flows from the adjacent mountains were conveyed to the alluvial

plains either by sheet flow or by dissected alluvial channel transport. The construction of the railroad embankment and Interstate 10 to the south interrupted and altered historic flows, which were diverted in a more east to west direction.

Figure 1 (above) presents an overview of the drainage conditions along the alluvial fan(s) from north to south, as well as, the riverine flow path from west to east.

Riverine flows from the west continue to the I-10 embankment. Part of the flow continues under the bridge as well as over the Interstate reaching its south side. These flows then continue in a southeast direction toward the Whitewater River/CVSC. As a backwater condition builds, the additional flows sheet flow east on the north side of the I-10 between I-10 and Varner Road and then through the project.

Runoff is estimated to be on the order of 1-5 feet (variable condition) and extends east. Flows extending to the east build up at Bob Hope Drive overpass, and eventually overtop the roadway and continue east. These flows encounter a variety of conditions in the existing commercial developments, where no defined channel exists, past the eastern extent of the development. Flows from the north meander and braid down to the south before encountering the riverine flow, or the existing improvements, discussed previously.

The limits of flooding included in the Hydrology and Drainage Update are based on the FEMA FIRM map. As shown on the Flood Zone Delineation Exhibit 3.9-2. The area south of the freeway and north of the railroad is identified as a flood zone. Flooding from this zone would appear to overtop the I-10 and return to the north side of the freeway as it moves to the southeast.

This occurs in a location in which the flood zone reaches the elevation of the adjacent NCESP. As the flow moves downstream, it reaches the newly elevated freeway improvements and the flow is directed back onto project site. As the flow crosses Bob Hope Drive and crosses the 9 acre site (Planning Area 2 (PA2)), it is diverted by the existing topography to the southeast and abuts up against the freeway and could eventually overtop the freeway.

Conveyance Facilities

There are currently no flood prevention facilities or storm drain facilities within the NCESP area. There are currently small drainage devices located at Bob Hope Drive, including curb inlet catch basins which collect water from the street, curb, gutter and outlets the collected runoff onto the Specific Plan area.

Bob Hope Drive is located directly adjacent to a large portion of the eastern property

boundary of the project. The street runs north and south and is a major thoroughfare for the Thousand Palms area. At the present time, Bob Hope Drive is improved with a small box culvert to allow drainage to flow under the road, east to the existing vacant lot on the east side of the street, PA2.

The box culvert will prevent low storm flows from building up and flooding Bob Hope Drive along with the intersection of Varner Road and Bob Hope Drive. However, the existing box culvert is inadequately sized to convey the 100-year storm. The existing box culvert under Varner Road appears to be a low frequency facility (10 years or less) that prevents low flow runoff buildup, similar to the box culvert at Bo Hope Drive.

As stated previously, major flood control and drainage facilities in the area fall under the jurisdiction of RCFC and CVWD. The City Engineer provides final conditions for drainage design approval by incorporating RCFC and CVWD comments and conditions resulting from their review of plans and environmental studies.

C. 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?

D. Project Impacts Found Not To Be Significant

Water Quality Standards: Siltation: Polluted Runoff

The Project will be required to comply with any waste discharge requirements. It is not expected to discharge waste except conventional urban water wastes of which a portion will eventually be discharged to the City's storm water system, and no impacts are anticipated related to this.

As mentioned previously, compliance with adopted procedures for grading and erosion will mitigate any impacts associated with grading and water quality during construction of the project. The developer shall prepare and implement (throughout all construction activities) a Stormwater Pollution Prevention Plan (SWPPP) and a Fugitive Dust (PM10) Management Plan. Construction site Best Management Practices are implemented to prevent any contamination of water (including siltation) that could occur as a result of construction activities of the proposed project.

To address operational impacts, each project 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. R7-2008-0001 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.

The Hydrology and Drainage Update provides recommendations for Surface Water Quality Regulatory Requirements. These are included in this discussion; however do not represent all measures that will be incorporated into each PA SWPPP and WQMP. These recommended measures are as follows:

SWPPP (Construction Activities)

1. Prior to the issuance of a grading permit, the project shall file a Notice of Intent (NOI) for construction with the State and comply with the requirements of the NPDES General Construction Permit, including the preparation of a SWPPP incorporating BMPs for construction and post-construction control of runoff. The SWPPP shall be prepared by a Qualified SWPPP Developer.

The plans shall indicate a design to reduce the discharge of pollutants, including sediment, to the maximum extent practical using management practices, control techniques and systems, design and engineering methods, and other appropriate methods. This requirement is not intended to bypass or usurp additional permits that may be required, depending on land-use (i.e. Industrial).

A SWPPP shall be developed prior to issuance of grading permits in accordance with RWQCB requirements. The plan shall identify the BMPs for use during construction of the proposed project to minimize the pollution from storm water runoff. Such practices shall include, but not necessarily be limited to the following:

- I. Control of impervious area runoff, including filtering devices, energy dissipaters, pervious drainage systems, and porous pavement alternatives.
- II. 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 recommended for compliance.
- III. In order to intercept sediment-laden runoff generated during construction activities, and trap and retain sediment, sediment basins or trapping facilities shall be employed within the project site;
- IV. Filter 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;
- V. Diversion of off-site runoff away from the construction site;
- VI. Prompt re-vegetation of proposed landscaped areas;
- VII. Perimeter gravel bagging and silt fences and/or temporary basins to trap sediment;
- VIII. Regular watering of exposed soils to control dust during construction with apalliative additive (i.e. copolymer product, such as Envirotac II, added to soil to bind particles and reduce fugitive dust;)
- IX. Installation of sediment basin(s) to alleviate discharge of increased flows;

2. To the maximum degree feasible, grading activities within the project shall be planned to occur during periods of no rain until the infiltration basins or temporary basins and an appropriate by-pass is designed. Grading during the remainder of the year may continue to the extent that surface water quality standards of the SWPPP are maintained.
3. To retain soils, reduce the potential for erosion, and minimize sedimentation of adjacent waters, stabilization of cut-and-fill slopes and exposed areas after construction activities shall be accomplished through landscaping.
4. 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.
5. 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.
6. A SWPPP manager shall oversee and monitor BMP and Stormwater management programs.

WQMP (Operational Activities)

1. BMPs (e.g., bioswales, drains, vegetation) shall be in place as specified in the WQMP, including but not limited to:
 - I. Implement regular sweeping of impervious surfaces such as streets and driveways (without the use of hoses/water).
 - II. Use of efficient irrigation practices.
 - III. Provision of infiltration trenches and basins.
 - IV. Linings for urban runoff conveyance channels.
 - V. Vegetated swales and strips.
 - VI. Landscape design such as xeriscape or other designs minimizing use of fertilizers.
 - VII. Provide covered trash enclosures.
 - VIII. Add drought-resistant planting with geosynthetic matting to stabilize the slopes, provided permissions are obtained from the adjoining lot owners as needed.
 - IX. Comply with County/City standards pertaining to properly designed and maintained oil and grease removal components in new storm drain systems designed to treat water before it leaves the project site, or at

existing on-campus location which is properly sized, properly permitted, and maintained for this purpose.

2. The debris basin shall be fitted with a debris wall or trash rack at the inlets to prevent floating solids from entering the storm drain and shall be available for maintenance.

Any increase in runoff due to increased impervious area within individual component areas shall be mitigated to existing flow rates. The project engineer shall design a properly sized detention/infiltration basin or alternative method to attenuate any increase in storm flows.

- Divert storm flows to grass swales to increase the Time of Concentration.
- Design landscape planters to attenuate storm flow runoff prior to entering the storm drain system.
- Implement underground detention/infiltration basins which detain runoff for sufficient time duration as to ensure to attenuate or retard the peak flows. The detention basins should be designed with flow restrictors and secondary emergency overflow provisions.
- Implement a maintenance covenant, inspection and maintenance program, and 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.

The regional basins will require consultation with the Agencies listed below. The project will be analyzed for any permit requirements which may require additional measures, however Water Quality measure are anticipated to be similar.

Responsible Agencies for the NCESP Storm Drain System include:

- Coachella Valley Water District (CVWD);
- Riverside County Flood Control and Water Conservation District (RCFCWCD);
- U.S. Army Corps of Engineers (USACE);
- FEMA;
- State Water Resource Control Board; and,
- City of Cathedral City.

Following implementation of Regulatory requirements impacts to water quality are expected to be less than significant.

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.

Pursuant to the guidelines and recommendations set forth within the NCESP, all development within 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. These concepts are elaborated on further within the guidelines outlined in the sections on Architecture and Landscaping found within the Specific Plan (Sections 5 and 6). Builders are strongly encouraged to consult with CVWD on methods to implement the latest trends in water conservation available, recommended by the district for all customers in the service area.

The NCESP requires the use of native and/or drought tolerant plant materials, to complement the existing landscape of the area and ensure water conservation. Future development shall abide by 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.

The proposed project will not 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 Pattern; Erosion

The site contains no active streams or rivers. There are no "Waters of the United States" or surface waters that have drainage paths across the property. There is a historic blue-line stream course, as depicted on the United States Geological Survey map, which runs to the west of the property. However, the flows continue south across the I-10, then southeast, eventually reaching the Whitewater River.

The historic USGS Map indicates that concentrated storm flows continued south and were then directed to the south east approximately 1 mile south of the Specific Plan area. Storm water that enters the property from upstream properties is described as sheet flow when it enters the proposed permanent retention basin. Each of the points of entry is considered a back flow condition associated with larger storm events, ostensibly exacerbated by revisions to the flow regime that occurred during construction of the Bob Hope Drive I-10 interchange.

As mentioned previously, consultation with the USACE and RWQCB (and possibly California Department of Fish and Game under the CWA Section 404) will be required. The potential of Impacts to Waters of the U.S. by the construction of the regional flood control measures such as retention basins or flood walls will require further analysis relative to additional permitting. Any required physical improvements are expected to align with the proposed project description.

In June of 2009, the MS4 regulation requiring the treatment of “first flush” storm water before discharging into a storm drain or channel was adopted. The developable portion of the project cannot be issued occupancy until Storm Water associated with the FEMA flood zone is addressed. This quantity of storm water exceeds the quantity considered “first flush.” Quantities for the WQMP storm water is far below the requirements for the flood zone. As a result, less than significant impacts are anticipated related to planned storm water quality drainage facilities.

Drainage Pattern; Flooding

According to CVWD, future storm drain facilities are proposed in anticipation of future development north of the I-10. The existing detention facilities on the adjacent properties are grossly undersized and would not serve to attenuate the flow, given the magnitude of the flows. These downstream basins would serve to hold local nuisance water and periodic low flow events.

As described in the Hydrology and Drainage Update, the NCESP includes the construction of regional Stormwater retention basins. Three (3) regional storm water retention basins are proposed upslope of the mixed used development. These basins are intended to be large spreading basins that intercept and infiltrate runoff from the Riverine Drainage Area Corridor, thereby minimizing the flood potential to the NCESP and other downstream developments.

Each retention basin is to be a shallow, open design intended to provide wide runoff capture areas by excavating below existing grades to accommodate the required volume requirements. Stormwater sheet flows which enter into the basins are to be captured and held allowing for the contained water to percolate into the

soil. Each basin will be designed with 3:1 side slopes and a minimum of three feet of freeboard. Access roads will be constructed in accordance with CVWD. The basin shape, size, and bank heights shall be designed to capture the debris potential of the design storm. The captured flows would allow sediment to settle within the basins, as the storm water percolates into the soil.

Maintenance of the regional basins is anticipated to fall under the responsibility of a regional organization. Some of the examples of possible responsible entities are an Assessment District, Land Owner Partnership or CVWD.

As part of the development of the NCESP, a system of localized retention basins, storm drains, inlet structures, and roadways with curbs and gutters will be constructed to handle the estimated runoff from the project site. Graded slopes will be protected from the erosive effects of their own runoff by a system of drains, erosion control mats and landscaping, v- ditches, catch basins, roof drains, and area drain systems will be utilized to convey water away from building foundations.

Streets within the NCESP will have integral concrete curbs and gutters which will convey the runoff from the street surfaces, street parkways, parking lots, adjacent planter islands, commercial/ industrial lots and landscaped areas. Catch basins and area drain systems will remove storm runoff from the streets.

Responsible Agencies for the NCESP Regional Storm Drain System include:

- Coachella Valley Water District (CVWD);
- Riverside County Flood Control and Water Conservation District (RCFCWCD);
- U.S. Army Corps of Engineers (USACE);
- FEMA;
- State Water Resource Control Board; and,
- City of Cathedral City.

Planning Area 2

According to the Hydrology and Drainage Update, during the preparation of this Hydrology Report, CVWD (through verbal communication, June 12, 2013) indicated that a backwater condition adversely affects the PA2 portion of the proposed development, from the riverine flows building up south and east of the site. This study is being prepared concurrently with the NCESP-EIR.

A cursory review of the site and flow conditions provided by the District, indicates that the 9 acre commercial site is impacted by backflow conditions from downstream (offsite condition) as an apparent result of the conversion of the I-10 and railroad

embankments to the south. Flows converge, build up and could spill over I-10 into the eastern 9-acre site. These flows are estimated to be on the order of 3 to 5 feet on some portions of the site, decreasing to zero. It is important to note that in the model by the District, the described impacts are also affected by contributory flows from the north. The NCESP project will intercept these flows in the on-site regional basins. Hence the overall impact would be decreased.

The proposed storm drain improvements would allow for development under conditions not exposed to the potential flood hazards that currently exist. On-site storm water runoff during a major storm event downstream of the Regional Detention/Retention or Interim Basin facilities will be directed into smaller onsite facilities. The proposed localized basin system will aid in storing any incremental increases produced by the development of the Planning Areas.

Construction of the Proposed Regional Basins and PA2 Flood Wall System will insure that future structures are no longer within a 100-year flood hazard area and will not impede or redirect flood flows. The placement of fill would require that flood elevations are not altered by more than 1 foot and the flow velocities by 1 fps. Additionally the flood limits shall be restored to existing before the flow leaves the NCESP area. The proposed basins and flood walls will remove the 100 year flood zone and designation by capturing and retaining the offsite flows; therefore the proposed structures will not impede or redirect flows.

The Project Specific Hydrology report describes the following proposed project basins:

Infiltration Basin 1: The main regional basin is the largest of the three proposed basins. Basin #1 will be located north west of the proposed NCESP improvements on PA4. The basin will span from Varner Road south to the Interstate 10 Right of Way, in order to intercept sheet flow across the entire span of the RDAC.

The upstream most edge of the basin will maintain existing grades and then gradually flow into the basin bottom, which will be approximately three feet below the existing grades. Erosion dissipaters will be implemented such as baffles or oversized stones to retard flow energy.

The basin slope will range from 2 percent to 5 percent and be clear of brush. The basin sides will have a 22-foot wide berm with a 20-foot wide access road on top of the berm. Side slopes of the berm will be sloped at 3:1 and have a height providing a minimum of three feet of freeboard.

The preliminary basin design has an approximate width of 2,000 feet wide and a length of 2,700 feet with an approximate capacity of 428 acre feet.

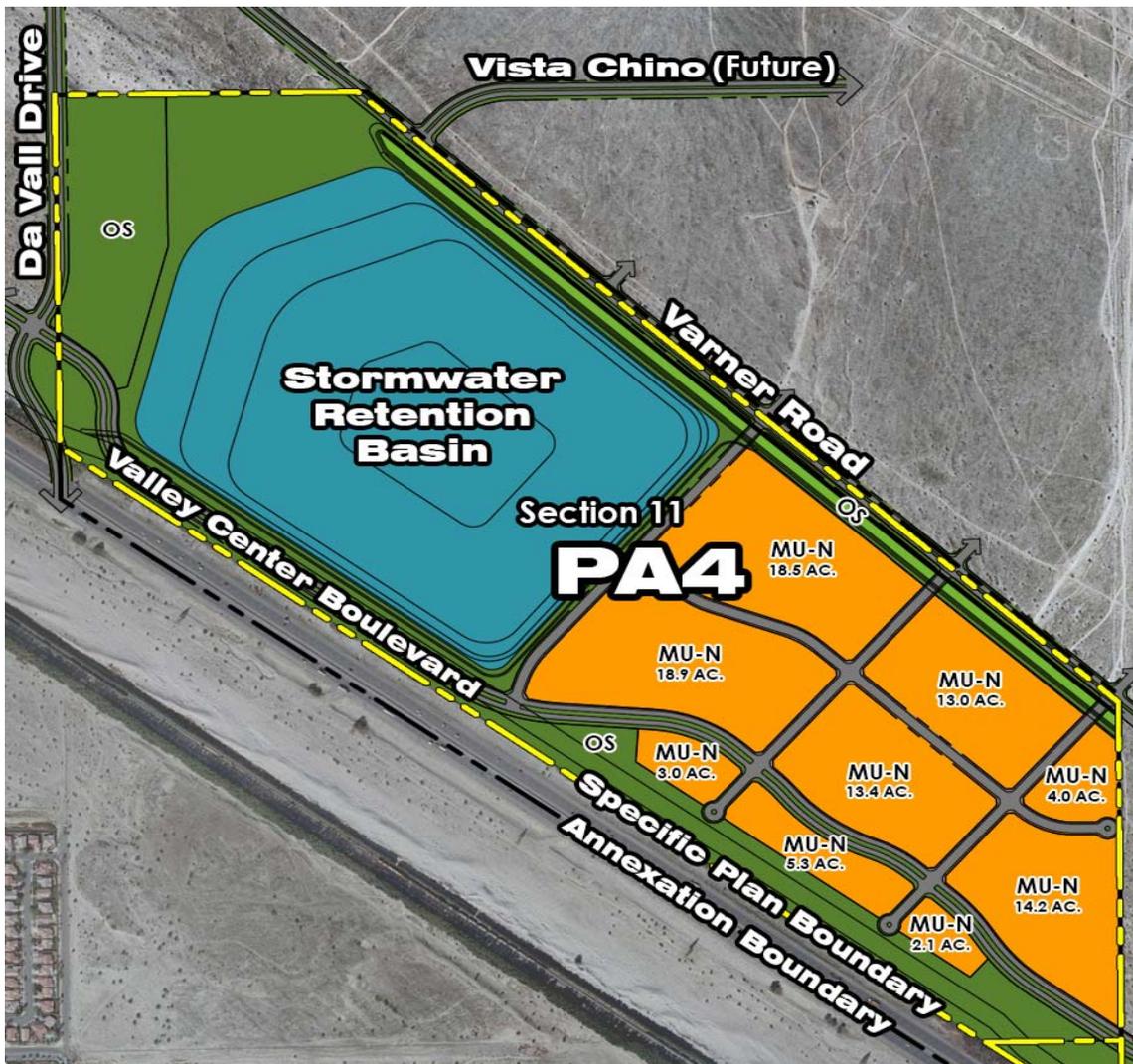


Figure 2: infiltration Basin 1

Infiltration Basin 2: An additional basin is proposed to be located east of the larger main basin #1, described previously. Basin #2 will collect storm water runoff which sheet flows from the northern offsite alluvial slopes, which would enter the proposed project across Varner road between Basin #1 and the northern portions of the proposed project. The basin includes a 50-foot wide narrow channel adjacent to and along the south side of Varner Road. The channel will capture sheet flow crossing Varner road from the north and convey it east to the main retention area. The basin slope will range from 2 percent to 5 percent and shall be clear of brush. The basin sides will have a 22-foot wide berm with a 20-foot wide access road on top of the berm. Side slopes of the berm will be sloped at 3:1. The height of the basin will provide a minimum of three feet of freeboard. The preliminary basin

design has an approximate width of 450 feet wide and a length of 500 feet with an approximate capacity of 125-acre feet, depending on final design.



Figure 3: infiltration Basin 2

Infiltration Basin #3: An additional basin is proposed to be located in the northern portion of PA3. Basin #3 will collect offsite storm water runoff which sheet flows from the northern alluvial slopes. The basin slope will range from 2 percent to 5 percent and be clear of brush. The basin sides will have a 22-foot wide berm with a 20-foot wide access road on top of the berm. Side slopes of the berm will be sloped at 3:1 and have a height providing a minimum of three feet of freeboard.

The preliminary basin design has an approximate width of 750 feet wide and a length of 450 feet with an approximate capacity of 250-acre feet, depending on the final design.

The proposed basin would prevent conveyed sediment and debris from being transported downstream to local streets, drainage devices, and storm drains. The runoff would be captured and allowed to percolate into the soil within the proposed basins. As described previously, the construction of the basins and PA2 flood walls will eliminate the proposed projects' risk of flooding and would then allow the NCESP area to fall outside the FEMA classifications. Therefore, there would be an

improvement in site conditions and no significant impact from flooding to the development.

The design and construction of the regional basins will be in accordance with District, County and federal requirements to minimize any such risk. This includes construction of the basins with 3 feet of freeboard. Additional allowances for infiltration and regular maintenance are built in accordance with current standards. Furthermore retention basins are designed to build down into the ground NOT above. The three (3) feet of freeboard is from the surface up. The retention period will likely be less than 72 hours and the probability exposure will be further reduced by the short residence time, spreading over a large area, and well drained soils. Therefore impacts related to exposure of 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 are expected to be less than significant following the construction of the proposed regional basins and the PA2 flood walls.

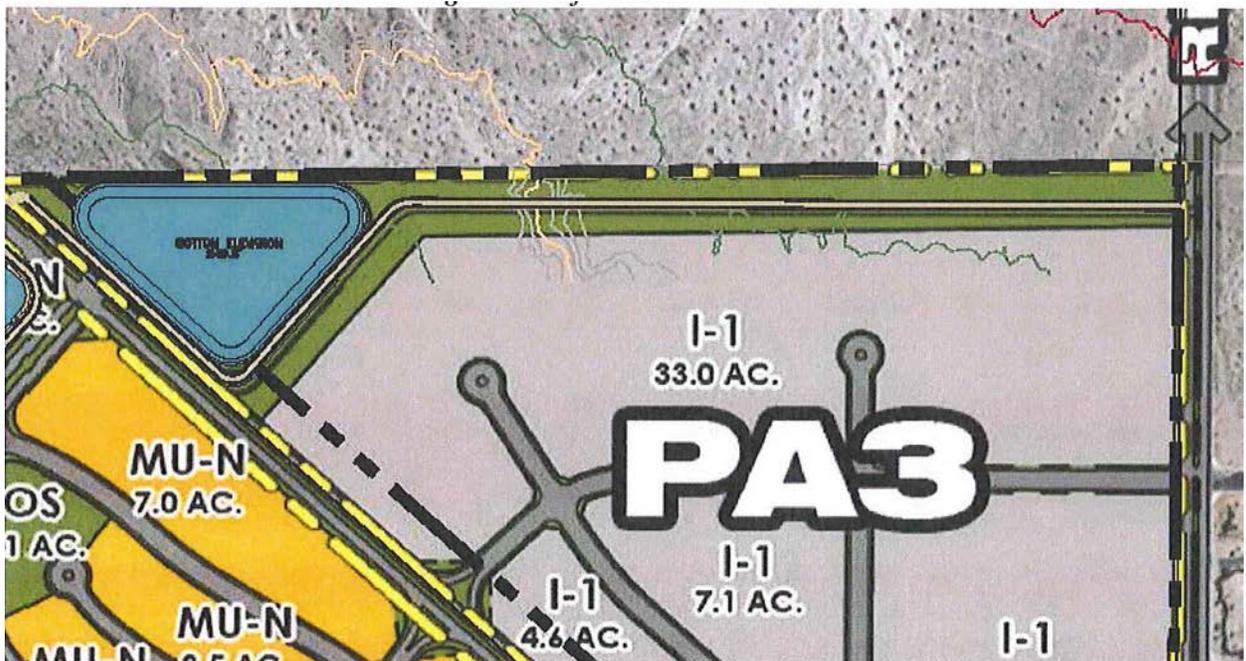


Figure 4: infiltration Basin 3

Landscaping around all basins shall be provided as described in Section 3.1. Construction of smaller discrete projects may be allowed prior to construction of the regional basins. However an interim design will be required for flood control and will be submitted for approval to all of the agencies mentioned previously.

Any interim design solutions would have to demonstrate that the mitigation of flooding adheres to the requirements of FEMA for 100 year flood definitions. Also the

interim solution will serve as a temporary detention facility for mitigation of storm runoff.

In the event that the entire design of the regional basins and PA2 flood walls are constructed, the whole of the NCESP can be constructed and occupied. Impacts are expected to be less than significant following project improvements.

Impacts relative to flooding are expected to be less than significant following the implementation of the standard conditions, recommendations and mitigation measures included in this DEIR.

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. Project basins, including retention, detention or lakes will be reviewed and approved by the City of Cathedral City and CVWD when appropriate. Proposed freeboard should address the seiche issue related to retention/detention basins. Impacts related to inundation by seiche are considered less than significant.

There is a potential for mudflow in the alluvial fan areas. Flash floods are short in duration, but have high peak volumes and high velocities. This type of flooding occurs in response to the local geology and geography, and the built environment. When a major storm moves in, water collects rapidly and runs off quickly, making a steep, rapid descent from the mountains into man-made and natural channels within developed areas. Flood flows often carry large amounts of mud, sand, and rock fragments.

The proposed basins have been sized to accommodate additional volumes due to mudflows/debris flows from upstream.

The topography of the site and surrounding lands shows a gradual decrease in elevation from west to east (as well as north to south) throughout.

According to the geotechnical investigation potential hazards from slope instability, landslides, or debris flows are considered low to moderate following construction of project improvements. Less than significant impacts are anticipated related to slope instability. See the Geology and Soils Section for further discussion.

Development of the NCESP project would result in a reduction of the total amount of pervious surface currently located onsite, since the existing site is completely pervious. The proposed development will include roadways, development associated improvements, natural areas and landscaped areas. Therefore, of the 583 acres proposed for development within the NCESP site, more than two-thirds is estimated to remain pervious. The construction of the localized basins and other design measures will attenuate flows to offset the increased flow rates as a result of the proposed development.

Local infiltration basins to mitigate local onsite flow rates and for storm water quality purposes will be required. Runoff from within the proposed development along with smaller undeveloped drainage areas within the site will be conveyed via an onsite storm water conveyance system to the local basins.

Graded slopes would be protected by the erosive effects of their own runoff by a system of drains, erosion control mats, and landscaping. Concrete swales and v-ditches, catch basins, roof drains, trench drains and area drain systems will be utilized to convey water away from building foundations.

Streets within the project site would have integral concrete curbs and gutters which will convey the runoff from the street surfaces, street parkways, parking lots, adjacent planter islands, commercial/industrial lots, and landscaped areas. Catch basins and area drain systems would remove storm runoff from the streets.

As proposed, these project drainage facilities are expected to be satisfactory in order to minimize erosion, flooding, and other drainage impacts. When properly implemented in accordance with local storm water regulations, it is anticipated that onsite drainage impacts would be less than significant.

Implementation of the proposed CVESP project would drastically reduce the RDAC flooding potential south of the proposed regional retention basins and result in the elimination of the flooding potential for the proposed project, and adjacent downstream areas. Provided the mitigation measures discussed above are adequately implemented, the NCESP project would have no significant erosion or runoff impacts.

E. Potentially Significant Impacts

Surface Water Quality

Any future development has the potential to impact water quality during construction and throughout the life of the project. Concerns relating to water quality during

construction include the containment of any potential contaminants such as gasoline and other petroleum products. Another concern is the release of any construction related storm water that may contain contaminants (including sediment material). Grading of soils creates the chance of erosion and potential introduction of sediments to existing area water systems, especially when construction storm water is allowed to flow into public streets.

The site is greater than one acre in size and will require compliance with the National Pollutant Discharge Elimination System (NPDES) as well as the South Coast Air Quality Management District's (SCAQMD) regulations during any grading and construction activities. Due to the nature of the project, it is anticipated that grading will take place for the installation of streets and infrastructure first, followed by individual home building projects subject to approval after lots are sold.

This scenario will result in the need for compliance with all applicable NPDES and SCAQMD regulations, and will most likely require that multiple plans be prepared and submitted prior to buildout of the project.

Compliance with adopted procedures for grading and erosion will mitigate any impacts associated with grading and water quality. The developer shall prepare and implement (throughout all construction activities) a Stormwater Pollution Prevention Plan (SWPPP) and a Fugitive Dust (PM10) Control Plan. Construction site Best Management Practices are implemented to prevent any contamination of water that could occur as a result of construction activities of the proposed project.

The development of the NCESP 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. R7-2008-0001 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.

FEMA; 100yr flood

The NCESP is currently located in a 100-year flood zone. Specifically, it is located within the Riverine Flood Hazard Zones as determined by studies conducted by private consultants, and as mapped by FEMA. FEMA studies indicate that flows are on the order of two (2) feet in depth (not applicable to local depressions) and flow velocities on the order of 5 to 7 feet per second. Given the geotechnical studies (RJR 2013) performed for the site, the fine sand deposits will be prone to scour and high magnitudes of sediment transport. Since the site is subject to flooding under State

and Federal requirements and is considered a significant impact under CEQA, mitigation measures are required.

As discussed previously, 100-year flood zone designations are as follows.

Zone AO: The flood insurance rate zone that corresponds to the 100-year floodplains that is determined in the Flood Insurance Study by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no Base Flood Elevations or depths are shown within this zone. Mandatory flood insurance purchase requirements apply.

Zone X: Zone X is the flood insurance rate zone that correspond to areas outside the 100-year floodplains, areas of 100-year sheet flow flooding where average depths are less than 1 foot, areas of 100-year stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 100-year flood by levees. No Base Flood Elevations or depths are shown within this zone.

The proposed storm drain improvements would allow for development under conditions not exposed to the potential flood hazards that currently exist. Construction of the flood control improvements (basins and flood walls) will result in the re-designation of flood zones for the project area (from Zone AO to Zone X or Zone X protected by levee) through a CLOMR or LOMR.

Prior to CLOMR LOMR Process structures would be within a 100-year flood hazard area as mapped on a federal Flood Insurance Rate Map or other flood hazard delineation map. However the 100-year flood zone will be eliminated prior to the placement of structures if the basins and PA2 flood walls are constructed. The flood hazard will need to be re-delineated to demonstrate that the proposed development is no longer within the 100 year flood zone. Following the recommendations and mitigation measures in this document impacts are expected to be Less than significant.

If the regional basins are not constructed prior to any onsite development, an interim solution may be possible for smaller discrete projects within the NCESP. This solution will require review and approval from both CVWD and the City of Cathedral City.

Any interim design solutions would be required to demonstrate that the mitigation of flooding adheres to the requirements of FEMA for 100 year flood definitions. Also the interim solution will serve as a temporary detention facility for mitigation of storm runoff.

F. 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 the development of the NCESP to less than significant levels.

SC 3.9-1: Each project 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 3.9-2: Each project 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 3.9-3: Each project 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. R7-2008-0001 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 3.9-4: Each PA developer shall insure that future 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.

SC 3.9-5: Each PA developer shall ensure future development follows domestic water conservation guidelines included within the Cathedral City General Plan to mitigate impacts to public water supplies.

SC 3.9-6: All project design shall be in accordance with the Riverine Drainage Area Corridor Ordinance and shall be reviewed by CVWD and the City of Cathedral City during project approvals.

MM 3.9-1: An approved CLOMR for the site shall be obtained by the Project Applicant before a Certificate of Occupancy is issued for any portion of the development,

unless demonstrated to be safe from the flooding conditions to the satisfaction of the City of Cathedral City and CVWD.

MM 3.9-2: Development of the 9 acre PA2 site will require construction of flood walls, in conjunction with the regional basins, located along the south and eastern boundary (Figure included in Appendix G). This flood control measure shall be designed in accordance with the rules and regulations of the FEMA CLOMR/LOMR process and shall be approved by the City and CVWD during project approvals.

MM 3.9-3: Individual developers of Planning Area Projects shall be required to submit plans including on-site provisions for capture of incremental storm water associated with project impervious surfaces prior to project approvals. The incremental storm water flowing off-site shall be equal to predevelopment conditions. Plans shall be reviewed and approved by the City.

MM 3.9-4: Design and Construction of the 3 Basins and PA2 flood walls intended to address offsite flooding shall be reviewed and approved by all applicable agencies. Drainage plans and hydraulic calculations for the regional retention final project design shall be prepared by a civil engineer and submitted for review and approval to the following:

- Coachella Valley Water District (CVWD);
- Riverside County Flood Control and Water Conservation District (RCFCWCD);
- U.S. Army Corps of Engineers (USACE);
- FEMA;
- State Water Resource Control Board; and,
- City of Cathedral City.

MM 3.9-5: CWA Section 404 Consultation with The US Army Corps of Engineers, RWQCB and California Department of Fish and Wildlife will be required relative to potential impacts to Waters of the U.S. prior to approval of the proposed regional flood control measures.

G. 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 North City Extended Specific Plan 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 reduce the peak surface water at Bob Hope Dive and therefore there would be no adverse cumulative impacts due to the NCESP.

H. Resources

City of Cathedral City Comprehensive General Plan, Zoning Map Amendment and Downtown Precise Plan Amendment, Draft Environmental Impact Report, Terra Nova Planning and Research Inc. April 2002.

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

Final Program Environmental Impact Report for the North City Specific Plan, Cathedral City, California, HDR Engineering, Inc. May 2009.

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

Hydrology Analysis, RJR Engineering

City of Cathedral City Design Guidelines, Interactive Design Corporation for the City of Cathedral City, September 1, 1989 (Amended May 19, 1997).

Comprehensive General Plan, Chapter V Environmental Hazards, City of Cathedral City, Adopted July 31, 2002.

Evaluation of Rational Method 'C' Values, Joe Hill, Hydrology Manual for Riverside County, February 1998 (Original Report), June 2002 (Update for Manual Revision).

Existing Conditions Flood Hazards Along Interstate 10, Morongo Wash Bridges to Washington Street, Coachella Valley, California Exponent, for Del Webb Sun City Palm Desert, Phase III, August 26, 2002.

Preliminary Hydrologic and Hydraulic Analyses, Tory R. Walker Engineering, Inc for OPUS 10 (TM 30875), July 5, 2007.

Without Project Hydrology Repo11, Thousand Palms Area, Whitewater River Basin, Riverside and San Bernardino Counties, California, Bechtel Corporation for U.S. Army Corps of Engineers Los Angeles District, March 1997.

3.10 LAND USE AND PLANNING

The purpose of this Land Use and Planning section is to evaluate the North City Extended Specific Plan (NCESP) in relation to the land use and planning policies that are placed on the project by local and regional regulating jurisdictions. The initial discussion within this section is a presentation of an overview of the “*Regulatory Context*” of documented local and regional policies.

A. Regulatory Context

Local Plans and Policies

- **General Plan Land Use Element/ City of Cathedral City**

The Land Use Element of the community’s General Plan defines the various land use categories assigned to lands within the City and its Sphere of Influence. This element provides appropriate goals, policies and programs to help direct future development and build-out of the community. The Land use Element is the broadest and most encompassing of all General Plan elements and, in conjunction with the General Plan Environmental Impact Report (EIR), serves as the most basic foundation for land use policy development, including those included within Specific Plans within the community.

- **North City Specific Plan (NCSP)/ City of Cathedral City**

This adopted Specific Plan defines more focused and tailored land use objectives, policies, programs, development standards and guidelines which build upon the goals, policies and programs of the Land use Element of Cathedral City’s General Plan. The City has adopted a General Plan amendment to formally incorporate the NCSP features into the foundation document. The North City Extended Specific Plan (NCESP) incorporates the objectives, policies, development standards and design guidelines of the North City Specific Plan by reference in order to maintain consistency between the two Specific Plans and the General Plan.

- **Zoning Ordinance/ City of Cathedral City**

The Cathedral City Zoning Ordinance serves as an implementation tool to further the objectives of and establish consistency with the Land Use Element of the General Plan and thus to protect the public health, safety and general welfare of the residents, and to provide economic and social benefits from an orderly, planned use of land resources. The Zoning Ordinance provides regulations for

the allowable development in each zoning designation. These regulations include information such as permitted and conditional uses, density, lot dimensions, yard requirements, lot coverage and building height, parking requirements, fencing and landscape and open space requirements. The Zoning Ordinance establishes consistency between land uses on adjacent properties within the City and provides a set of regulations to develop the City in an efficient and harmonious fashion.

- **Coachella Valley Multiple Species Conservation Habitat Plan (MSHCP)**

The Coachella Valley Multiple Species Conservation Habitat Plan (MSHCP) is a conservation plan that strives to preserve over 240,000 acres of open space and protect 27 plant and animal species in the Coachella Valley. In complying with federal and state endangered species laws, the MSHCP not only safeguards the desert's natural heritage for future generations, but also allows more timely construction of roads and other infrastructure needed to accommodate population growth in the Coachella Valley.

- **Agua Caliente Band of Cahuilla Indians Tribal Habitat Conservation Plan (THCP)**

The Agua Caliente Band of Cahuilla Indians Tribal Habitat Conservation Plan (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 the U.S. Fish and Wildlife Service (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 (USFWS). USFWS approval would also include a Section 10a permit for all covered species and activities.

Regional Plans and Policies

- **Western Coachella Valley Area Plan of the Riverside County Integrated Project (RCIP)**

The Western Coachella Valley Area Plan of the RCIP contains policies that guide the physical development and land uses in the unincorporated western portion of the Coachella Valley. The Area Plan is not a stand-alone document, but rather an extension of the General Plan and Vision Statement. Using the Vision Statement as the primary foundation, the General Plan establishes standards

and policies for development within the entire unincorporated County territory, while the Area Plan details standards and policy direction relating specifically to the western Coachella Valley.

- **Destination 2030: 2004 Regional Transportation Plan (RTP) – SCAG 2004**

Prepared by the Southern California Association of Governments (SCAG), Destination 2030 is the 2004 Regional Transportation Plan (RTP) for the six county region in Southern California including Los Angeles, Orange, Riverside, Ventura and Imperial Counties. The RTP is the culmination of a three-year effort with a focus on improving the balance between land use and the current and future transportation systems. SCAG is required to develop, maintain and update the RTP on a three-year cycle.

Destination 2030 is a multi-modal Plan representing the vision for a better transportation system, integrated with the best possible growth pattern for the region over the Plan horizon of 2030. The Plan provides the basic policy and program framework for long term investment in the regional transportation system in a coordinated, cooperative and continuous manner. Transportation investments in the SCAG region that receive state or federal transportation funds must be consistent with the RTP and must be included in the Regional Transportation Improvement Program (RTIP) when ready for funding.

- **Compass Blueprint Growth Vision – SCAG 2004**

The Southern California Compass vision adopted by SCAG’s Regional Council in June 2004 helps to set a new course for Southern California to accommodate growth, reduce traffic congestion, preserve open space, manage and minimize pollution and manage resources more efficiently. The implementation framework known as the “*2% Strategy and Shared Values, Shared Future*” seeks to assist cities and counties in the development of strategies to accommodate future growth while promoting SCAG’s principles of Mobility, Livability, Prosperity and Sustainability for future generations of Southern Californians.

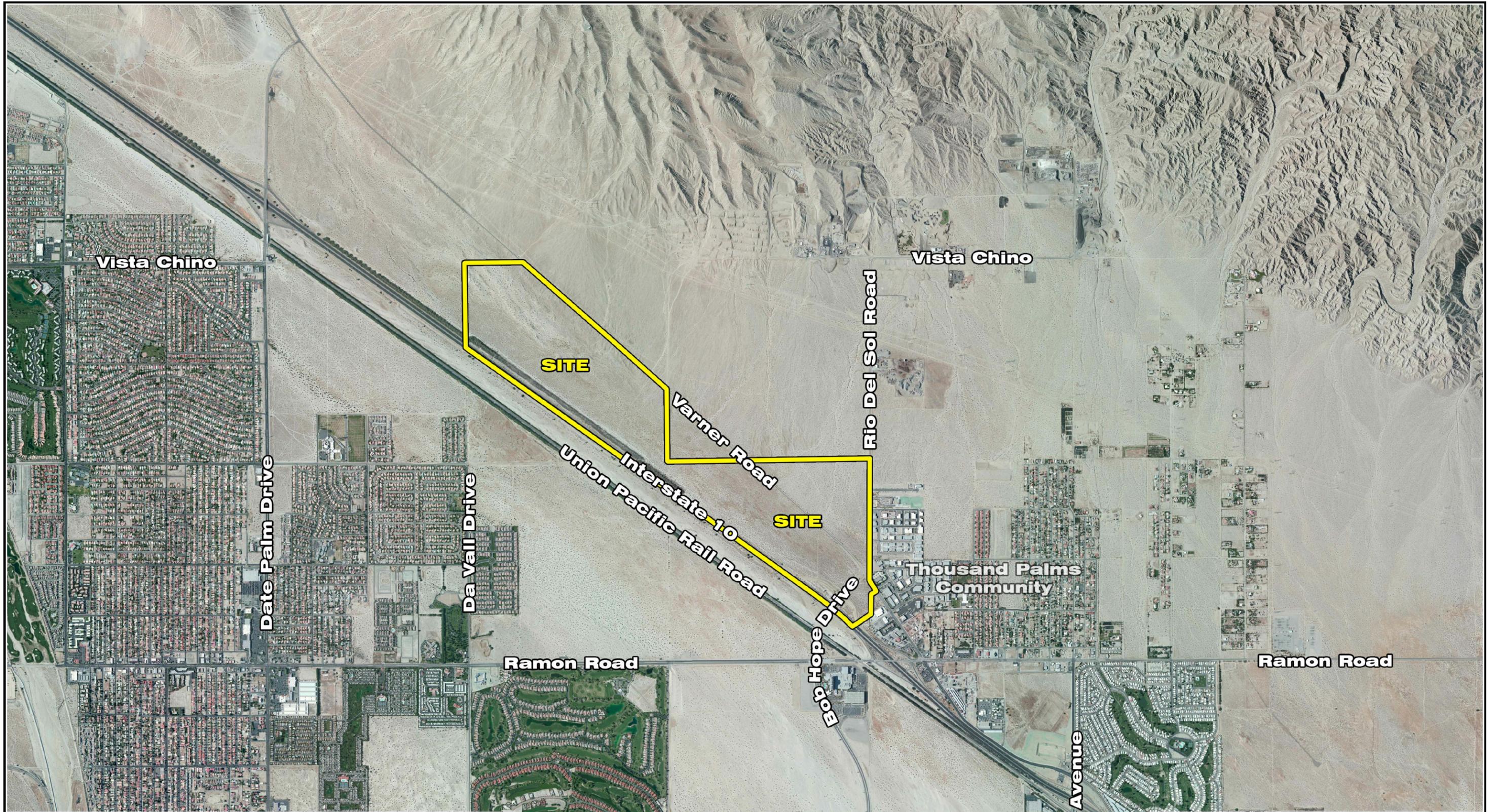
B. Regional Setting

The NCESP is located immediately east of the city limits of Cathedral City and borders the north right-of-way line of Interstate Highway 10. Cathedral City is located in Riverside County, CA, and is approximately 115 miles east of Los Angeles, 150 miles northeast from San Diego and 60 miles west from the City of Riverside. Within the Coachella Valley, Cathedral City is strategically located with land on both sides of the east-west Interstate-10 Corridor which runs parallel to the Union Pacific Railroad

Corridor. As shown in Exhibit 3.10-2 Cathedral City is bordered by the City of Palm Springs on the west and southwest and by the City of Rancho Mirage on the east and southeast. Unincorporated areas of Riverside County currently border Cathedral City to the north and east along the north right-of-way line of the I-10 corridor, including the “North City Extended Specific Plan”. The unincorporated Thousand Palms Community is located directly east of this Specific Plan, also north of Interstate Highway 10, and is located within Cathedral City’s Sphere of Influence, as is the NCESP.

The NCESP includes approximately 591.38 acres of vacant desert land located just north of Interstate Highway 10 (I-10). Its general boundaries are I-10 along the south, DaVall Drive (as to be extended north of I-10)/ current Cathedral City Limit Line on the west and Rio Del Sol Road on the east. The proposed project lies within the Sphere of Influence of Cathedral City, in a portion of Sections 11, 13 and 14, Township 4 South, Range 5 East, San Bernardino Base and Meridian. Varner Road defines a majority of the Specific Plan on the north, with the exception being the entirety of Section 12 which is located immediately north of the SP. This North City Extended Specific Plan has been prepared as an easterly extension of the previously prepared and adopted North City Specific Plan (July 2009). The original North City Specific Plan included nearly 5,000 acres of mostly undeveloped land north of I-10 and has been annexed into Cathedral City.

The North City Extended Specific Plan is characterized as vacant, undeveloped desert land, with significant mountain range and open desert views and vistas in all directions. The Specific Plan is located within the northern portion of the western extents of the Coachella Valley in a geographical area known as the Colorado Desert, a subdivision of the Sonoran Desert. Both the Little San Bernardino Mountains to the north and Indio Hills to the northeast dominate the landscape in the area as shown in exhibit 3.10-1. Land north of I-10 remains largely undeveloped and consists of steep, eroding sand covered slopes of the Indio Hills, natural drainage ways and washes that emanate from them, and desert open spaces. Land immediately north of the SPA includes undeveloped Indian Reservation land in Section 12, attributed to the Agua Caliente Band of Cahuilla Indians, as well as portions of vacant land under Riverside County’s jurisdiction. The vast majority of land included within the North City Extended Specific Plan lies within the 100 year flood plain as defined by FEMA.



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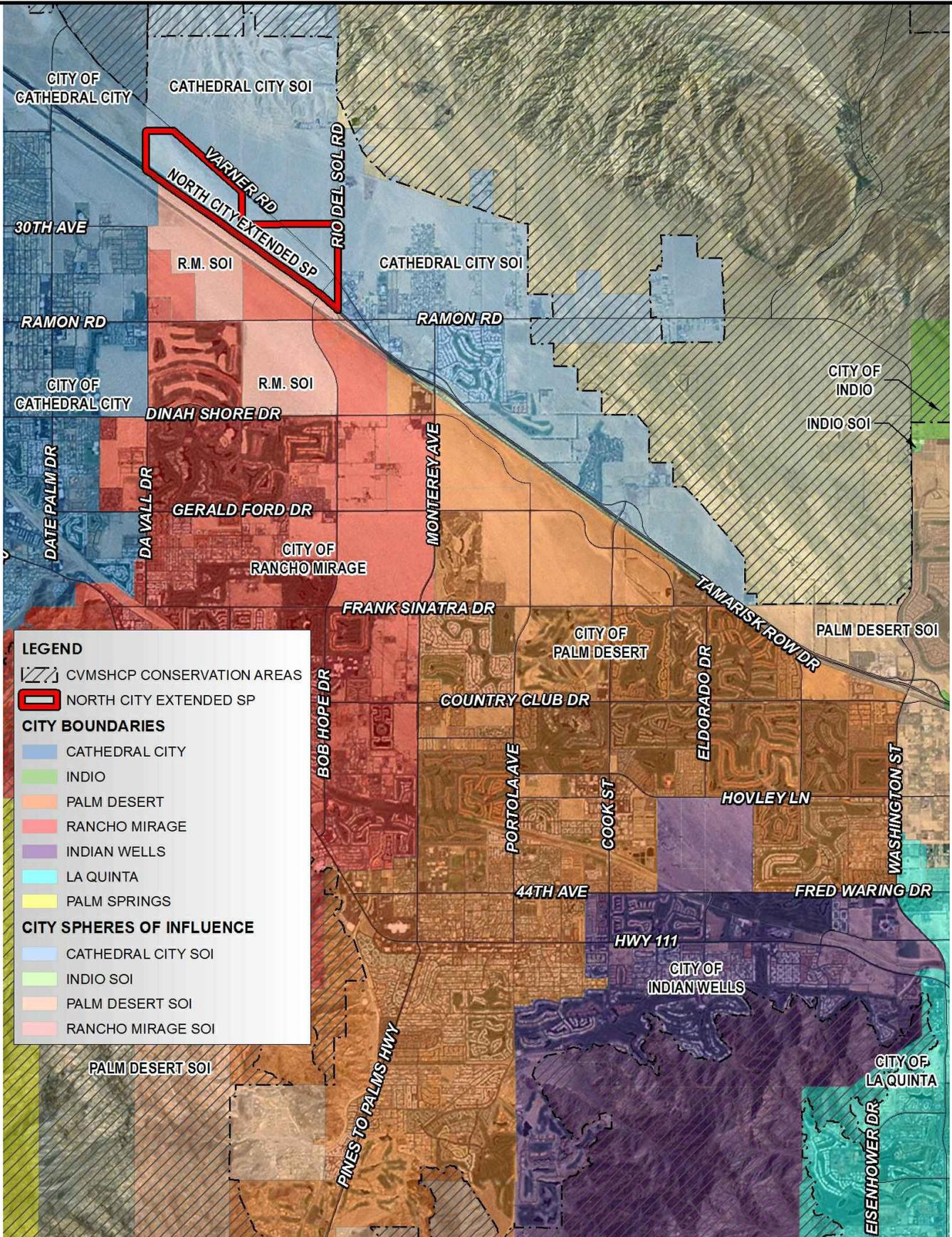
PLANNING ■ CIVIL ENGINEERING ■ LAND SURVEYING

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Aerial Photograph

North City Extended Specific Plan
Environmental Impact Report

Exhibit 3.10-1
Page 3.10-5



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Jurisdictions Map

North City Extended Specific Plan
 Environmental Impact Report

Exhibit 3.10-2

Page 3.10-6

C. Existing Conditions

The abundance of Aeolian (wind-blown) sand within the Specific Plan provides the prime habitat for the Coachella Valley fringe-toed lizard. This Specific Plan is located within the Coachella Valley Multi-Species Habitat Conservation Plan; however, this area is not located within a Conservation Area of this Plan. Property located directly to the north of this Specific Plan is located within the Tribal Habitat Conservation Plan for the Agua Caliente Indian Reservation (2010).

Vacant, undeveloped land currently abuts the Specific Plan on the west and north, and the Interstate Highway 10 right-of-way forms the southern boundary. Land to the east of Rio Del Sol Road includes the unincorporated Thousand Palms Community, which recently formed part of the Cathedral City Sphere of Influence. This community includes, among other uses, light industrial, residential and highway commercial development. Existing commercial uses line the Varner Road corridor and largely serve the Interstate Highway 10 area with fueling stations, hotels and fast-food restaurants.

The entirety of this North City Extended Specific Plan is currently zoned “Light Industrial” (LI) in Riverside County, which permits “industrial and related uses including warehousing/ distribution, assembly and light manufacturing, repair facilities and supporting retail uses”. This is consistent with the “Light Industrial” land use indicated for this area in the Western Coachella Valley Area Plan of the Riverside County Integrated Project (RCIP).

D. 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 land use and planning perspective. Would the project:

- a) Physically divide an established community?
- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, Specific Plan, local coastal program, or Zoning Ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

E. Project Impacts Found Not To Be Significant

As stated previously, the immediate area consists primarily of vacant desert land within the Specific Plan as well as to its north, west and south. Immediately to the east of the SP, the unincorporated Thousand Palms Community includes light industrial and highway-oriented commercial uses as well as low density residential neighborhoods. Characteristics of these existing Thousand Palms neighborhoods to the east include: relatively low density Single Family Detached and Mobile Home Residential areas; single story Light Industrial and Business Park buildings; conventional strip highway commercial” uses including fast food restaurants, automotive services and minor personal services and office buildings.

- a) Therefore, because the site abuts the edge of existing development, no impacts are anticipated relating to the physical division of an established community. The project will not divide, but rather add new light industrial, commercial and housing land uses to the immediate vicinity which consists of similar but lower density land uses in the Thousand Palms Community to the east. In addition, the proposed site design and architecture outlined in this Specific Plan will be compatible with, as well as an extension of, the design standards of the North City Specific Plan, located adjacent to the western boundary of this SP which has been adopted by the City of Cathedral City in conjunction with a previously successful annexation effort for that area.

The proposed development of the NCESP area includes similar as well as complementary land use activities organized in a higher density and master planned context, closely following the vision statement, goals and policies of the North City Specific Plan which was adopted by the City of Cathedral City in 2009 in conjunction with the annexation of that area. The objectives of this Specific Plan are summarized as follows:

- 1) Land Use:** To provide for mixed use development within the Specific Plan by designating land uses and intensities to meet the needs of anticipated growth and to achieve Cathedral City’s objectives, including; creating a jobs/ housing balance in North City, creating the opportunity for a regional commercial/ destination resort development at the new I-10/ Bob Hope Drive interchange, creating a range of housing opportunities and choices, creating desirable environment for both residents and visitors, and creating a development which incorporates sustainable design and development practices.
- 2) Economic Development:** To encourage a complementary mix of commercial and industrial development in the Specific Plan that will enhance the long-term

financial stability and fiscal viability of Cathedral City and establish North City Extended as a commercial and job employment center.

- 3) Open Space and Natural Resources:** To preserve and enhance an interconnected open space framework which complements the natural desert environment, including the following elements; preservation of the natural topography and drainage patterns, promotion of water conservation and water quality, creation of a comprehensive and integral open space network and trails system, assurance that views into the Specific Plan from I-10 are attractive and inviting, protection of views and vistas from the Specific Plan toward the surrounding mountain ranges and Mt. San Jacinto, and enhancement of the pedestrian environment with comfortable gathering spaces.
- 4) Circulation:** To create a multi-modal circulation system which; separates local project traffic from regional traffic flows, provides convenient access to Interstate Highway 10, provides access for all modes of transportation while maintaining efficient circulation and accessibility, enhances connectivity through the development of Valley Center Boulevard, limits the impact of truck traffic on residential neighborhoods and connects the North City SP with the rest of Cathedral City and the Coachella Valley.
- 5) Parking:** To provide adequate, efficient vehicular parking throughout the Specific Plan Area, while avoiding an oversupply of parking through the use of shared parking and reduced parking requirements where they are judged to be appropriate, and encourage alternate modes of public transportation.
- 6) Infrastructure:** To provide a complete system of public infrastructure, including sewer, water and storm drainage, to meet the need of future development within the Specific Plan while providing a sustainable, long-term supply of water that is available to the area.
- 7) Adaptability:** To provide development plan and program flexibility to adapt to changing market dynamics through the implementation of a Land Use Equivalency (LUE) Program; and to facilitate the maintenance of adequate Open Space to accommodate a stormwater management system of retention/detention basins and drainageways through the implementation of a Transfer of Development Rights (TDR) Program.

The North City Extended “Conceptual Land Use Plan” is illustrated in Exhibit 2.0-5. The stated central theme of the “Site Plan” is a focus on the creation of compact, walkable neighborhoods which support healthy lifestyles, and multiple transportation options, all integrated within an “Open Space” framework that is intended to complement and enhance the existing desert environment of the Specific Plan. This framework

emphasizes sustainable environmental and site design principles appropriate to the native desert, and an overall landscape design theme which also emphasizes low maintenance and water requirements of the desert.

A primary organizing framework of the “Conceptual Land use Plan” is an integral “Open Space” system which integrates several basic components: 1) a subsystem of stormwater drainage corridors and retention basins; 2) view corridors to mountain range panoramas in all directions, with an emphasis on Mt. San Jacinto to the west; 3) a variety of landscaped water features within a “Desert Oasis” theme; 4) planned Community Park and Neighborhood Parks, including public recreational facilities, for the use of residents of the Specific Plan; 5) a network of bikeways and pedestrian walkways which provide connectivity to all open space system components; 6) a landscaped linear parkway along the north right-of-way line of Interstate Highway 10 which serves as a noise buffer as well as a designed “edge” to the freeway frontage; 7) landscaped wind buffers along the western edge of the project; and 8) Primary and Secondary Gateways to the Specific Plan which emphasize and highlight the overall landscape design theme of the “Open Space” system.

A second organizing framework of the “Conceptual Land Use Plan” is a system of landscaped “Streetscapes” which complements the “Open Space” system previously discussed. This system includes the following linkages: 1) Interstate Highway 10 corridor improved with a linear parkway and multi-use trail along its north right-of-way line; 2) Varner Road corridor, improved as a “Modified Major Highway”, with a landscaped central median and parkways which include a multi-use pathway and sidewalk; 3) a new Valley Center Boulevard, classified as a “Major Highway”, which is intended to serve as the plan’s central visual and circulation spine, including landscaped central median, parkways and a multi-use pathway and sidewalk. Also, within this system, a themed “Main Street” central corridor is directed through a planned “Village Center” as a means to enhance pedestrian activity, on-street parking options and flexibility for mixed retail/residential uses in the central commercial core of the “Conceptual Land Use Plan”.

Within the two organizing framework systems, the “Conceptual Land Use Plan” integrates four (4) designated land use and zoning districts. Of these, the Mixed Use-Urban (MU-U) and Mixed Use- Neighborhood (MU-N) districts are included in the adopted North City Specific Plan and the Light Industrial (LI) and Open Space (OS) districts are currently included in Cathedral City’s Zoning Ordinance. The districts are summarized as follows:

- **Mixed Use-Urban (MU-U):** Takes advantage of freeway visibility and accessibility along the I-10 corridor, including public transportation routes, to accommodate regional and community scale commercial and mixed use

projects and provides for a mix of higher density housing such as condominiums, apartments and vertical mixed use options.

The objectives of the MU-U district are to: 1) create the maximum amount of commercial development at a variety of scales, from regional to community serving retail and resort/ hotel/ recreational complexes; 2) encourage higher density residential development in close proximity to employment uses and services; 3) foster pedestrian-oriented activity nodes by providing a mix of uses in compact and walkable areas; and 4) provide appropriate locations for a range of live/work activities such as residential over retail and live/work lofts.

The maximum gross Floor Area Ratio (FAR) for the commercial component of a development project is 1.0; for a residential component, the maximum gross density is 45 dwelling units/ acre. The maximum building height is 65 feet or 5 stories, whichever is less.

- **Mixed Use-Neighborhood (MU-N):** Provides for a variety of lower density housing types including apartments, town homes and single family residences with some flexibility for mixed use options.

The objectives of the MU-N district are to: 1) promote a variety of housing types and range of densities to accommodate diverse housing needs; 2) provide residential uses that are proximate to supportive commercial services in a mixed use environment; 3) foster pedestrian-oriented activity area by providing a mix of uses in compact and walkable areas; and 4) encourage new housing opportunities, such as live/work units and residential over retail.

The maximum gross Floor Area Ratio (FAR) for the commercial component of a development project is 1.0; for a residential component, the maximum gross density is 25 dwelling units/ acre. The maximum building height is 45 feet or 3 stories, whichever is less.

- **Light Industrial (I-1):** Provides planned business campus and light industry sites for tax base enhancement and job creation.

The purpose and intent of this use district is to provide a wide diversity of industrial uses in areas where such uses are not likely to have adverse effects upon each other or upon neighboring residential or commercial areas. Uses permitted are those generally regarded as “light industry”, conducted

primarily indoors, but which may require limited outdoor storage or assembly areas.

The maximum site coverage by building(s) is 80%; the maximum building height is 36 feet or 3 stories except where abutting a residential district, in which case the maximum height shall be that of the residential district at all locations within 50 feet of the residential district boundary.

- **Open Space (OS):** Provides for the preservation of the “Open Space” network, as previously discussed, as well as provisions for solar and wind generation. This system will work in concert with a Transfer of Development Rights (TDR) program in order to achieve the “Open Space” system.

The “Open Space” designation is to be placed on property under one of the following circumstances: 1) when by the nature of its use, such as regional transmission of electricity, or its natural limitation, such as being subject to flooding or faulting, make the property inappropriate for habitation or intensive development; or 2) when the property is under public control and is intended for the development of public uses (buildings may be permitted in this instance).

Further, two methodologies are to be implemented to address development plan/program flexibility and adaptability issues: 1) a Land Use Equivalency (LUE) Program which will provide flexibility in order to adapt to changing market dynamics through a system of equivalent impact land use “exchanges”; and 2) a Transfer of Development Rights (TDR) Program to facilitate the maintenance of adequate Open Space to accommodate an environmentally sensitive stormwater management system of retention/ detention basins and drainageways by permitting the transfer of property “yield” from designated stormwater retention basin sites to other nearby property within the Specific Plan Area.

The NCESP is also intended to have a landscape design theme which complements and enhances its natural desert setting, yet presents a “Desert Oasis” thematic emphasis. New development is to be transitioned into the natural environment by respecting the existing native habitat and site specific desert systems. This is to be achieved by complementing and enhancing a network of natural open areas and creating recreation spaces, streetscapes, parks and plazas that are planted with an ecologically appropriate palette of low-maintenance and low-water requiring materials that are indigenous or readily adaptable to the Coachella Valley.

Relative to selected Plant Materials in the “Landscape Plan”, selected materials are to be drought-tolerant and low maintenance, generally following the plant material palette

listed in the Coachella Valley Water District's (CVWD's) "Lush and Efficient Landscape Gardening" publication. This palette is consistent with the 2010 Coachella Valley Water Management Plan by the Coachella Valley Water District (CVWD).

In order to support the future development of the Specific Plan, a backbone vehicular circulation system is intended to provide adequate access throughout the interior of this NCESP as well as provide connectivity to the North City SP and existing and future residential and commercial development within Cathedral City, Rancho Mirage, the Thousand Palms Community and other areas within the Coachella Valley. The sizing of these roadways has been determined based on traffic model forecasts from the RIVTAM traffic model. The circulation network is intended to respond to and respect existing topographical conditions and to minimize impacts on washes that cross the area. Also, this proposed circulation system is consistent with Riverside County Integrated Project (RCIP) and Riverside Transportation Plan (RTP) designations and Circulation Analysis as referenced in the Transportation/ Traffic section of this EIR.

The roadway classifications proposed within the Vehicular Circulation Plan are consistent with those included in the North City Specific Plan and are summarized as follows:

- **Modified Major Highway:** The right-of-way width of a Modified Major Highway (Varner Road) is to be 102' with two lanes in each direction and a 14' landscaped central median. Curb-to-curb width will be 70 feet, with no on-street parking or bike lanes.
- **Major Highway:** The right-of-way width of a Major Highway (the new Valley Center Boulevard and DaVall Drive) is to be 112' with two lanes in each direction and a 25' central landscaped median. Curb-to-curb width is to be 81 feet, with no on-street parking or bike lanes.
- **North City Collector:** The right-of-way width of a North City Collector is to be 56' with one 11 foot wide traffic lane in each direction, with no central median. Curb-to-curb width is to be 36' with an on-street parking lane on each side of the street. Through the designated "Village Center" of the plan, a special, modified section of Collector is to designated as a "Main Street", with on-street diagonal and/or parallel parking on each side of the street and a 10' central landscaped median and 15' sidewalks on both sides. The right-of-way width of this section is to be 106'.
- **Industrial Collector:** Located within the "Light Industrial" areas of the plan, the right-of-way width to be 66' with a pavement width of 48'. It will have two 12' wide traffic lanes in each direction.

Complementary to the vehicular Circulation System previously described, a Bike and Trail Network included in the plan incorporates pedestrian circulation as a component of the system. This network includes the following linkages and is consistent with the Bike and Trail Network established in the North City Specific Plan:

- Multi-Use Trail within Parkway adjacent to and along I-10: This trail will provide an uninterrupted off-street/ open space corridor path for pedestrians and bicycles (Class I Bikeway) along the southern edge of the SP and is to be an easterly, seamless extension of the trail included in the North City SP. Trail width is to vary between 12' and 16'.
- Western Coachella Valley Regional Multi-Use Trail: This network component is to be included within the western Coachella Valley Regional Trail System and will link this SP with North City SP and to a regional trail network. This multi-use pathway is to be located along the south side of Varner Road and is to accommodate both pedestrians and bicycles (Class I Bikeway). Trail width is to be 12'.
- Valley Center Boulevard Multi-Use Trail: This trail link is to be located along the south side of the new Valley Center Boulevard and will serve both pedestrians and bicycles (Class I Bikeway) within its varying 12'- 14' width. It will also be linked to the regional trail network.
- Class II Bikeways: Striped on-street bike lanes providing one-way bicycle travel are proposed on DaVall Drive and along Collector Streets within this SP.
- Sidewalks: 5' wide sidewalks are included within all street sections, complementing the multi-use trail system. In addition, property owners are to provide additional trail and bikeway easements over their developments to connect to the overall pedestrian/ bikeway network as well as to the parkway along the south side of Interstate -10.

Regulatory Context Review of the Plan

Review of the North City Extended Specific Plan, within the framework of the Regulatory Context as previously discussed, leads to the following findings and conclusions:

Local Plans and Policies

- **General Plan Land Use Element/ City of Cathedral City**

The Cathedral City General Plan served the as the regulatory foundation for establishing goals, policies and programs which guided the preparation of the North City Specific Plan, which was adopted by the City in 2009. This adoption triggered a General Plan Amendment which brings the two documents into a status of full consistency.

- **North City Specific Plan (NCSP)/ City of Cathedral City**

The North City Extended Specific Plan has been prepared based on the previously adopted North City Specific Plan. Once adopted, this Specific Plan will form the basis for an additional General Plan Amendment in order to create a status of full consistency between this Specific Plan and the Cathedral City General Plan.

- **Zoning Ordinance/ City of Cathedral City**

The North City Extended Specific Plan employs four (4) Zoning Districts to implement provisions of the plan. Two of these districts, Mixed Use-Urban (MU-U) and Mixed Use Neighborhood (MU-N), were established in the North City Specific Plan and were therefore previously incorporated into the Cathedral City Zoning Ordinance. Two other districts, Light Industrial (L-I) and Open Space (OS) were established by Chapter 9 of the Cathedral City Municipal Code, specifically Section 9.40 (Light Industrial) and Section 9.42 (Open Space). The provisions of these Zoning Districts are re-stated with slight modifications to reflect the provisions of the NCESP.

- **Coachella Valley Multiple Species Conservation Habitat Plan (MSHCP)**

The “Conservation Area” of the MSHCP is not included within this Specific Plan area, but was included in the North City Specific Plan area to the north and west of this SP. This area will pay the required fees for the MSHCP

- **Agua Caliente Band of Cahuilla Indians Tribal Habitat Conservation Plan (THCP)**

The THCP is not included within the North City Extended Specific Plan area, but is located immediately north of this SP. This SP project will consult with the Tribe during the public review and SB 18 consultation -process.

Regional Plans and Policies

- **Western Coachella Valley Area Plan of the Riverside County Integrated Project (RCIP)**

The Western Coachella Valley Area Plan of the RCIP shows the NCESP as primarily “Light Industrial” land use along the Varner road corridor north of Interstate Highway 10. The Vision Statement and supporting policies of this plan are consistent with the Cathedral City General Plan and, therefore, with the North City Extended Specific Plan.

- **Destination 2030: 2004 Regional Transportation Plan (RTP) – SCAG 2004**

The Cathedral City General Plan and, therefore, the North City Extended Specific Plan are consistent with and supportive of the RTP.

- **Compass Blueprint Growth Vision – SCAG 2004**

The NCESP applies SCAG’s regional principles of Mobility, Livability, Prosperity and Sustainability through its Vision Statement and development goals, objectives and policies.

Therefore, two additional findings are made regarding Threshold Criteria and related Project Impacts Found Not to be Significant:

- b) The North City Extended Specific Plan is to be adopted by the City of Cathedral City in conjunction with the overall annexation process along the north side of Interstate Highway 10 (to and including the Thousand Palms Community). This Project does reflect a somewhat higher land use intensity profile than existing Regional Plans; however the plan as proposed will not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project, following implementation of standard conditions and mitigation measures included in this EIR. The Specific Plan outlines the standards for the development for specific criteria which are consistent with those of the previously adopted North City Specific Plan, located to the immediate west of this SP.
- c) Further, the project will not conflict with any applicable habitat conservation plan or natural community conservation plan. Specifically, the SP is not within a “Conservation Area” of the Coachella Valley Multi-species Habitat Conservation Plan (MSHCP) which outlines policies for conservation of habitats and natural communities for all areas in the Coachella Valley except the various Indian reservations.

F. Potentially Significant Impacts

As stated previously, with regards to any applicable habitat conservation plan or natural

community conservation plan, the property is not within the area of the Coachella Valley Multi-species Habitat Conservation Plan (MSHCP) which outlines policies for conservation of habitats and natural communities for all areas in the Coachella Valley except the various Indian reservations. This Project has significantly higher land use intensities and potential yields than existing regional plans, but review and approval of the project by the City of Cathedral City and implementation of standard conditions and mitigation measures of the EIR offset this potentially significant impact. Likewise, the Air Quality Analysis of the Air Quality Management Plan and the Transportation Analysis relating to the RTP requirements will ensure that the project has less than significant impacts relative to land use Planning. Thus no Potentially Significant Impacts have been identified.

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

As required, the project will be processed through the City of Cathedral City; and through this process impacts resulting from traffic and noise will be reduced to less than significant levels.

H. Level of Significance after Mitigation

Development of the North City Extended Specific Plan is anticipated to result in less than significant impacts related to land use and planning. Therefore, no mitigation measures are necessary, since impacts related to land use and planning are expected to be less than significant.

I. Resources

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.

City of Cathedral City General Plan (July 2002);

City of Cathedral City General Plan EIR (April 2002);

North City Specific Plan and EIR (May and July 2009).

3.11 MINERAL RESOURCES

A literature review was conducted for this analysis to determine the potential impacts to mineral resources associated with the North City Extended Specific Plan implementation. The assessment relied on a range of topic-specific references to obtain the most useful information about the subject of mineral resources in relation to the project. These included relevant sections of the Riverside County Integrated Plan (RCIP) General Plan and Environmental Impact Report (EIR) (October 2003) as well as the City of Cathedral City Comprehensive General Plan (adopted in 2002 and amended in 2009) and corresponding EIR. The Mineral Resource Data System (MRDS) of the United States Geological Survey (USGS), studies by California Geological Survey prepared pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA) and *Special Report 159: Mineral Land Classification: Aggregate Materials in the Palm Springs Production-Consumption Region ("Special Report 159")* (1988), prepared by the California Department of Conservation Division of Mines and Geology were also referenced.

A. Regional Setting

The North City Extended Specific Plan (NCESP) is located in the Coachella Valley region of Riverside County, California and within the Sphere of Influence of the City of Cathedral City. The Coachella Valley is described as being formed from a deep fault-controlled extension which has been filled in with stream deposited (alluvial) materials from the surrounding hills and mountains. Strong winds emanating from the San Gorgonio Pass actively contribute to the distribution of sand deposits along the central axis of the Valley. As a result, the mineral resources of the desert floor generally consist of sands and gravels, mostly along or near the local drainages, including the Whitewater River and Coachella Valley Stormwater Channel.

The California Geological Survey (CGS) provides the most comprehensive information about mineral resources in California. In accordance to the Surface Mining and Reclamation Act of 1975 (SMARA), mineral land classification maps and reports were developed to assist in the protection and development of mineral resources. When developing land-use plans and making land-use decisions, local agencies must utilize this information about mineral classifications. Local and regional mineral deposits are classified according to the following Mineral Resource Zones (MRZs) designations:

MRZ -1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists.

MRZ-3: Areas where the significance of mineral deposits cannot be evaluated from the available data. Hilly or mountainous areas underlain by sedimentary, metamorphic, or igneous rock types and lowland areas underlain by alluvial wash or fan material are often included in this category. Additional information about the quality of material in these areas could either upgrade the classification to MRZ-2 or downgraded it to MRZ-1.

MRZ-4: Areas where available information is inadequate for assignment to any other mineral resource zone.

Special Report 159, prepared by the California Department of Conservation, Division of Mines and Geology, contains information about mineral resources for the Palm Springs Production-Consumption Region, which generally conforms to the Coachella Valley. This report from 1988 recognizes that the Coachella Valley has adequate quantities of low-cost, high-quality aggregate material and explores the local mining operations at that time (1988). Aggregate is considered an indispensable material to the building industry because it is a significant material component of asphalt, concrete, road base, stucco and plaster. Local or regional construction industries tend to be dependent on readily available aggregate deposits within reasonable distance to the market region. Because aggregate is considered a low unit-value, high bulk-weight commodity, aggregate for construction must be obtained from nearby sources in order to minimize costs. If nearby sources do not exist, then transportation costs can exceed the value of aggregate. Transportation cost is considered one of the principal constraints defining the market area for aggregate operation, so the presence of local aggregate quarries is deemed important to the Coachella Valley region.

According to Special Report 159, there are eight (8) active aggregate quarries in the Coachella Valley region as of 1988. Two quarries are identified in the north Palm Springs area and four sites are situated in the eastern Coachella Valley near Indio and Coachella. Two sites, E.L. Yeager Construction Co. and A-One Aggregates, Inc., are situated approximately 2 miles northeast of the project and adjacent to each other. The production at these sites is primarily attributed to the deposits of a small unnamed drainage path north of the community of Thousand Palms. No other active aggregate quarries or mineral resources are identified in North City Extended Specific Plan area or in its immediate surroundings. In this report, the NCESP is located in an area identified by the Office of Planning and Research (OPR) as either urbanized or projected to urbanize by the year 1990 according to this source.

The Mineral Resources On-Line Spatial Data platform of the United States Geological Survey (USGS) contains comprehensive information about mineral resources throughout the United States, including this project's region. Specifically, the Mineral Resources Data System (MRDS) stores a compilation of general facts about metallic and nonmetallic mineral resources. According to the MRDS database, there are nine (9) mines within a three-mile radius of the project. The commodity for these mines is sand and gravel for the primary purpose of construction. A majority of these sites are located to the east and northeast of the annexation area in unincorporated Riverside County territory. These sites are generally clustered at the base of Indio Hills. Seven (7) of these sites are considered past-producers while two (2) are considered producers.

A past-producer mine is one that once operated, but is currently closed. The equipment or structures at these facilities may have been removed or abandoned. Based on the reported locations, the nearest mining sites to the project are named the Southwest Pit and the Thousand Palms Community Pit, located east of Rio Del Sol and north of Interstate 10. The Southwest Pit is situated approximately 0.5 miles to the southeast of the project. The Thousand Palms Community Pit is located approximately 0.25 miles to the east. The geologic unit or mineral resource associated with these sites is primarily quaternary alluvium and marine deposits. These alluvium deposits comprise eroded materials from nearby hills and mountains located to the north.

Cathedral City General Plan

In the City of Cathedral City Comprehensive General Plan (2009), mineral resources are described as naturally occurring crystalline substances which are economically valuable and which provide materials for a variety of uses, making them important to community development and commerce. The significant accumulations of sand and gravel, or aggregate, are considered a locally important mineral resource. Aggregate is found throughout the Coachella Valley as a result of the transport of soils and rocks from the local mountains to the Valley floor. Based on the State's mineral resource studies and maps referenced in this document, the entire City and planning area are identified under Mineral Resource Zone 3 (MZR-3), a designation for areas where the significance of mineral deposits cannot be determined from the available data. The project site is not located on or near a Mineral Resource Zone 2 (MRZ-2), which is of greatest significance regarding the likelihood of mineral resource deposits.

Riverside County General Plan

Under the County of Riverside General Plan, the topic of mineral resources is primarily addressed in the Multipurpose Open Space and the Land Use Elements. The identification and assessment of non-renewable mineral resources largely based on existing information resulting from the SMARA of 1975. Figure OS-5 in the Multipurpose Open Space Element further demonstrates that the project site and a greater part of the Coachella Valley has undetermined mineral deposits (MZR-3). As a result, the project

site and its immediate surroundings are not classified as Aggregate Mineral Resource areas by the State of California. Mineral resources are only known in limited areas of the Coachella Valley, where available geologic information indicates that there is a likelihood of significant mineral deposits.

Under the Land Use Element of the County of Riverside General Plan, the designation of Open Space – Mineral Resource (OS-MIN) allows for mineral extraction and processing facilities. Areas held in reserve for future mining activities also fall under this designation. Ancillary structures or uses may be permitted which assist in the extraction, processing, or preservation of minerals. Actual building or structure size, siting, and design will be determined on a case by case basis. Existing policies applicable to this land use designation (LU 21.1 to 21.5) aim to protect it from incompatible activities. The North City Extended Specific Plan is not located on or near any OS-MIN designation. The nearest land with this designation is located approximately 13 miles to the east in unincorporated Riverside County territory located north of the City of Indio.

B. Existing Conditions

The NCESP is situated north of the Interstate 10 Freeway and primarily west of Rio Del Sol. This portion of the Coachella Valley has a general decline in elevation from northwest to southeast. The descent in elevation originates from Edom Hill and Indio Hills to the north. The Specific Plan area’s highest point of elevation is approximately 300 feet above sea level at the northwestern edge, sloping southeast to an elevation of approximately 240 feet. The site is largely characterized as vacant, undeveloped desert land. There are no mining facilities or related operations.

C. 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 mineral resources perspective. Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local General Plan, Specific Plan or other land use plan?

D. Project Impacts Found Not To Be Significant

There are no known mineral resources or mining operations on or adjacent to the project. The project site is not recognized for having known mineral deposits according to the State's various geologic studies and maps prepared under the Surface Mining and Reclamation Act of 1975. The existing designation of Mineral Resource Zone 3 (MRZ-3) applicable to the project property does not ascertain the presence of these deposits. The sites in the Coachella Valley region where mineral deposits are identified or where mining operations are taking place would not be physically impacted by the project or their access precluded. Therefore, construction and operation of the Specific Plan will not result in the loss of availability of known mineral resources that would be considered valuable to the region or the residents of the State. As previously discussed, the most prominent mineral resource in the Coachella Valley region is aggregate, the deposits of which are not known or delineated in the Specific Plan area. Less than significant impacts are anticipated related to this topic.

The project will not result in the loss of a locally-important mineral resource recovery site delineated on a local General Plan, Specific Plan or other land use plan. The NCESP does not occupy any mineral resource recovery site as delineated by the existing Cathedral City General Plan (2009) and the Rancho Mirage General Plan (2005). At the County level, the project does not occupy any area assigned for mineral extraction, processing or held in reserve for future mining activities under the Open Space – Mineral Resource land use designation of the Riverside County General Plan. The nearest area with an Open Space - Mineral Resource designation is located approximately 8.5 miles to the east in unincorporated Riverside County territory located north of the City of Indio. Less than significant impacts are expected related to this topic.

E. Potentially Significant Impacts

No potentially significant impacts to mineral resources are anticipated to result from proposed project development.

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

Development of the North City Extended Specific Plan is anticipated to result in less than significant impacts to mineral resources. Therefore, no mitigation measures are necessary to retain a level of significance.

G. Level Of Significance after Mitigation

Development of the NCESP is anticipated to result in no impacts to any mineral resources. Therefore, no mitigation measures are necessary to retain a level of significance.

H. Resources

City of Cathedral City Comprehensive General Plan Update, prepared by Terra Nova Planning and Research, Inc. Adopted July 31, 2002, Amended November 18, 2009.

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.

Special Report 159: Mineral Land Classification: Aggregate Materials in the Palm Springs Production-Consumption Region (1988), prepared by the California Department of Conservation Division of Mines and Geology.

3.12 NOISE

The discussion presented in this section is based on a variety of information sources, including the project-specific Noise Assessment, completed by Mestre Greve Associates (February 12, 2013), the Noise Element from the Cathedral City General Plan (Amended in 2009), the Noise Element from the Rancho Mirage General Plan (2005), and the Noise Element (Chapter 7) from the Riverside County Integrated Plan (RCIP) General Plan and Environmental Impact Report (EIR) (October, 2003).

A. Background

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air, and are sensed by the human ear. Sound is generally characterized by several variables, including frequency and amplitude. Frequency describes the sound's pitch (tone) and is measured in cycles per second (Hertz [Hz]), while amplitude describes the sound's pressure (loudness).

Noise is generally defined as unwanted sound that disrupts normal activities or that diminishes the quality of the environment. It is usually caused by human activity that adds to the existing acoustic setting of a locale. The responses of individuals to noise levels are diverse and influenced by multiple factors, including the type of noise, the perceived importance of the noise, its appropriateness to the setting, noise sensitivity of the individual, and the time of day as well as the type of activity during which the noise occurs. Noise is generally deemed undesirable when it interferes with normal activities, causes actual physical harm, or has an adverse effect on health.

Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). The human ear does not respond uniformly to sounds at all frequencies. It tends to be less sensitive to low and high frequencies than to medium frequencies that correspond with human speech. In response to this, the A-weighted noise level or scale has been developed to correspond better with peoples' subjective judgment of sound levels. This A-weighted sound level is called the "noise level" referenced in units of dB (A).

Noise sources occur in two forms: (1) point sources, such as stationary equipment or individual motor vehicles and (2) line sources, such as a roadway or railroad with a large number of stationary or mobile point sources (i.e. motor vehicles and train cars, respectively). Sound dissipates exponentially with distance from the noise source. Such attenuation is commonly referred to as a distance loss. For a single point source, sound levels decrease (attenuate) approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced from a line source, the sound decreases 3 dB for each doubling of

distance in a developed environment. Line source noise in a relatively flat, undeveloped environment with absorptive vegetation decreases 4.5 dB for each doubling of distance.

Moreover, the presence of structures (e.g., solid walls and buildings) and natural topography (e.g., hills) that obstructs the line-of-sight between a noise source and a receptor tends to reduce the noise level. This type of sound attenuation is known as “barrier insertion loss.” Partial attenuation will occur to a lesser extent if the line-of-sight between the source and its receptor is partially blocked.

Several scales have been developed which address community noise levels. Those that are applicable to this analysis are the Equivalent Noise Level (Leq) and the Community Noise Equivalent Level (CNEL). Leq is the average A-weighted sound level measured over a given time interval.

Leq can be measured over any given time period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods. CNEL is another average A-weighted sound level measured over a 24-hour period.

The CNEL scale, as described above, is expressed as a weighted aggregate number. The time of day corrections which comprise the CNEL model require the addition of 5 decibels to sound levels from 7:00 p.m. to 10:00 p.m. in the evening, and an additional 10 decibels to sound levels occurring between 10:00 p.m. and 7:00 a.m. Because there is a general decrease in the overall amount and loudness of noise generated during these times as compared to daytime hours, sensitivity to sound increases. Therefore, sounds seem louder in the evening and at night and are weighted accordingly.

In general, sensitive noise receptors, such as residential uses, schools, libraries, churches, hospitals and nursing homes are considered unsuitable land uses in unmitigated noise environments where exterior CNEL levels exceed 65 dB. Commercial and industrial uses, conventional hotels and motels, neighborhood ballparks and playgrounds, and other outdoor spectator sport arenas are considered less sensitive land uses. Heavy commercial and industrial uses, transportation and utility land uses are considered least sensitive, with allowable unmitigated exterior ambient noise levels of up to 70 CNEL.

Excessive noise levels can result in psychological and physiological impacts ranging from annoyance to temporary or permanent hearing loss and mental distress. In recent years, concerns regarding the potential impacts of noise pollution have increased significantly. Community sounds commonly range between very quiet (40 dBA) to very loud (100 dBA). A conversation carried on at three feet has a sound level of about 60 dBA.

B. Regional Setting and Existing Conditions

Regional noise impacts in the Coachella Valley are known to primarily result from transportation sources such as roadway, air, and rail traffic. Motor vehicle traffic generally represents a major source of continuous noise, particularly affecting neighboring areas due to engine vibration, exhaust system and the interaction of tires with the roadway. The noise produced along a roadway is influenced by traffic volume, average speed and the percentage of trucks in the traffic composition.

The project is located north of a regionally important corridor formed by the Interstate 10 Freeway and the Union Pacific Railroad. The Interstate 10 Freeway and the Union Pacific Railroad traverse the Coachella Valley along an upper portion of its primary axis. Seven of the Valley's nine incorporated cities and various unincorporated areas are adjoined or traversed by these transportation routes. The railroad accommodates rail freight transport services through the Coachella Valley under the operation of Union Pacific Corporation while passenger services take place under the operation of the National Railroad Passenger Corporation, Amtrak. Interstate 10 Freeway accommodates vehicular traffic across the Valley.

The project site is presently vacant. Land west of the project is primarily undeveloped and includes the southeast-trending Interstate 10 Freeway and Union Pacific Railroad within the Cathedral City limits. To the north, beyond Varner Road, is vacant unincorporated land. To the east, beyond Rio Del Sol, is the unincorporated Community of Thousand Palms, which forms part of the Cathedral City Sphere of Influence. The RCIP General Plan land use designations for this community include Medium Density Residential (MDR), Light Industrial (LI), and Commercial Retail (CR).

Nearby existing commercial facilities and establishments primarily serve the existing residential areas of Thousand Palms and the interstate transportation corridor with fueling stations, fast-food restaurants, industrial and storage facilities, and a hotel. Areas to the south of the project include Interstate 10 and the Union Pacific Railroad, beyond which is undeveloped land currently within the Rancho Mirage Sphere of Influence and Indian Reservation land attributed to the Agua Caliente Band of Cahuilla Indians. The *Agua Caliente Casino, Resort and Spa*, is also located to the south. This establishment is a regional destination that includes a multiple-story hotel building with a concert venue, casino floor and multi-level parking garage.

Existing roadway noise sources near the project are primarily attributed to traffic along Varner Road to the north and Rio Del Sol to the east. Interstate 10, the Union Pacific Railroad and the Bob Hope Drive interchange generate traffic-related noise to the south and southeast of the project. The highest traffic volume at the highest speed limits occurs along Interstate 10.

Sound and groundborne vibration are also generated in the project vicinity by freight or passenger transport on the Union Pacific Railroad, however, there are factors that contribute to their partial attenuation. One factor is distance. The project's southerly boundary is separated from the Union Pacific Railroad by a distance ranging from approximately 700 to 900 feet. Interstate 10 and a swath of vacant land occupy a majority of the area separating the project from the railroad. As a result, noise and groundborne vibration levels generated by railroad traffic at a relatively lower elevation are partially attenuated, reducing their current impact on the neighboring undeveloped areas. Moreover, trains traveling along this track do not use a locomotive horn routinely, because there are no highway-rail crossings in the vicinity. Therefore, the greatest source of excessive and impulsive noise normally associated with train traffic is eliminated in the project locale. Railroad traffic noise is limited to the locomotive engines and train wheels. Train wheels tend to generate more noise along the curved sections of track. Since the segment of track south of the project and in the vicinity is linear (lacks noticeable curves), the level of noise caused by the train wheels is minimized further.

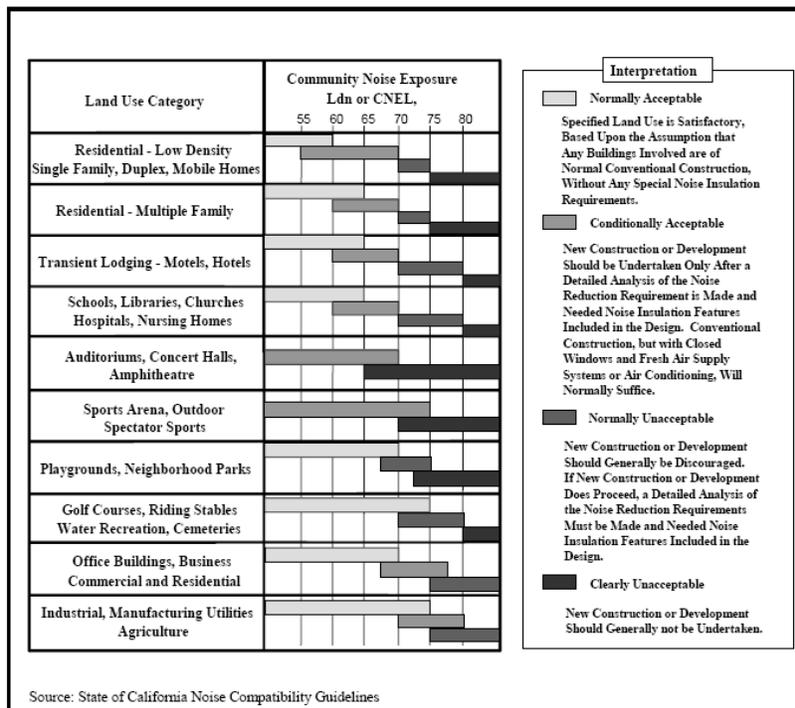
Further noise attenuation occurs due to the presence sand berms, which act as a barrier to partially obstruct the propagation of sound and groundborne vibrations from the railroad corridor toward the project. The sand transport caused by typical wind conditions has resulted in the formation of sand berms and other rises in elevation of various heights. These features are found in the swath of land between the railroad track and Interstate 10 and along the annexation area's southerly limits.

The annexation area is located north of the City of Rancho Mirage. Information that pertains to potential noise impacts was also reviewed from the Noise Element of the Rancho Mirage General Plan. According to this document, the primary source of noise for the existing community is attributed to motor vehicle traffic. Aircraft and stationary noise sources are deemed to have relatively lesser impacts. The Interstate 10 and Southern Pacific Railroad Lines are recognized for generating a more noticeable noise impact primarily to the northern areas of the City.

The City's General Plan provides a variety of collected data and modeled noise impacts, some of which are represented in the projected noise contours for the City's roadways and freeways at General Plan buildout. According to the Exhibit 3.12-2, Future Roadway Community Noise Equivalent Level (CNEL) Noise Contours, the project area is impacted by three levels of noise attributed to Interstate 10 traffic. As previously discussed, the CNEL is the average of the intensity of a sound over a 24 hour period, with corrections for time of day. The portion of the project closest to Interstate 10 is impacted by 70 CNEL. Areas farther from the freeway are affected by the 65 CNEL and 60 CNEL accordingly. Since a majority of the land in the project area is undeveloped and not considered built-out, existing traffic conditions and associated noise impacts are expected to be substantially lower than the projections.

According to the Noise Element of the Cathedral City General Plan, the City's neighborhoods are typically deemed to have the ambient noise characteristics of quiet rural areas. However, vehicular traffic throughout the City represents a major source of continuous noise. The primary line noise generators identified in the General Plan for the City and Planning Area include traffic along Interstate 10, East Palm Canyon Drive, Date Palm Drive, Vista Chino, Palm Drive, Varner Road, Edom Hill Road and Ramon Road. Freight or passenger transport service along the Union Pacific Railroad, parallel to Interstate 10, is also deemed responsible for generating excessive noise. Moreover, occasional high noise levels in the City are also attributed to commercial aviation at the Palm Springs International Airport. Other recognized noise generators include construction activities, industrial operations, lawnmowers, and home appliances. Sensitive receptors in the City and planning area include schools, one public library and one medical facility, none of which are located near the Specific Plan area.

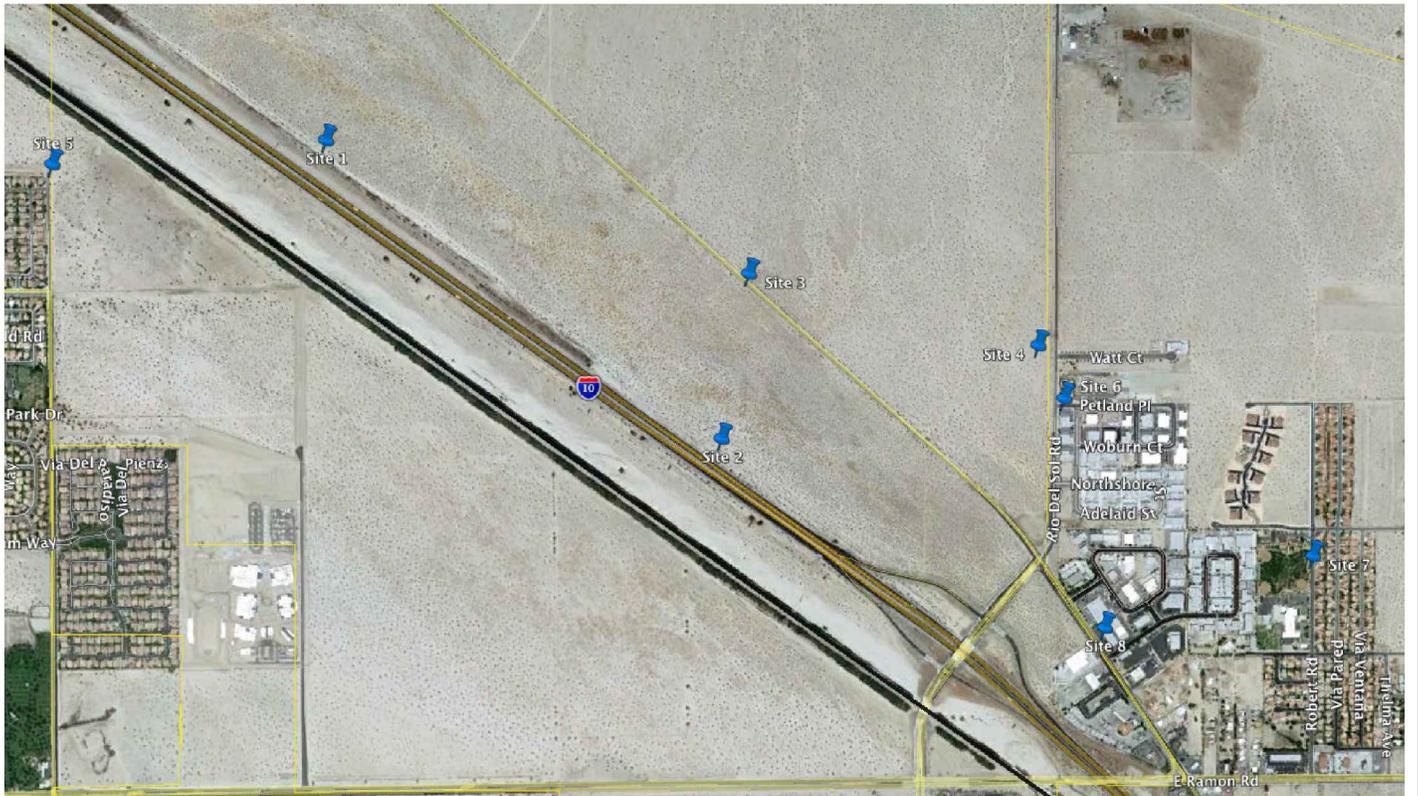
Table 3.12-1
Noise and Land Use Compatibility Guidelines



In February of 2013, Mestre Greve Associates performed a Noise Assessment for the North City Extended Specific Plan. Noise level measurements and a survey of the project area and vicinity were performed to establish the current baseline noise levels. Eight points, located north, east and south of the project, were designated for such measurements (Exhibit 3.12-1). The highway noise levels project for this specialized assessment were computed using the Federal Highway Administration Highway Traffic Noise Prediction Model and data from the project-specific traffic study. The methods

found that the Interstate 10 Freeway represents a significant noise source. Traffic along this freeway was found to have a high percentage of nighttime traffic and a high percentage of trucks in comparison to most freeways in Southern California. Additional details can be reviewed in Noise Assessment report, included in its entirety as an Appendix of this document.

Existing train noise levels were also assessed for the Union Pacific Railroad (UPRR) corridor. Existing train operations as of 2010 are estimated at 67 trains per day while future train operations are expected to increase to 137 daily freight train operations. The train noise level modeling identified the project's southerly edge as currently experiencing the worst-case unmitigated noise levels (64-67 CNEL).



*Mestre Greve Associates
Division of Landrum & Brown*

Noise Measurement Sites

North City Extended Specific Plan
Environmental Impact Report

Exhibit 3.12-1

Page 3.12-7

C. 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 noise perspective. Would the project result in:

- a) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- b) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- c) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- d) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

D. Project Impacts Found Not To Be Significant

Threshold e) is found to be less than significant because the project is not located within an airport land use plan, within two miles of a public airport or public use airport, or where the project would expose people residing or working in the project area to excessive noise levels related from air traffic or airport uses. The nearest airport to the project is the Palm Springs International Airport, located approximately 4 miles to the west. Impacts associated with threshold f) are also found to be less than significant and less relevant because the project is not located in the vicinity of a private airstrip.

E. Potentially Significant Impacts

Based on the project-specific Noise Assessment, the potential noise impacts are commonly divided into two groups; temporary and long term. Temporary impacts are

usually associated with noise generated by construction activities. Long-term impacts are further divided into impacts on surrounding land uses generated by the proposed project and those impacts that occur at the proposed project site. Following the recommended mitigation measures identified in this section based on the noise study, the project was found to have less than significant impacts related to the temporary, periodic and permanent increases in ambient noise levels as well as exposure of persons to noise levels in excess of the established standards and exposure of persons to ground borne vibration.

Short Term Noise Sources

Construction noise represents a short-term impact on ambient noise levels. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators can reach high levels.

Typical equipment that might be employed for this type of project includes graders, scrapers, front loaders, trucks, concrete mixers and concrete pumps. The peak noise level for most of the equipment that will be used during the construction is 70 to 95 dBA at a distance of 50 feet. Noise levels at farther distances would be less than this. For example, at 200 feet, the peak construction noise levels range from 58 to 83 dBA. These noise levels are based upon worst-case (i.e. loudest noise) conditions at the construction site, so these noise levels were used as the basis for predicting the worst-case construction noise estimate.

There are no existing noise sensitive receptors in the project area or in the immediate surroundings. The nearest sensitive land use is the existing residential land uses which are over 1,300 feet east of the project along Date Garden Drive. Based on a distance of 1,300 feet, the worst-case unmitigated peak (Lmax) construction noise levels could be 42 to 67 dBA at the nearest homes. The average noise levels (L50) are typically 15 dB lower than the peak noise levels. Average noise levels (L50) at the nearest existing residential buildings could be in the range of 37 to 52 dBA (L50). These are low levels of noise and will not be a significant impact for the existing residences. The project's construction operations will be required to take place only within the allowable hours, further minimizing the impacts.

Off-Site Long Term Noise Sources

Off-site impacts may be generated due to increases in traffic noise, parking lots associated with proposed commercial uses, and light industrial noise.

Increased traffic caused by the project will result in increased traffic noise levels along the roadways in the vicinity of the project. The table below shows traffic noise CNEL

level changes on the roadways affected by the project. The first data column shows the project’s contribution. Specifically, it represents the noise difference between 2035 No Project and 2035 With Project. The second data column shows the cumulative noise increase. This column represents a comparison of existing levels with the levels in 2035 With Project. The increase is due to the general increase in traffic in the area and the project.

Traffic Noise CNEL Increases (dB)

Roadway Segment		Project Impact	Cumulative Impact
Rio Del Sol Road	North of Varner Road	0.5	2.9
Bob Hope Drive	South of Varner Road	4.1	5.5
Bob Hope Drive	North of I-10 Westbound Ramps	4.2	5.6
Bob Hope Drive	North of I-10 Eastbound Ramps	2.3	4.7
Bob Hope Drive	North of Ramon Road	0.7	4.3
Bob Hope Drive	South of Ramon Road	0.6	1.6
Metroplex Drive	North of Varner Road	0.3	N/A
Varner Road	West of N Street	2.0	7.5
Varner Road	West of M Street	1.9	7.4
Varner Road	West of L Street	2.1	7.6
Varner Road	West of I Street	1.7	7.2
Varner Road	West of H Street	2.6	8.1
Varner Road	West of Valley Center Blvd.	2.8	8.3
Varner Road	West of F Street	4.0	9.5
Varner Road	West of Bob Hope Drive	4.5	10.0
Varner Road	West of Metroplex Drive	1.5	2.9
Varner Road	East of Metroplex Drive	1.4	2.7
Ramon Road	West of Bob Hope Drive	0.3	4.0
Ramon Road	East of Bob Hope Drive	0.0	1.5
Interstate 10	West of Bob Hope Drive	0.2	3.8
Interstate 10	East of Bob Hope Drive	0.3	3.6

Some of the roadway links indicate increases in traffic noise greater than 3 dB due to the project. However, the noise assessment indicates that the undeveloped condition and lack of sensitive receptors in surrounding areas would result in less than significant traffic noise impacts and will not contribute significantly to any cumulative noise impacts.

Parking Lots

The proposed project would designate areas for Mixed-Use Urban and Mixed-Use Neighborhood, which has the potential to place commercial parking lots adjacent to residential uses. The traffic associated with commercial parking lots is usually not sufficient to exceed community noise standards; however, impulsive sounds, such as

those created by car door slamming, engine start-up, alarm activation and vehicle circulation has the potential to affect nearby residents. The potential for noise impacts increase when residences are located closer than 50 feet to commercial parking lots. In such conditions, a 6 foot block wall separating the parking lot from the residential areas is recommended as a mitigation measure.

Industrial Uses

The project includes Light Industrial uses, which are separated from existing and future residential areas. The assessment anticipated no significant impacts from industrial development on existing or future noise sensitive land uses.

Long-Term On-Site Impacts

The project-specific noise assessment examined the potential noise impacts. It found that as expected, the primary source of noise impacting the project site is traffic on the Interstate 10 Freeway. Local roadways and the Union Pacific Railroad were found to have a minimal potential effect on the overall noise levels on-site.

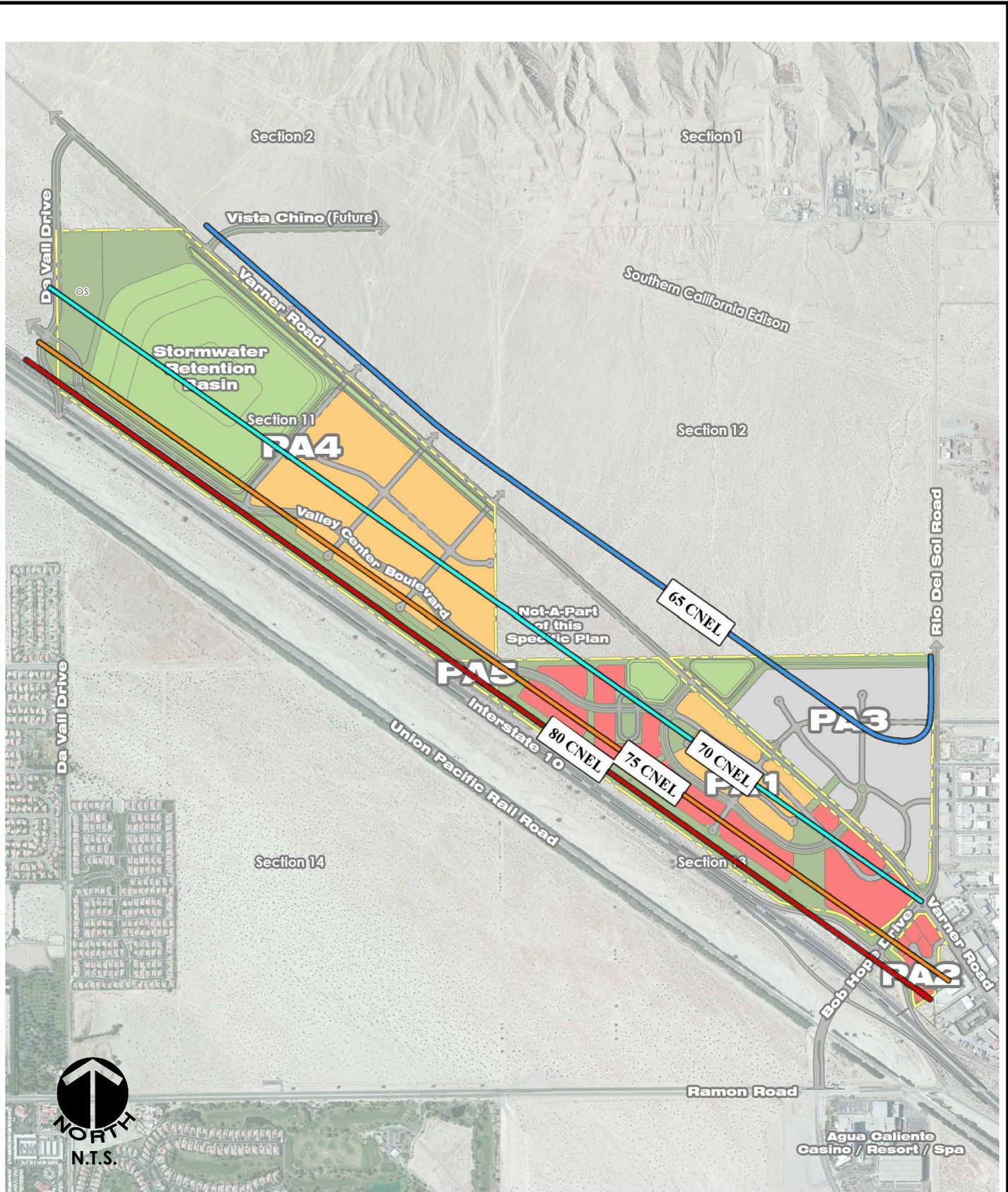
The proposed mixed-use development designation, which could include residential uses, was found to be within a distance of Interstate 10 which would result in potentially significant impacts if left unmitigated. Based on the project-specific noise study, there are several approaches that can be used to avoid the conflict between freeway noise levels and the development of residential uses. The three most common approaches are site design, noise barriers and setbacks. The combined project approach of noise barriers and site design would result in less than significant impacts.

Site Design: Site design can include a variety of approaches. For example, a residential product type that has few or no windows facing the freeway could be used along the freeway. The multi-family residences would be massed to form a wall so that the rest of the site was shielded from the noise. A second example is the use of commercial buildings massed along the freeway. These buildings if properly positioned can be used as very effective noise barriers so that residences can be constructed on the opposite side of the commercial building from the freeway. The multiple site design elements that would reduce noise impacts are incorporated into the land use configuration and site design elements of the Specific Plan.

Noise Barriers/Buffers: Per the North City Extended Specific Plan, the project's Interstate 10 frontage is to be improved as a "Freeway Open Space Buffer", a landscaped corridor ranging from approximately 200 to 250 feet wide. This buffer would exist parallel and continuous to the north I-10 right-of-way line to Bob Hope Drive. The existing vegetation and sand hummocks are planned to be removed and replaced by designed berms and themed "desertscape" treatment, which among other benefits,

would help avoid the conflict between freeway noise levels and the development of residential uses. In addition to this Freeway Open Space Buffer, an average setback of 75 feet (minimum of 40 feet) will offer space for a public parkway and provide additional noise attenuation between the proposed development and Interstate 10 traffic.

Setbacks: To reduce the noise levels with setbacks alone to a compatibility of “conditionally acceptable” for residential (i.e., 70 CNEL) would require a setback of about 1,200 feet from the I-10 centerline. This large of a setback is probably not viable for this project. Commercial and office uses become “conditionally acceptable” at noise levels of about 77 CNEL. The 77 CNEL contour lies at about 400 feet from the I-10 centerline and is close to where the current site plan is showing the extent of the mixed-use development. Therefore, setbacks alone do not appear to be viable for residential uses, but appear to be viable for the commercial and office portions of any mixed-use development. The project’s distance between the nearest proposed structures to the Interstate 10 north right-of-way line will range between 240 and 275 feet based on the Freeway Open Space Buffer and the 40 to 75-foot additional set back.



Mestre Greve Associates
 Division of Landrum & Brown

Future Noise Contours

North City Extended Specific Plan
 Environmental Impact Report

Exhibit 3.12-2

Page 3.12-13

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

SC 3.12-1: Construction is only allowed during the following hours:

October 1st through April 30th

Monday through Friday: 7:00 a.m. to 5:30 p.m.

Saturday: 8:00 a.m. to 5:00 p.m.

May 1st through September 30th

Monday through Friday: 6:00 a.m. to 7:00 p.m.

Saturday: 8:00 a.m. to 5:00 p.m.

MM 3.12-1: Any commercial parking lots within 50 feet of residences should incorporate a 6 foot wall between the parking lot and residential development.

MM 3.12-2: An acoustic study (or studies) shall be prepared by a Registered Engineer, once graded pad elevations are known, identifying the mitigation measures and/or site design features that will reduce all residential areas, schools, libraries, churches, hospitals and nursing homes, and destination resort areas to less than 70 CNEL and all commercial areas to less than 77 CNEL. Additionally the report shall show how sensitive uses within these uses will be mitigated to 65 CNEL or less. Specifically, rear yards, patio areas, and outdoor activity areas for residential; outside teaching areas for schools, libraries and churches; and outdoor places of relaxation for hospitals and nursing homes shall be mitigated to 65 CNEL or less. The report(s) shall be submitted to the City and approved by the City prior to the issuance of any precise grading permits or site design approvals.

MM 3.12-3: An acoustic study (or studies) shall be prepared by a Registered Engineer, once graded pad elevations are known, demonstrating that indoor residential, hotel, private school, church, hospital and nursing home areas shall achieve a noise level of 45 CNEL or less. The report(s) shall be submitted to the City and approved by the City prior to the issuance of any building permits.

MM 3.12-4: Commercial and office projects that experience traffic noise that regularly exceeds 65 dBA are subject to the specific requirements called out in Section 5.507.4 of CalGreen. All areas proposed for commercial and office uses would be subject to this requirement. Prior to the issuance of building permits, an acoustic study (studies) shall be prepared by a Registered Engineer demonstrating that the commercial or office project will comply with the acoustic requirements of CalGreen.

G. Level of Significance after Mitigation

The level of significance following implementation of the established mitigation measures is expected to be less than significant for thresholds related to noise. The project is not expected to result in unavoidable significant impacts.

H. Resources

City of Cathedral City Comprehensive General Plan prepared by Terra Nova Planning & Research, Inc., Adopted July 31, 2002 / Amended November 18, 2009

Draft North City Extended Specific Plan prepared by MSA Consulting, Inc., October 31, 2012

Adopted North City Specific Plan prepared by The Arroyo Group, July 2009

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.

Transportation Related Earthborne Vibrations, prepared by Caltrans, July 24, 1992.

3.13 POPULATION AND HOUSING

This section analyses the potential physical environmental effects related to population and housing associated with implementation of the North City Extended Specific Plan. The evaluation within this section is based on a variety of information sources, including the Land Use and Housing Elements of the Cathedral City Comprehensive General Plan (Amended June 2009), City of Cathedral City Zoning Code and Zoning Map (Revised 2010), Riverside County Integrated Project (RCIP) General Plan Final Program Environmental Impact Report, Volume I (October 2003). Also referenced is information from the United States Census Bureau, the Riverside County Center for Demographic Research, and the California Department of Finance.

A. Regional Setting

The City of Cathedral City is situated in the western Coachella Valley region of Riverside County. The Municipality is adjoined to the west by the Cities of Palm Springs and Desert Hot Springs and to the east by the City of Rancho Mirage. Adjoining land to the north and south of the City is unincorporated territory of Riverside County. Cathedral City currently encompasses approximately 22.5 square miles of land, extending from the Santa Rosa Mountains to the south and Edom Hill to the north.

Cathedral City has two designated Spheres of Influence covering an additional area of approximately 14 square miles, generally located north of Interstate 10. The lands known as the City's Sphere of Influence are identified by the Riverside County Local Agency Formation Commission (LAFCO) as areas likely to be serviced or annexed by the City of Cathedral City in the future. The City presently does not have regulatory control over these lands, but does have authority and responsibility to designate its preference for land use planning in the County land.

The Coachella Valley region is formed by nine incorporated cities and surrounding unincorporated areas, including the project site. The incorporated cities include Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage. According to the information compiled by the Coachella Valley Business Partnership from the U.S. Census Bureau and the California Department of Finance, the Coachella Valley region has an approximate population count of 423,644 persons as of the most recent decennial census in 2010. This estimate includes the cumulative population counts of the Valley's nine incorporated cities and surrounding unincorporated areas. The estimate reveals an increase of 117,114 persons (37.8 percent) from the prior decennial count in 2000, when the population was estimated at 309,530 persons.

The City of Indio has the largest population in the Coachella Valley. In 2010, its population was 76,036, which increased to 77,165 by 2011. The Coachella Valley city

with the smallest population is Indian Wells. Its 2010 and 2011 populations were 4,958 and 5,010 respectively. The populations for other Valley cities range from approximately 17,463 to 51,603. In this context, Cathedral City has the second largest population with 51,200 residents in 2010 and 51,603 residents in 2011 due to a slight increase of 0.78 percent.

City	2010	2011
<i>Cathedral City</i>	<i>51,200</i>	<i>51,603</i>
Coachella	40,704	41,502
Desert Hot Springs	25,938	27,383
Indian Wells	4,958	5,010
Indio	76,036	77,165
La Quinta	37,467	37,836
Palm Desert	48,445	49,111
Palm Springs	44,552	45,002
Rancho Mirage	17,218	17,463
Source: U.S. Census Bureau (2010), California Department of Finance (2011)		

B. Existing Conditions

The North City Extended Specific Plan area primarily encompasses vacant land with no population or housing. Areas immediately surrounding the project have similar conditions due to their undeveloped state. The project is bordered to the west by the existing eastern Cathedral City limit, within is the North City Specific Plan, adopted in July of 2009. The North City Specific Plan encompasses approximately 5,000 acres designated for mixed-use urban, mixed-use neighborhood, residential estate, open space residential, business park, light industrial, and open space land uses. The Specific Plan also includes Native American lands associated with the Agua Caliente Band of Cahuilla Indians. The proposed NCESP serves as an easterly extension of the adopted North City Specific Plan.

Vacant land to the north of the project (Section 12) is Indian Reservation attributed to the Agua Caliente Band of Cahuilla Indians. Of the 640 acres encompassed by Section 12, approximately 600 acres form part of the Palm Springs International Raceway Specific Plan (1995). The adopted Raceway Specific Plan is envisioned as a year-round, multi-purpose racing facility. Section 2, also situated north of the Specific Plan area, is vacant Indian Reservation land with no known plans for development.

Immediately to the east of the project is the unincorporated Thousand Palms Community, which includes light industrial and highway-oriented commercial uses as well as low density residential neighborhoods. The characteristics of these existing Thousand Palms neighborhoods to the east include: relatively low density Single Family Detached and Mobile Home Residential areas; single story Light Industrial and Business Park buildings; conventional strip highway commercial uses including fast food restaurants, automotive services and minor personal services and office buildings.

Land to the south of the project includes Interstate 10, beyond which is the Union Pacific Railroad corridor. Vacant land within and outside of the Indian Reservation is found farther south, occupying portions of Sections 11, 13 and 14. A majority of this land forms part of the Rancho Mirage Sphere of Influence. In Section 14, Rancho Mirage High School (High School #4) is being constructed. This facility will be operated by the Palm Springs Unified School District and is anticipated to open in the Fall of 2013. Within Section 13, an area of approximately 193 acres south of Interstate 10 is currently being processed for annexation to the City of Rancho Mirage.

According to the Decennial Census information from the U.S. Census Bureau, the total Cathedral City population in 1990 was approximately 30,085 persons. In 2000, the population had increased by approximately 12,562 persons (42 percent), reaching approximately 42,647 persons. In 2010, the City population grew by 8,553 (20 percent), reaching a total of approximately 51,200 persons. As of the year 2012, the population is estimated at 51,952 persons.

According to the U.S. Census Bureau, in 1990, the City's housing stock totaled 15,229 units with an average household size of 2.75 persons. In 2000, the City had a total of 17,893 housing units and an average household size of 2.99 persons. This decennial count revealed that approximately 14,027 housing units (78.4%) were registered occupied while the remaining 3,886 units (21.6%) were deemed vacant. The housing types comprised 11,411 single-family units (63.8%), 3,846 multiple-housing units (14.5%) and 2,636 mobile homes (14.7 %). By 2010, the number of total housing units in the City increased by 3,102, reaching a total of 20,995 units, which represents a 17.3% growth from the prior decennial count. Approximately 17,047 housing units (81.2%) were registered occupied while the remaining 3,948 units (18.8%) were deemed vacant. The housing types comprised 14,079 single-family units (67.1%), 4,713 multiple-housing units (22.5%) and 2,202 mobile homes (10.5 %).

The average household size listed for Cathedral City was estimated at 2.75 persons in 1990 and 3.03 persons in 2000. The 2010 census revealed an average household size of 2.99 persons, indicating a slight decrease from the prior decennial count.

The proposed project would include a total of 1,900 multiple-family residential dwellings and 1,300 single family residential dwellings. Approximately 1,425 of the multiple-family residential dwellings are planned to be apartments and the remaining 475 multiple-family dwellings are planned to be condominiums. Approximately 1,140 of the single-family dwellings are expected to be detached units and the remaining 160 units are expected to be attached.

PHASE	PLANNING AREA(s)	Retail/ Commercial	Restaurant	Office/ Services	Light Industrial	Hotel	Resident'l.
1A Yrs. 1-2	2	10,000 SF	40,000 SF	-0-	-0-	100 rms.	-0-
1B Yrs. 1-2	4	-0-	-0-	-0-	-0-	-0-	1,000 DU's
2 Yrs. 3-5	1 & 3	30,000 SF	20,000 SF	50,000 SF	150,000 SF	-0-	600 DU's
3 Yrs. 6-8	1 & 3	150,000 SF	30,000 SF	60,000 SF	200,000 SF	300 rms.	300 DU's
4 Yr. 9-11	1 & 3	10,000 SF	30,000 SF	80,000 SF	245,000 SF	-0-	600 DU's
5 Yrs. 12-15	1	-0-	-0-	-0-	-0-	-0-	700 DU's
SP	Build-Out	200,000 SF	120,000 SF	190,000 SF	595,000 SF	400 rms.	3,200 DU's

Build-out of the mixed-use community within the project is anticipated to occur in five phases over a fifteen-year absorption period. Phase 1 would be developed in the first 2 years for Planning Areas 2 and 4. Up to 100 hotel rooms and 1,000 dwelling units would be constructed during this phase. Buildout of phase 2, which includes the construction of up to 600 dwelling units, would take place in the subsequent three years for portions of Planning Areas 1 and 3. The development of Phase 3 in the subsequent 3 years includes up to 300 dwelling units and up to 300 hotel rooms. The development of Phases 4 and 5 for portions of Planning Areas 1 & 3 would take place in the following 6 years, resulting in the development of 600 dwelling units and 700 dwelling units respectively.

Based on the City's average household size range of 2.5 to 2.99 persons per household, it is anticipated that build-out of the North City Extended Specific Plan would bring between 8,000 to 9,568 residents to the site based on full occupancy. Considering that some units would have a household size smaller than the City-wide average and that some of the future residents of the project would be relocated from within Cathedral City or neighboring areas, the net increase in population would be smaller than the estimated range of 8,000 to 9,568 residents.

The project proposes the integration of four designated land use and zoning districts. The Mixed Use-Urban (MU-U) and Mixed Use-Neighborhood (MU-N) districts are included in the adopted North City Specific Plan and therefore were previously incorporated into the Cathedral City Zoning Ordinance. The Light Industrial (LI) and

Open Space (OS) districts are currently in the Cathedral City Zoning Ordinance. The districts are summarized as follows:

- **Mixed Use-Urban (MU-U):** This district will accommodate regional and community scale commercial and mixed use projects, providing a mix of higher density housing, such as condominiums, apartments and vertical mixed use options. The maximum gross Floor Area Ratio (FAR) for the commercial component of a development project is 1.0; for a residential component, the maximum gross density is 45 dwelling units/ acre. The maximum building height is 65 feet or 5 stories, whichever is less.

- **Mixed Use-Neighborhood (MU-N):** This district will accommodate housing at a lower density, including apartments, town homes and single family residences with some flexibility for mixed use options. The maximum gross Floor Area Ratio (FAR) for the commercial component of a development project is 1.0; for a residential component, the maximum gross density is 25 dwelling units/ acre. The maximum building height is 45 feet or 3 stories, whichever is less.

- **Light Industrial (I-1):** This district will accommodate planned business campus and light industry sites. Under the City’s existing Zoning Ordinance, this district is intended to provide a wide diversity of industrial uses where such uses are not likely to have adverse effects upon each other or upon neighboring residential or commercial areas. Uses permitted are those generally regarded as “light industry,” conducted primarily indoors, but which may require limited outdoor storage or assembly areas.

The maximum site coverage by building(s) is 80%; the maximum building height is 36 feet or 3 stories except where abutting a residential district, in which case the maximum height shall be that of the residential district at all locations within 50 feet of the residential district boundary.

- **Open Space (OS):** Provides for the preservation of the “Open Space” network, as well as provisions for solar and wind generation. This system will work in concert with a Transfer of Development Rights (TDR) program in order to achieve the “Open Space” system.

The “Open Space” designation is to be placed on property under one of the following circumstances: 1) when by the nature of its use, such as regional transmission of electricity, or its natural limitation, such as being subject to flooding or faulting, make the property inappropriate for habitation or intensive development; or 2) when the property is under public control and

is intended for the development of public uses (buildings may be permitted in this instance).

C. 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 population and housing perspective. Would the project:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

D. Project Impacts Found Not To Be Significant

The project will result in the annexation of 591.38 acres of vacant land into the City of Cathedral City, resulting in a total of 1,900 multiple-family residential dwellings and 1,300 single-family units. The multiple-family residences would consist of 1,425 apartments and 475 condominiums.

Based on the City's average household size, ranging from 2.5 to 2.99 persons per household, build-out and full occupancy of the North City Extended Specific Plan would result in a projected population ranging between 8,000 and 9,568 residents. It is expected that some of those residents would be relocated from the neighboring areas or from within Cathedral City. Build-out of the mixed-used community within the project is anticipated to occur in five phase over a 15-year absorption period.

The projected Cathedral City population by the year 2020 is 57,034 persons and 64,607 persons by the year 2035. The project's population at full build-out, occupancy and household size is expected to be approximately 9,568 persons by 2030 or in the subsequent years depending on start of construction. This local population represents approximately 75.6% of the projected population increase between 2012(51,952) and 2035 (64,607), thus not surpassing it. The project would induce a local growth in population over a period of 15 years through the building of homes.

However, this growth is not expected to significantly impact the rest of the Cathedral City population or its neighboring areas. Any future development on nearby vacant land that (not a part of the project) would be subject to the assigned land use and zoning regulations regarding housing as well as a separate environmental review. Less than significant impacts are expected.

The project site is vacant land and will not result in the displacement of substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere. As previously stated, the project site is currently vacant with no population or housing. Less than significant impacts are anticipated related to this topic.

E. Potentially Significant Impacts

The project's impacts are not deemed to be significant.

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

The project would not result in impacts requiring the implementation of mitigation measures. Project development would occur under the guidance of the North City Extended Specific Plan.

G. Level of Significance after Mitigation

This topic is not applicable.

H. Resources

City of Cathedral City Comprehensive General Plan prepared by Terra Nova Planning & Research, Inc., Adopted July 31, 2002 / Amended November 18, 2009

Draft North City Extended Specific Plan prepared by MSA Consulting, Inc., October 31, 2012

Adopted North City Specific Plan prepared by The Arroyo Group, July 2009

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.

United States Census Bureau, American Fact Finder,
<http://quickfacts.census.gov/qfd/states/06/0612048.html> Accessed December 2012
and January 4, 2013

3.14 PUBLIC SERVICES

Impacts to public services resulting from the development of the proposed North City Extended Specific Plan project were analyzed based on the review of various documents and consultations with appropriate agencies; these include, but are not limited to the City of Cathedral City Comprehensive General Plan Environmental Impact Report Amended 2009 and the Riverside County Integrated Project (RCIP) General Plan Final Program Environmental Impact Report, Volume I (October 2003). A complete listing of resources utilized is included at the end of this analysis.

A. Regional Setting

The NCESP project site is located in the Coachella Valley region of Riverside County, California and within the Sphere of Influence of the City of Cathedral City. An annexation request to the Local Agency Formation Commission (LAFCO) will be filed as part of this development proposal that would transfer a number of municipal services from County jurisdiction to Cathedral City jurisdiction. The following are brief summaries of the various public services provided by the County to the Coachella Valley:

Fire Protection

A full range of fire protection services are offered by Riverside County Fire Department 24 hours a day 7 days a week. The Riverside County Fire Department (RCFD) is staffed with a combination of County and State of California Department of Forestry & Fire Protection employees. Together they operate 96 fire stations that serve 1,360,000 residents over 6,970 miles of Riverside County. Currently, Fire Station No.35 located at 31920 Robert Road, Thousand Palms, is the first responder to the Thousand Palms Community and adjoining areas. Upon annexation service would be provided by Cathedral City Fire Department.

Police Protection

The Riverside County Sheriff's Department provides community policing and the operation and maintenance of correctional facilities. The Sheriff's Department contracts with the Cities of Indian Wells, Palm Desert, and Rancho Mirage. Two sub-stations are located in the Coachella Valley; the Palm Desert Station at 73705 Gerald Ford Drive, in the City of Palm Desert and the Indio Station at 82-695 Doctor Carreon Boulevard, in the City of Indio. The Sheriff's Department is a "demand response" agency that maintains limited patrol services. The Department also operates five adult correction or detention centers and juvenile detention facilities. Future Police Services will be provided by Cathedral City Police Department upon annexation.

School

Three school districts provide public education services to the Coachella Valley region. These include, Coachella Valley Unified District (CVUSD), Desert Sands Unified School District (DSUSD) and Palm Springs Unified School District (PSUSD). Based on the RCIP, the majority of the County school districts lack the ability to provide educational services for future growth. In general, State and local fiscal constraints have been linked to inadequate revenues/funding for the expansion of school facilities. Upon annexation the NCESP area would be covered by the Palm Springs Unified School District.

Parks and Recreation

See Section 3.15 Recreation for discussion regarding Parks and Recreation.

Other Public Facilities

Medical Facilities:

Major medical service providers in the Coachella Valley include, Desert Regional Medical Center in the City of Palm Springs, Eisenhower Medical Center located in the City of Rancho Mirage and John F. Kennedy Memorial Hospital in the City of Indio. There would be no change to these service providers after annexation into the City.

Library

The Riverside County Library System includes 33 libraries and 2 bookmobiles with 4 valley locations. In the Coachella Valley, library services are provided by the following branches of the Riverside County Library System:

- Cathedral City Library located at 33520 Date Palm Drive, Cathedral City, CA 92234
- Coachella Library located at 1538 Seventh Ave, Coachella, CA 92236
- Desert Hot Springs Library located at 11691 West Drive, Desert Hot Springs, CA 92240
- Palm Desert Library 73-300 Fred Waring Drive, Palm Desert, CA 92260
- La Quinta Library located at 78-275 Calle Tampico La Quinta, CA 92253
- Bookmobile is available in Palm Desert, Indio Hills and Desert Hot Springs on Tuesdays, Thermal on Thursdays and Saturdays.

B. Existing Conditions after Annexation

Fire

The City of Cathedral City provides its residents with its own 24-hour fire and emergency services department. The Cathedral City Sphere of Influence (SOI) is within the County of Riverside, and service to the SOI is currently provided by Riverside County Fire Department. The city maintains cooperative/mutual aid agreements with other communities and agencies for additional emergency response support. The Cathedral City Fire Department Headquarters is located at 32100 Desert Vista Rd in Cathedral City.

In general, the Cathedral City Fire Department responsibilities include:

- Basic and advanced life support emergency medical response
- Fire and life safety code enforcement
- Plan reviews for new construction and remodels
- Inspections
- Hazardous materials administration and control,
- Fire and life safety public education
- Paramedic services

Cathedral City Fire Station No. 412 located at 32100 Desert Vista Road would be the first responder to the project site. This station is approximately 2 miles from the NCESP boundary and equipped with a Type 1 fire engine, two reserve medic ambulances and two firefighters. A 75' ladder truck is in order and expected to be delivered in April 2014. Upon annexation into Cathedral City manpower and resources may be adjusted as needed to meet the service level and response times mandated by City policy. Please refer to Exhibit 3.14-1 for emergency service located within a 5-mile radius of the project site.

Per the Adopted North City Specific Plan EIR, the Cathedral City Fire Department (CCFD) was understaffed at the time of the EIR's adoption in 2009. The City's General Plan recommends a ratio of 1.0 firefighters per every 1,000 residents, with the goal of staffing 1.5 firefighters per every 1,000 residents within the next 5 to 10 years.

Under the 2009 staffing levels, the CCFD had .80 firefighters per every 1,000 residents. The CCFD web site states that staffing levels are now 8 per day and all three stations are in operation. Approximate staffing includes one Interim Fire Chief, one Battalion Chief, one Administrative Captain, two Administrative Assistants, eight Captains, nine Engineers and thirteen Firefighter Paramedics. This low staffing is the result of the economic downturn and city budget cuts. See Table below for current Fire Station staffing.

Table 3.14-1
Current Cathedral City Fire Station Staffing

Shift	Stations Open	Number of Fire Fighters Per Station
A Shift	Station 411 & 413	4 Firefighters
B Shift	Station 411, 412, 413	Station 411 & 413 = 2 Firefighters Station 412 = 5 Firefighters
C Shift	Station 411 & 413	4 Firefighters

Existing Cathedral City fire stations are briefly described below:

Station No. 411

Station No. 411 generally serves the Cathedral City Downtown Area and is located at 36913 Date Palm Drive. It is approximately 7.1 miles southeast of the project site. This fire station is currently equipped with one engine and one Advanced Life Support (ALS) ambulance. Additionally, fire station staffing includes one captain, one engineer and two firefighters or firefighter/paramedic.

Station No. 412

Station No. 412 serves as the Cathedral City Fire Department Headquarters located at 32100 Desert Vista Road. It occurs roughly 2 miles southeast of the NCESP boundary. This station is equipped with one engine or aerial truck. Staffing includes one captain, one engineer and two firefighter/paramedics.

Station No. 413

Station No. 413 is at 27610 Landau Boulevard, this is the City's north end station. Station 413 is equipped with one engine and one ALS ambulance and staffed with one captain, one engineer and one firefighter or firefighter/paramedic and is 5.9 miles from the project site.

Operational and capital improvement needs of the Cathedral City Fire Department is funded by the City General Fund and more recently the formation of special community facility district or other similar funding in order for the Department to maintain its current level of service. The CCFD continues its efforts to provide adequate and enhanced fire protection services that will accommodate the continued growth and development in the City and its Sphere of Influence.

Cooperative/Mutual Aid Agreements

Cathedral City provides its own fire department and maintains a cooperative/mutual aid agreement with other agencies and communities to assist in suppressing fire or controlling emergency incidents. Mutual aid is an agreement among emergency responders to lend assistance across jurisdictions provided resources are available and is not to the detriment of their own service area.

Standardized Emergency Management System (SEMS)

On January 1, 1993, the Standardized Emergency Management System (SEMS) law came into effect, subsequent to the 1991 Oakland fires. The SEMS law was created to enhance coordination of State and Local emergency response in California. As set forth by the SEMS, all jurisdictions within the State of California are required to participate in the establishment of a standardized statewide emergency management system. The law also gives local agencies the primary authority regarding rescue and treatment of casualties, and decision making of protective actions for the community. The local emergency services organization and the incident commander have the on-scene authority.

Based on the incident type, multi agencies and disciplines maybe called upon to assist with emergency response. Emergency response teams could involve fire and rescue, health and medical crews, police, public works, and the coroner. The success of an emergency response involves carrying out the work in the most effective manner, keeping open lines of communication between the responding agencies to share and distribute information, and coordinate efforts.

The SEMS law governs emergency response in every California jurisdiction, with each City agencies and personnel conducting their responsibilities as outlined by the City's Emergency Plan.

The SEMS system includes the following:

- Incident Command System – a standard response system for all hazards that is based on a concept originally developed in the 1970's for response to wildfires.
- Multi-Agency Coordination System – coordinated effort between different agencies and disciplines, allowing for effective decision-making, sharing of resources, and prioritizing of incidents.
- Master Mutual Aid Agreement and related systems – agreement between cities, counties and the State to provide services, personnel and facilities when local resources are inadequate to handle an emergency

- Operational Area Concept – coordination of resources and information at the county level, including political subdivisions within the county; and
- Operational Area Satellite Information System – a satellite-based communications system with a high-frequency radio backup that permits the transfer of information between agencies using the system.

Fire Codes

The City of Cathedral City has adopted the 2010 California Fire Code with City amendments which provides required construction standards in new structures and remodels, road widths and configurations to accommodate the passage of fire trucks and engines and requirements for minimum fire flow rates for water mains. The construction requirements are a function of building size, type, material, purpose, location proximity to other structures, and type of fire suppression system installed.

Wildland Fires

Large areas of southern California are particularly susceptible to wildfire due to the region's weather. Much of Riverside County is rated as a potential wildland Fire Area by the State of CA, Department of Forestry & Fire Protection. Fire potential in Riverside County is typically greatest from August through October, when dry vegetation coexists with hot, dry Santa Ana winds. The encroachment of residences into wildland areas also increases the wildfire risk. Urban areas, such as most of Cathedral City, with irrigated vegetation, which are not intermixed with wildlands, have a highly decreased risk of wildfire.

Wildland Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) has primary responsibility for fire protection in areas of the State which are currently designated as State Responsibility Areas (SRAs). SRAs are areas classified as having a fire hazard designated as moderate, high, or very high.

In 1996, the State Board of Forestry and Fire Protection and CAL FIRE in a joint-effort created the California Fire Plan. The joint-effort has resulted in a system which ranks the fire hazard of the wildland areas of the state based on four main criteria: fuels, weather, assets at risk, and level of service. According to the Plan, the fire hazard of an individual cell area is ranked as moderate, high, very high, and extreme.

To protect a building from wildfire, flammable materials must be removed from around the building and fire resistant material must be used for building construction. Current State law requires that homeowners to clear and conduct fuel modification to 100 feet

around their buildings to create a defensible space for firefighters to protect their homes.

Fuel modification is the act of reducing the volume of flammable vegetation of an area to decrease fire intensity, and duration. Defensible space is an area created to help protect a home and provide a safety zone for the firefighters who are battling the flames.

Police

The Cathedral City Police Department provides police protection to the City of Cathedral City. The police department was created in 1984 and is located at 68-700 Lalo Gurrero in Cathedral City. The Police Department was created back in 1984 and has 47 sworn police offers, a police reserve program, and a Citizens on Patrol Program, which is comprised of volunteer residents. The Cathedral City Police Department patrols approximately 21.5 square miles and provides service to over 52,000 residents. There are various departments within the police department. These departments include but are not limited to the following:

- Patrol
- K-9
- Detective
- SWAT
- School Resource Officer
- Citizens on Patrol (COPS)

Officers assigned to work the NCESP area will be deployed from the Cathedral City Police Station. Law enforcement would continue to grow its presence as development builds out.

Patrol Unit

The City's Patrol Division is comprised of a lieutenant, 7 sergeants, 25 patrol officers and 3 community service officers. This division is the first to respond to all emergency and non-emergency calls. There are two shifts, day and night each shift is 12 hours. Day shift is 6:00am to 6:00pm and night shift is from 6:00pm to 6:00am. Response time for Priority One emergency calls is 7.9 minutes, Priority Two is 13.8 minutes and Priority Three is 23.1 minutes.

K-9

Per the Cathedral City Police Department web site, Cathedral City has been authorized 2 positions for Police K-9 handler. Currently the City employs one K-9 units. K-9 units are efficient in tracking and uncovering concealed suspects, additionally; K-9's are used for detecting narcotics and explosives. Per the CCPD website, an additional K-9 unit may be added within the year.

Detective

The Cathedral City Detective Bureau continues criminal investigations initiated by the patrol division. Detectives are assigned investigations based on categories, such as crimes against property, crimes against persons, and domestic violence. In addition, there are multi-agency detective teams available, such as The Gang Task Force, and The Coachella Valley Narcotics Task Force.

SWAT

SWAT team is comprised of highly trained officers from each department. Each SWAT officer is highly trained to assume a variety of responsibilities. The SWAT team is prepared to assume total control of specific tactical situations, which by nature, are deemed too dangerous or complex for patrol officers to adequately and safely handle. The SWAT team is comprised of two main elements, The Tactical Element and The Technical Element. The Tactical Element has a team of members that conduct various assault tactics to secure areas, enter buildings, vehicles and perform hostage rescues. The Technical Element is comprised of team members who are marksman, crisis negotiators, chemical agent specialists and medical personnel.

Police Reserve

Police Reserve Officers provide assistance to the Cathedral City Police Department by committing 24 hours a month to assist in a variety of details such as, patrol, DUI checkpoint and investigation assistance.

School Resource Officer (SRO)

The School Resource Officer is a sworn police officer who is assigned to Cathedral City High School. This officer serves as a teacher, counselor, role model and an advocate for students, faculty and staff. The primary focus of the SRO is prevention and deterrence, while also conducting all criminal investigations on campus. The SRO is under the direct supervisions of the Cathedral City Police Department but is also considered a member of the school faculty and works closely with the Principal and Vice Principal. The ultimate

goal of the SRO program is to maintain and improve the safety of the learning environment and the prevention of school violence and drug/alcohol abuse.

Citizens on Patrol (COPS)

The City currently has 14 regular unpaid volunteers and 6 seasonal volunteers to assist the Department, also known as Citizens on Patrol. Approximately 3,846 volunteer hours were provided to the CCPD in 2011. COPS volunteers are trained by sworn police officers in non-confrontational methods, various police surveillance, police reporting, first aid and emergency preparedness.

The Cathedral City Police Department adopts a Community-Oriented Policing Philosophy. This policy is founded upon a working partnership with the community and police to reduce and prevent criminal activity.



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EXISTING EMERGENCY SERVICES WITHIN 5 MILE RADIUS

Existing Emergency Services

North City Extended Specific Plan
 Environmental Impact Report

Exhibit 3.14-1

Page 3.14-10

School

The NCESP is located with the Palm Springs Unified School District (PSUSD). The School Districts current facilities include sixteen elementary schools, five middle schools and four high schools. The District also offers continuation high school, independent study program, head start programs, and adult education. Within Cathedral City, Palm Springs Unified School District operates five elementary schools, two middle schools and one high school. Table 3.14-2 shows the school facilities and enrollment rate for the past five years.

**Table 3.14-2
Palm Springs Unified School District
Student Enrollment Rate 2008-2012
School Facilities in the City of Cathedral City**

School	2008	2009	2010	2011	2012
Elementary School Grades K-5					
Agua Caliente	761	798	732	705	656
Cathedral City Elementary	848	836	795	809	811
Landau Elementary	836	828	818	748	722
Rio Vista Elementary	675	736	758	724	729
Sunny Sands Elementary	1035	994	989	995	960
Middle School Grades 6-8					
James Workman Middle	1,554	1,576	1,594	1,515	1,514
Nellie N. Coffman	1,177	1,152	1,104	1,115	1,108
High School Grades 9-12					
Cathedral City High	2,853	2,878	2,849	2,810	2,702

Source: California Department of Education website, accessed February 20, 2013

Based on student enrollment data provided by the California Department of Education, the overall enrollment in school facilities in the City of Cathedral City has remained relatively constant between the 2008-2012 school years. PSUSD continues to plan for expansion of existing services and facilities to meet the increasing demand for public education. It should also be noted that PSUSD has an open enrollment policy so that students may choose to commute to another school outside of their school boundary but within the district, provided space is available.

Under SB 50, one of the three ways to determine funding levels for school districts is a default level which allows school districts to levy development fees to support school construction necessitated by the development and receive a 50% match from State bond money. The current required developer fee is \$3.44 per square foot for residential development and \$0.51 per square foot for commercial/industrial development. The NCESP would be required to comply with the new construction school fees at the time of building permits.

School aged children may also attend several private schools located in Cathedral City or near and throughout the Coachella Valley. Private schools in or near Cathedral City are Calvary Christian for grades Pre-K through twelfth, Palm Valley School (K-12) and Kings School adjacent to Cathedral City limits (K-8).

There are a number of schools in the Coachella Valley that provide higher education; these include College of the Desert, California State University, San Bernardino, Palm Desert Campus, University of Phoenix, University of California, Riverside, Palm Desert Campus.

Parks and Recreation

See Section 3.14 Recreation for discussion regarding Parks and Recreation.

Other Public Facilities

Medical Facilities

Major medical facilities and a number of physicians' offices and urgent care centers provide healthcare services to the City of Cathedral City.

Desert Regional Medical Center is a subsidiary of the Tenet Healthcare Corporation, and is located at 1150 North Indian Canyon Road in Palm Springs. It is approximately 10 miles southwest from the North City Extended project site. Desert Regional Medical Center is licensed for 394 acute-care beds and offers various healthcare services.

Hospital facilities and services include the Level II Richards Emergency Trauma Center, 24 hours emergency care and rooms, MedExpress Urgent Care Center, Wound Care Center, Orthopedic Institute, Comprehensive Cancer Center, the Cardiovascular Institute of Palm Springs and the Women and Infant Center. Hospice services are also available to both inpatients and outpatients. This hospital facility has an on-site helipad to transport medi-vac patients.

The Eisenhower Medical Center complex is located at 39000 Bob Hope Drive in the City of Rancho Mirage and is 5.3 miles south from the NCESP. This not-for-profit medical facility has 250+ full service beds and provides a wide range of medical services. The

Eisenhower Medical Center complex includes a number of facilities, among these are the Andrew Allen Surgical Pavilion, the Barbara Sinatra Children's Center, the Community Blood Bank, the Davis MIR building, the Desert Cardiology Center, the Desert Orthopedic Center, the Eisenhower Hospital, the Eisenhower Lucy Curci Cancer Center and the Emergency Department. This hospital facility also has an on-site helipad to transport medi-vac patients.

The John F. Kennedy Memorial Hospital is located at 47111 Monroe Street in the City of Indio and 15 miles east of the NCEP. The hospital is a subsidiary of Tenet Healthcare Corporation and has 145 patient beds. The various medical services provided at the JFK Memorial Hospital include a 24-hour emergency room, Arthritis Institute, cardiac and vascular services, JFK Express Care, orthopedics, pediatrics, and surgical services.

Libraries

The Cathedral City Public Library provides library services to the City of Cathedral City and is located at 33-520 Date Palm Drive. The library is a branch of the Riverside County Library System. The Library which opened in 1996 and newly renovated in 2009 consists of a 20,000 square foot facility with over 80,000 items. The library provides free access to the Internet and educational databases. The library also provides three study rooms, a community room, local history collection, story room and Friends of the Library Book Store.

Other Libraries

The following public libraries are located throughout the Coachella Valley:

- Palm Springs Library: located at 300 South Sunrise Way
- Desert Hot Springs: Library located at 11691 West Drive
- Palm Desert Library located at 73-300 Fred Waring Drive
- Rancho Mirage Public Library at 71-100 Highway 111
- La Quinta Library located at 78-275 Calle Tampico

C. 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 to public services. Would the project:

- a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to

maintain acceptable service ratios, response times or other performance objectives of any of the public services:

- Fire protection?
- Police protection?
- Schools?
- Parks and Recreation?
- Other public facilities?

D. Potential Impacts Found Not to be Significant

Development of the proposed NCESP is not anticipated to result in potentially significant impacts to the following public services: schools, parks and recreation, medical facilities and libraries.

Schools

The NCESP proposes at build-out a unique blend of mixed use development which would include 200,000 square feet of retail/commercial buildings, 120,000 square feet of restaurant, 190,000 square feet of office service buildings, 400 hotel rooms and 3,200 residential units. The residential portion of the project has the potential to generate 1,619 new students based on the student generation factors provided by PSUSD (See Table 3.14-3 and 3.14-4).

Individual project developers will pay the required developer fee to the Palm Springs Unified School District which at the time of writing is \$3.44 per square foot for residential development and \$0.51 per square foot for commercial. Developer fees are state legislated (AB 2926) and monies collected are used for construction and reconstruction of school facilities.

**Table 3.14-3
 PSUSD Student Generation Rates**

School Level	SFD	SFA	MF
Elementary School (Grades K-5)	0.1326	0.0026	0.3349
Middle School (Grades 6-8)	0.0706	0.0000	0.2065
High School (Grades 9- 12)	0.0833	0.0093	0.1917

**Table 3.14-4
Potential Number of New PSUSD Students
Associated with the Development of the
Proposed North City Extended Specific Plan**

School Level	Proposed Units	Land Use Type	*Student Generation Factor	Total Students Generated
Elementary School (Grades K-5)	1,900	MF	0.3349	636
Middle School (Grades 6-8)	1,900	MF	0.2065	392
High School (Grades 9-12)	1,900	MF	0.1917	364
Total Multi Family				1,392
Elementary School (Grades K-5)	1,300	SFR	0.1326	172
Middle School (Grades 6-8)	1,300	SFR	0.0706	91
High School (Grades 9-12)	1,300	SFR	0.0833	158
Total Single Family				421
*Source: Student Generation Factor provided by Palm Springs Unified School District 2013				

Parks and Recreation

See Section 3.15 Recreation for discussion regarding Parks and Recreation.

Libraries

Development of the proposed NCESP is anticipated to have less than significant impacts to library services and facilities. Future residents of the proposed project will have access to the Cathedral City Library and other various existing branches of Riverside County Library systems located throughout the Coachella Valley.

Other Public Facilities

Future residents, patrons and employees of the proposed NCESP could obtain medical services from various local medical facilities in the City of Cathedral City and other areas of the Coachella Valley. The Health Service Element of the Cathedral City General Plan states that the City should consider establishing a medical complex that could provide a variety of medical services in one location to the northern planning areas. Such facilities

could be developed in the approved North City SP and the proposed NCESP. New medical facilities are likely to be built prior to the build out of the NCESP. Therefore, impacts associated to medical facilities associated with this development are considered less than significant.

Fire Protection

Build out of the proposed North City Extended Specific Plan would result in demand for fire protection services. The Roy Wilson Fire Station No. 35 located at 31920 Robert Road in Thousand Palms is the closest station to the NCESP site, located less than 2 miles away. Station No. 35 is operated by Riverside County Fire Department under contract with Cal Fire. This station is the primary response to fire and emergency medical calls to Thousand Palm's plus portions of Palm Desert and Rancho Mirage. Palm Desert and Rancho Mirage are also contracted for fire services under the Riverside County Fire Department. Palm Springs and Cathedral City are the only two cities within the Coachella Valley that provide their own fire and emergency service to their residents.

It has been indicated by the Cathedral City Fire Chief Robert Van Nortrack that Cathedral City Fire Station No. 412, located at 32100 Desert Vista Road could meet acceptable response times to the initial commercial development in Phase 1A. Additional resources may be adjusted upon annexation to adequately meet service levels and response times that are mandated by City Policy.

Per communication with CCFD Fire Chief, the CCFD has 30 full-time personnel. The General Plan, Fire & Police Protection Element, adopted in 2002 recommends a ratio of 1.0 firefighter per every 1,000 resident, with a goal of staffing 1.5 firefighters for every 1,000 resident within the next 5 to 10 years. With current staffing levels and a population estimate of 52,381 (U.S Census Bureau 2011 estimates) the current ratio is .60 firefighters per 1,000 residents which is below the recommended General Plan ratio. To achieve the General Plan ratio of 1.0 per every 1,000 residents, the CCFD would need 22 additional firefighters. To achieve a ratio of 1.5 per every 1,000 residents, 49 additional firefighters would be required by CCFD.

The current CCFD response time to emergency calls is 6.52 minutes. This time has increased due to station closures that were in effect the later part of 2012 and staff reduction due to City budget cuts. Cathedral City Fire is currently exploring ways to improve staffing and improve the current response times. CCFD Fire Chief estimated response time to Bob Hope and Varner Road to be 6 minutes. Fire Station No. 412 located mid-town and station No. 413 located uptown could serve the project site on a temporary basis.

It has been indicated by Cathedral City Fire Chief that the Cathedral City Fire Department (CCFD) can serve the project in its first year of development of PA2 an into year two with response times between 5-5 minutes which meets the CCFD and NFPA standards of 8 minutes or less. PA2 is 9.14 acres in size and proposes a 100 room travel hotel and commercial uses. Access to the project site from CCFD No. 412 is from Ramon Road to the I-10 interchange.

The adopted North City Specific Plan, *Public Service Section 4.9 Fire Protection Service* states that the CCFD proposes to have at least one new fire station located near Date Palm and Valley Center Boulevard; however no plans to date have been established for this station. A Public Safety station site is reserved in the NCESP under PA1. The timing and funding of potential fire services at this location will be determined prior to the approval of any development and the nature and extent of development proposals within PA1, PA3, PA4 and PA5.

Annexation of the NCESP will not impact current fire services; however, individual development will need to be reviewed by City and Fire officials to ensure level of service can be met and maintained. Current fire services in place cannot support the projected build-out of the NCESP without additional staffing and equipment. Individual development with the NCESP would be required to pay development impact fees into the Fire and Police Facilities and Equipment Fund, as established by Chapter 3.17 of the Cathedral City Municipal Code (CCMC). Payment of the required fees at building permits would assist with offsetting the cost to provide adequate fire service to the project site. Less than significant impacts are expected.

Police Protection

The Cathedral City General Plan has a goal of 1.5 officers per 1,000 residents. Currently Cathedral City has 47 sworn police officers. Current staffing levels are not adequate to meet the City's General Plan goal of 1.5 officers per 1,000 residents. Per the U.S. Census Bureau (2011 estimates), the City's estimated population is 52,381 persons. This calculates to .89 officers per 1,000 residents which is below the City's standard as set forth in Policy 12 of the Fire and Police Protection Element. 13 additional staff personal would be needed to achieve 1.5 officers per 1,000 residents.

Current response time for priority one calls is 7.9 minutes, priority two is 13.8 minutes and priority three is 23.1 minutes. Per communication with Cathedral City Police Department call times to the project site would be similar to current call times based on staffing in the area.

A Fiscal Analysis and Plan of Service for the annexation of the Thousand Palms Community are in process of being completed for Cathedral City by John Goss of Ralph Anderson and Associates. Annexation and implementation of the suggested plans for service will benefit the NCESP since the project lies just west of the Thousand Palms Community.

It has been suggested in the Cathedral City Plan of Services report that two patrol beats be assigned to the Thousand Palms community 24/7 with each officer assigned to a separate beat. To staff two patrol beats and support staff 24/7 11.75 additional officers would be needed. Officers and staff will deploy from the Cathedral City police station located at 68-700 Lalo Gurrero. The department could also use an office out of Fire Station 35 for report writing and meeting the public since the station is large and can accommodate a small office space. Alternatively, the officers could use the Thousand Palms Library for report writing which is currently done by the Riverside County Sheriff's Department.

A community facility is proposed as part of the NCESP, it is suggested that this facility could also accommodate a space for law enforcement and serve the community with limited public access. Additional police beats assigned to the area would improve the overall level of law enforcement service to the community.

While annexation of the NCESP will not impact current police services; project build-out will add a greater demand for police service and require additional police offers to adequately serve the project site. Additional resources such as police vehicle and equipment will also be required. Individual development will need to be reviewed by City and police officials to ensure level of service can be met and maintained. Current services in place cannot support the projected build-out of the NCESP without additional staffing and equipment.

Individual development with the NCESP would be required to pay development impact fees into the Fire and Police Facilities and Equipment Fund, as established by Chapter 3.17 of the CCMC. Payment of the required fees at building permits would assist with offsetting the cost to provide adequate police service to the project site. Less than significant impacts are anticipated to Police Service.

E. Potentially Significant Impacts

Less than significant impacts are expected to Public Services.

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

Implementation of standard conditions is expected to reduce potential impacts to public services resulting from the development of the proposed NCESP to less than significant levels. Future development shall implement the following standard conditions:

Fire Protection

SC 3.14-1: Individual project plans shall be reviewed by the Cathedral City Fire Department prior to approval of project.

SC 3.14-2: The Project shall adhere to the provision of the Cathedral City Municipal Code for building construction standards.

SC 3.14-3: The project will comply with Uniform Fire Code, Uniform Building Code and other state and national code provisions regarding building construction, including fire sprinklers.

SC 3.14-4: The project will provide onsite fire hydrants with required fire flow, approved automatic sprinkler system, as well as adequate emergency access to the project site.

Police Protection

SC 3.14-5: The project shall be reviewed by the Cathedral City Police Department prior to project approval.

SC 3.14-6: Project design shall provide adequate access for all emergency vehicles.

SC 3.14-7: Project siting and design shall promote the feasible use of defensible space concepts or high security designs to improve public safety. Examples of defensible space concepts include but are not limited to, site and building lighting, visual observation of open spaces, secured areas and screening elements.

SC 3.14-8: The project will adhere to the standards for street addressing and lighting in order to enhance and facilitate emergency response time. All structures and places of business shall display visible addresses.

School

SC 3.14-9: 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.

Parks and Recreation

See Section 3.15 Recreation for discussion regarding Parks and Recreation.

Other Public Facilities

No additional mitigation measures required for library or medical services.

G. Level of Significance after Mitigation

Less than significant impacts to Public Services are expected as a result of the development of the NCESP. Therefore, no mitigation measures are necessary.

H. Resources

Cathedral City Website, www.cathedralcity.gov

Cathedral City Fire Department Website, www.cathedralcityfire.org

Cathedral City Police Department Website, www.cathedralcitypolice.com

Cathedral City Guide 2012 Visitors Guide & Business Directory, prepared by Cathedral City Chamber of Commerce

Riverside County Library System, www.rivlib.info, accessed February 20, 2013

City of Cathedral City Comprehensive General Plan, prepared by Terra Nova Planning & Research, Inc. Adopted July 31, 2002, Amended November 18, 2009

California Department of Education, www.cde.ca.gov accessed February 2013

Palm Springs Unified School District, www.psusd.k12.ca.us, accessed February 2013

Palm Springs Unified School District School Facilities Needs Analysis, prepared by Dolinka Group, LLC. March 22, 2012

Draft Report Fiscal Analysis and Plan for Services for the City of Cathedral City Sphere of Influence within the Unincorporated Community of Thousand Palms, March 18, 2013, prepared by John Goss at Ralph Anderson & Associates

3.15 RECREATION

Potential impacts to recreational facilities associated with the development of the North City Extended Specific Plan were assessed based on the review of various resources which include the City of Cathedral City 2009 Amended General Plan and General Plan EIR (April 2002), Draft North City Extended Specific Plan (October 2012), Cathedral City and Recreation Master Plan (December 2005) and Riverside County Integrated Project General Plan Final Program Environmental Impact Report, Volume I (October 2003).

A. Regional Setting

The County of Riverside maintains and operates a total of 35 regional parks, encompassing approximately 22,317 acres located throughout the County. Also, approximately 215 additional parks (1,534 acres) are maintained by local cities within the Riverside County. The County's park inventory includes approximately 794,000 acres of the Joshua Tree National Park; the Santa Rosa Mountains National Monument that encompasses approximately 272,000 acres which is managed by the U.S. Bureau of Land Management; and the Salton Sea which is under State jurisdiction.

Private parks and recreational facilities occur throughout the County. Many planned communities and apartment complexes offer facilities such as pools/spas, basketball/tennis courts, playgrounds, and golf courses. Commercial recreational facilities in the County include polo and equestrian centers, golf courses and water/amusement parks.

B. Existing Conditions

The proposed project site is currently vacant on approximately 591.38 acres located north of I-10 and West of Rio Del Sol Drive, in the Cathedral City Sphere of Influence. The site is primarily covered with natural desert terrain with a significant mountain range and open desert views and vistas in all directions.

Recreation is a major feature in the Coachella Valley. The local natural environment and climate have afforded various recreational opportunities for golfing, hiking, tennis, and horseback riding. Recreational resources in the City comprise of parks, golf courses, trails, and recreational facilities.

Parks

The City of Cathedral City has a mix of mini and neighborhood parks that offer a range of recreational activities. Parks and recreation services are provided by the Cathedral City

Public Works Department. The table below provides a summary of each park and its amenities. Also refer to Exhibit 3.15-1 “Cathedral City Parks in the Planning Area”.

**Table 3.15-1
 Cathedral City Park Facilities and Amenities**

Name	Location	Acres	Park Type	Amenities
Panorama Park	28905 Avenida Maravilla	7.5	Neighborhood	Ball field Basketball Courts, Tennis Courts, Soccer Fields, Playground, Picnic Area, Restrooms, Shade Structures
Agua Caliente Park	30-800 San Luis Rey Dr.	6.0	Neighborhood	Ball Field, Basketball Courts, Tennis Courts, Soccer Field, Playground, Picnic Area, Shade Structures
Patriot Park	Northeast Corner of Date Palm & Dinah Shore Dr.	6.0	Neighborhood	Open Grass, Picnic Area and Shade Structures
Century Park	69908 Century Park Dr.	5.0	Neighborhood	Ball Field, Basketball Courts, Tennis Courts, Soccer Field, Playground, Picnic Area, Restrooms, Shade Structures
David Keats Soccer Park	69-400 30 th Avenue	17.0	Neighborhood	Soccer Park, Fitness Track, Exercise Equipment
Town Square	68-701 Avenida Lalo Guerrero	1.17	Mini	Water Fountain, Benches, Rose Garden, Public Art
Second Street	68-752 Buddy Rogers Ave	2.75	Mini	Ball Field, Tennis Courts, Soccer Fields, Playground, Picnic Area, Restrooms, Shade Structure
Memorial Park	Cathedral Canyon Dr. & Officer David Vasquez Dr.	0.13	Mini	Memorial Bench, Desert Landscape

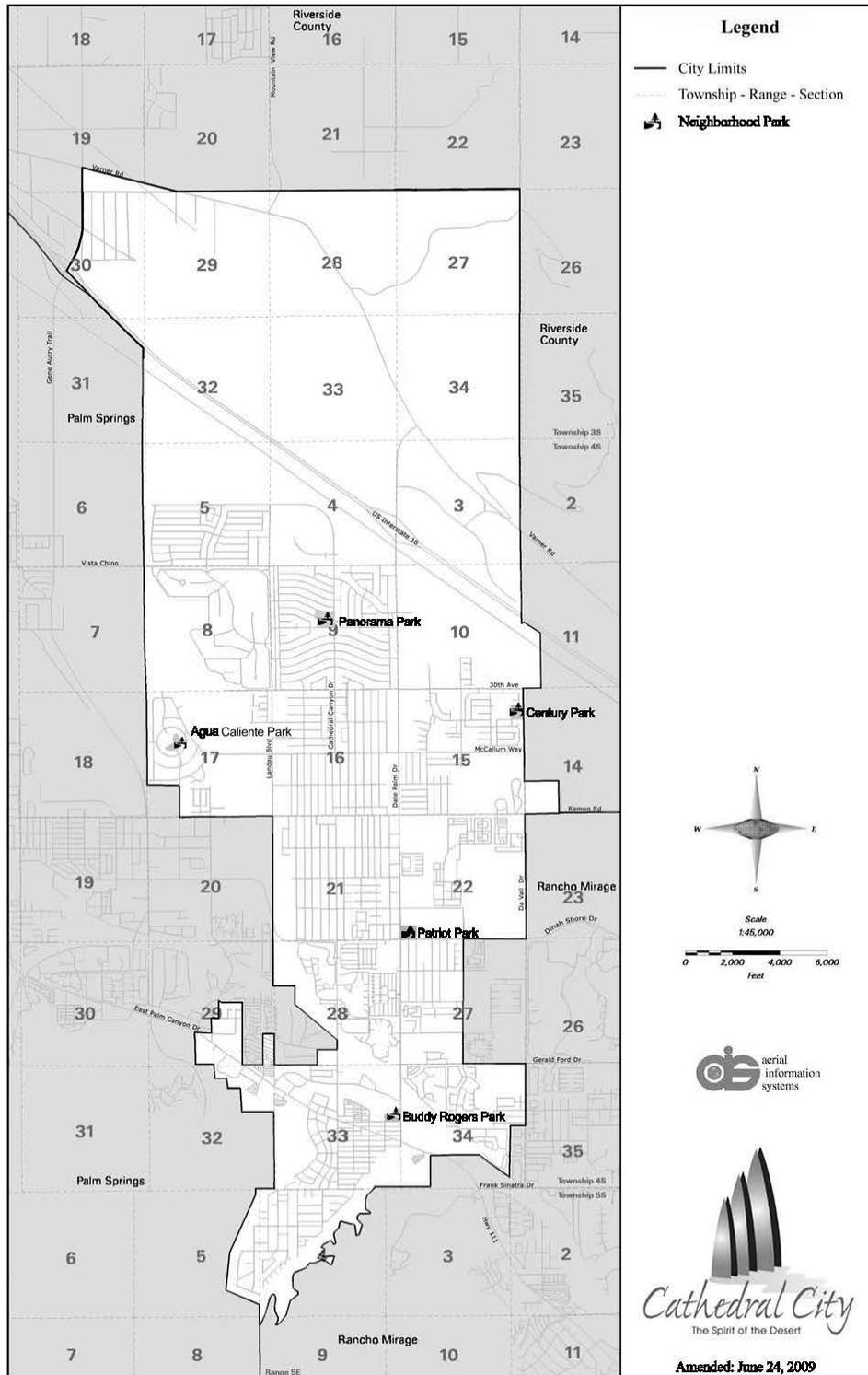
Mini Parks, Pocket Parks and Plazas are designed to be less than 3 acres and are typically used for limited, isolated or unique purposes. The David Vasquez Memorial Park and the Cathedral City Town Square fall into this category. Facilities vary depending on location but there is generally no design for structured or organized play. Most of these parks are located in the traditional residential setting, but may also be used in office business or commercial centers, and utilized as a space for rest, relaxation and socializing. While Mini parks, pocket parks and plazas do not count towards the recreational needs of the community; they make good use of small or unique spaces with various benefits. The Cathedral City Town Square is situated in front of City Hall and is where the award winning interactive “Fountain of Life” is located. The fountain has a sprayground and water element and serves as an attraction for children and adults to play in the water of the fountain. Additional amenities of the Town Square include public art, shaded benches and rose gardens.

Neighborhood parks are designed to serve residents within walking or bicycling distance and serve the non-programmed recreational needs of residents in nearby neighborhoods. These parks are typically designed for passive and active recreation with a design that is typically geared towards children. These parks may also include half sized basketball courts, picnic and play areas that serve all age groups. Panorama Park, Patriot Park, and Century Park are neighborhood parks owned and operated by the City. The 17 acre David Keats Soccer Park is maintained by the local chapter AYSO using volunteer labor and equipment. This commitment included scheduling activities, mowing turf, picking up trash, cleaning restrooms, water costs and other duties.

Community parks are large recreation facilities that contain features such as amphitheaters, landscaped picnic areas, lighted ball fields, and swimming pools. They serve residents within a 5 mile radius of the park and are at least 20 acres in size.

Private recreational facilities should not be relied upon to meet the City's recreational needs; however they do make up a portion of recreational opportunities. Big League Dreams Sports Park and Boomers Attraction Park are businesses within the City that provide services that are generally reserved for public parks and recreation systems. Boomers amenities include a game room, miniature golf, bumper boats, rock wall and Go-Karts. Big League Dreams provides scaled down replicas of famous ball park stadiums, all designed to accommodate both adult and youth softball. There are currently 3 replica fields, a 20,000 square foot indoor soccer pavilion, flag football fields, and batting cages.

Exhibit 3.15-1
Cathedral City General Plan
Parks in the Planning Area



Golf courses also contribute to the recreational opportunities available in the City. While most courses are associated with resorts or residential development, they are used frequently by residents and visitors throughout the valley. Golf courses are an important part of the City and valley’s economy. Currently, there are 5 golf courses in the City. Three courses are open to the public and two are private. Cathedral City does not provide a public play golf course. Per the Cathedral City Parks and Recreation Master Plan, the national standard for golf courses is one course per 50,000 residents in a twenty to twenty-five mile radius. Cathedral City has more golf resources available than the national standard.

**Table 3.15-2
Existing Golf Courses
in City of Cathedral City**

Golf Course	Public	Private	Holes
Cimarron Golf Course	X		18
Desert Princess Country Club	X		18
Date Palm Country Club		X	18
Cathedral Canyon Country Club	X		18
Outdoor Resort		X	18

Park Acreage

Cathedral City in conjunction with the Palm Springs Unified School District and private businesses provide seven parks totaling 45.55 acres. The National Recreation and Park Association have established 5 to 8 acres per 1,000 residents for community level parks. The Cathedral City Quimby Act and General Plan established a standard of 3 acres per 1,000 residents. The 2011 U.S. Census Bureau estimates the population of Cathedral City at 52,381, using the Quimby Act recommendations of 3 acres per park thousand populations, the City currently needs a total of 157 acres of parks. At this level of service, a minimum of 24.1 acres of land in the North City Extended SP will need to be dedicated to Public Park and Recreation Facilities at buildout of the Specific Plan.

Exhibit 3.15-2 illustrated the open space framework for the NCESP. Within this overall system, the following will be dedicated by the developer to Park and Recreation facilities:

- One Community Park at 7.0 acres;
- Four Neighborhood Parks at 8.6 acres (combined) and
- A minimum of 8.5 acres of dedicated park land within the 49.7 acre “Freeway Buffer.

In addition to City-owned and developed parkland and facilities, there are multiple additional public and private parks and recreational facilities which are located

throughout the Coachella Valley. These include the Palm Springs Aerial Tramway located at the north end of Palm Springs and the 13,522- acre Mount San Jacinto State Park that can be accessed from the top of the tramway, or from Highway 243 near Idyllwild. The Palm Canyon and Tahquitz Canyons are specialized parks under management by the Agua Caliente Tribe. Other well known parks in Coachella Valley include the Salton Sea State Recreation area, the Cahuilla County Park, the vast areas of Joshua Tree National Park and the Living Desert Nature Preserve.

Trails & Bikeway

Trails are also considered an integral part of the City's parks and recreation facility. Recreational trails systems include riding and hiking trails that provide opportunities to explore the City and its natural environs. These trails also function as windows to the City's history, both tribal and early Anglo settlement, and movement. Trails are located throughout the Coachella Valley those closest to Cathedral City are located in neighboring Palm Springs. Over 80 miles of trails provide hiking, biking, equestrian, and other recreational uses such as backpacking and cross country skiing activities. From the north side of Cathedral City trail opportunities are more limited.

The City of Cathedral City implements the following bikeway classifications: Class I (Bike Path or Trail), Class II (Bike Lane), and Class III (Bike Route). Please refer to Section 3.16 Traffic and Circulation for additional details of the bicycle classifications above, and the "Trail and Bikeway Network" Exhibit 3.16-3.

Equestrian activity in the City is traceable back to the early pioneer days and continues to be one of the popular recreational activities in the Coachella Valley. Equestrian trails in neighboring Palm Springs include approximately 38 miles of natural trails and 13 miles of drainage basins and natural washes.

The North City Extended Specific Plan (NCESP) proposes an average 75' setback along the I-10 frontage which would continue the parkway proposal from the adopted 2009 North City Specific Plan. Features of this parkway would include a naturalistic desert landscape theme, multi-use recreational trail, shaded rest stations, view preservation and screening where necessary. The NCESP suggests that a "trail adoption" program be implemented to assist in the construction funding and maintenance of this parkway.

Maintenance and Financing of Parks, Trails and Recreation Facilities

In 2003 the City's Parks and Recreation Division was eliminated due to budget constraints. However, the City still maintains a 5-member Parks and Recreation Commission, consisting of citizen volunteers. The commission reports to the City Council regarding issues and improvements important to residents. In addition to the Parks and

Recreation Commission, the City's Public Maintenance Division is responsible for the care and maintenance of city-wide parks.

Funding for maintenance and development of public parks are derived from various sources including general revenue funds, developer assessments through use of the Quimby Ordinance and exactions of commercial developments, business or fund-raising contributions, Mello-Roos Community Facilities Act, special taxes, benefit assessment districts, facilities bonding, state and federal grants or loans and sewer fund loans.

Trails occur on city, county, state, federal and tribal lands. The federal and state governments oversee the operations and maintenance of trails in their jurisdictions. Management of trails under the jurisdiction of the Agua Caliente Indians is conducted in accordance to the adopted tribal trails management plan. The adopted Coachella Valley Multiple Species Habitat Conservation Plan (CVMSCHP) includes a trail management plan applicable to all Coachella Valley local governments.

The goals and policies of the Cathedral City General Plan (Amended 2009) demonstrate the City's continued efforts to provide adequate quantity and quality recreation to its residents and visitors. The City proposes to build/extend new trails and parks and also requires developers to dedicate or pay for three acres of developed parkland per 1,000 persons. The goals of the City include providing recreation elements which are sensitive to the overall natural environment, wildlife and habitat, culture and history of the area.



Legend:

-  **Potential Network of North City and Regional Trails**
- 1** **Freeway Buffer**
- 2** **Stormwater Retention Basin**
- 3** **Neighborhood Park**
- 4** **Community Park**



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Open Space Framework

North City Extended Specific Plan
 Environmental Impact Report

Exhibit 3.15-2

Page 3.15-8

C. 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 to recreation. Would the project:

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

D. Potential Impacts found not to be Significant

Buildout of the proposed North City Extended Specific Plan would result in the development of 591.38 acres of vacant land. An estimated 240.44 acres of land, or 47% of the area, is to be maintained as “Open Space” for the accommodation of neighborhood and community parks, multi-use trail network, wind and noise buffers and storm water retention basins and drainageways; approximately 95.57 acres are to be included in rights of way for public streets; approximately 65.28 acres are designated as a “Mixed Use-Urban” land use district which will provide for regional and community scale commercial projects and higher density housing such as condominiums, apartments and mixed use options; approximately 115.93 acres of a “Mixed Use-Neighborhood” land use district will accommodate a variety of lower density housing types including apartments, town homes and single family residences; and 76.16 acres of “Light Industry” to provide business park campus sites.

The 2011 U.S. Census estimates the household size is 2.95 persons in Cathedral City. Using the estimated 2.95 persons per dwelling unit the North City Extended Specific Plan could generate approximately 6,519 new residents at project build-out. With this increase in population demand for parks and recreation facilities will be greater. Based on the City’s goal of providing three acres of parkland per 1,000 residents a minimum of 24.1 acres of parkland in the NCESP would need to be dedicated.

The NCESP intends to incorporate a bikeway and trails network in coordination with the adopted North City Specific Plan (July 2009), which would be a major part of the dedicated open space. A Bike and Trail Network included in the plan incorporates pedestrian circulation as a component of the system. This network includes the following linkages:

- Multi-Use Trail within an average 75' Parkway adjacent to and along I-10: This trail will provide an uninterrupted off-street/ open space corridor path for pedestrians and bicycles (Class I Bikeway) along the southern edge of the SPA and is to be an easterly, seamless extension of the trail included in the North City SP area. Trail width is to vary between 12' and 16'.
- Western Coachella Valley Regional Multi-Use Trail: This network component is to be included within the western Coachella Valley Regional Trail System and will link this SPA with North City SP area and to a regional trail network. This multi-use pathway is to be located along the south side of Varner Road and is to accommodate both pedestrians and bicycles (Class I Bikeway). Trail width is to be 12'.
- Valley Center Boulevard Multi-Use Trail: This trail link is to be located along the south side of the new Valley Center Boulevard and will serve both pedestrians and bicycles (Class I Bikeway) within its varying 12'- 14' width. It will also be linked to the regional trail network.
- Class II Bikeways: Striped on-street bike lanes providing one-way bicycle travel are proposed on DaVall Drive and along Collector Streets within this SP area.
- Sidewalks: 5' wide sidewalks are included within all street sections, complementing the multi-use trail system.

In addition to the above, property owners are to provide additional trail and bikeway easements over their developments to connect to the overall pedestrian/ bikeway network as well as to the parkway along the south side of Interstate 10.

The open space, bike and trail network of the proposed NCESP would provide passive and active recreational opportunities. This would also meet the city of Cathedral's City's park requirements of 3 acres per 1,000 residents through a combination of land dedication, improvements and in-lieu fees. The proposed open space element would also provide services to existing and future residents. Cathedral City parks are far below the recommended standard, construction of the proposed parks, trails and bikeways meet the City's General Plan Goals. Individual projects within the NCESP will be reviewed by the City of Cathedral City and required to comply will all requirements and fees in effect at the time of building permits. The design and incorporation of the open space components within the NCESP will off-set the demand of parks and recreation facilities, therefore less than significant impacts associated with recreation is expected.

E. Potentially Significant Impacts

No potentially significant impacts to recreation are expected to result from the development of the North City Extended Specific Plan.

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

Potential impacts to parks and recreation facilities associated with the development of the North City Specific Plan project are considered less than significant. The following standard conditions will be implemented.

SC 3.15-1: The Project Developer will provide on-site recreational or open space facilities and contribute to the public development of additional facilities to offset additional demands generated by future project residents in tandem with implementing development.

SC 3.15-2: The Project Developer shall ensure that the elements of the proposed project such as buildings, open spaces, landscape, and activities will be designed to enhance efficiency and compatibility with adjacent uses. Proposed landscape locations and species will be coordinated with architectural and site design.

SC 3.15-3: The Project Developer will comply with the Quimby Act and will be required to pay Park Fees to the City upon development of the property.

G. Level of Significance after Mitigation

Upon the execution of these standard conditions, the project will have less than significant impacts to Recreation Services.

H. Resources

City of Cathedral City Comprehensive General Plan prepared by Terra Nova Planning & Research, Inc., Adopted July 31, 2002 / Amended November 18, 2009

Cathedral City Parks and Recreation Master Plan prepared by City of Cathedral City, December 2005

Draft North City Extended Specific Plan prepared by MSA Consulting, Inc., October 31, 2012

Adopted North City Specific Plan prepared by The Arroyo Group, July 2009

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.

United States Census Bureau, American Fact Finder,
<http://quickfacts.census.gov/qfd/states/06/0612048.html> Accessed December 2012
and January 4, 2013

3.16 TRANSPORTATION/TRAFFIC

The discussion within this section is based on a variety of information sources. These sources include:

- Cathedral City Annexation and North City Extended Specific Plan Traffic Impact Study prepared by Endo Engineering (August 9, 2013);
- “Traffic and Transportation”, Draft Program EIR of the North City Specific Plan, City of Cathedral City (August 10, 2013);
- “Traffic and Circulation”, Draft General Plan EIR, City of Cathedral City (January 2002); and
- Riverside County Integrated Project General Plan Final Program Environmental Impact Report Volume 1 (October 2003) and the 2004 Regional Transportation Plan (October 2003.)

The Traffic Impact Study for The North City Extended Specific Plan is included as Appendix J to this EIR.

A. Regional Setting

Riverside County’s transportation system is comprised of many State highways as well as many County and City routes providing modes of travel and goods movement for passenger vehicles and trucks. In addition the County transportation system includes general aviation facilities, limited passenger air service, transit passenger and freight rail service, bicycle facilities and other non-motorized forms of transportation (pedestrian and equestrian trails) (County of Riverside Transportation and Land Management Agency, 2003.)

Within the Coachella Valley of Riverside County, the City of Cathedral City is located both south and north of Interstate Highway 10 (I-10) between the cities of Palm Springs and Rancho Mirage. Two major regional routes provide primary access to the City, East Palm Canyon Drive (State Route 111) through the southerly portion and I-10 through the northerly portion of the community.

I-10 forms the southern boundary of the North City Extended Specific Plan and connects the Los Angeles metropolitan area on the west with Arizona and other cities and states on the east. East Palm Canyon Drive (State Route 111) joins I-10 several miles northwest of Palm Springs. The Mid-Valley Parkway is an additional intra-regional arterial that extends from the Palm Springs International Airport entrance on Ramon Road, southeast to Cook Street.

Regional access for the North City Extended Specific Plan (the project) is currently available from Interstate Highway 10, via a new interchange at Bob Hope Drive. Motorists can access I-10 in both (east and west) directions to and from the project via the Bob Hope interchange. This interchange and adjacent developable parcels create the economic focus for this project, north of I-10. Interstate Highway 10 is an eight-lane freeway in the vicinity of the project, under the jurisdiction of Caltrans.

Bob Hope Drive, oriented in the north-south direction at this interchange, is classified as a six-lane divided Urban Arterial Highway in the Riverside County General Plan and a six-lane divided Major Arterial in the City of Rancho Mirage General Plan. Varner Road parallels I-10 to the north and passes through the project in an east-west direction. Varner Road is currently classified as an Arterial Highway in Riverside County and is constructed as a two-lane undivided roadway through the western portion of the project to a point 550 feet west of Bob Hope Drive; to the east of this point, Varner was improved to a four-lane divided cross-section in conjunction with the construction of the I-10 interchange project at Bob Hope Drive. Rio del Sol Road is classified as a Secondary Highway in Riverside County, north of Varner, as extended north from the Varner at Bob Hope Drive intersection.

The private automobile is the dominant mode of travel within the Coachella Valley, and the project's regional location as well as the system of roadways serving and accessing that location result in a priority need to analyze existing and planned roadway capacities and efficiencies within this section of the EIR. In order to present this analysis, two measures of roadway capacity and efficiency relevant to private automobile and truck traffic need to be defined at the outset of this section of the EIR.

Roadway Capacity and Efficiency

Roadway Volume to Capacity (V/C) Analysis

Volume (V) indicates the Average Daily Trips (ADT) on a roadway. Capacity (C) is the maximum amount of traffic capable of being handled by a given highway section. Capacity is determined by a number of factors: the number and width of lanes and shoulders; merge areas at interchanges; and roadway alignment (grades and curves) (Federal Highway Administration, June 2006.)

The design capacity of a roadway is the level at which the facility is handling the maximum traffic volume that it can accommodate while maintaining an acceptable level of driver satisfaction.

A critical V/C ratio of less than 1.00 indicates that all movements at the intersection can be accommodated within the defined cycle length and phase sequence by proportionally allocating green time. In other words, the total available green time in

the phase sequence is adequate to handle all movements, if properly allocated. A V/C ratio of 1.00 indicates that the roadway segment is handling the maximum traffic volume that it can accommodate at the upper limit of LOS E (defined in following section), which is the maximum flow rate or physical capacity of the road segment. V/C ratios that exceed 1.00 imply unfavorable operating conditions and LOS F.

Level of Service (LOS)

Level of Service (LOS) is a measure of transportation system performance based upon the ratio of traffic volume relative to the capacity of the roadway or intersection. Roadway capacity is a factor of the number of travel lanes, the presence of left turn pockets, on-street parking and other specific attributes. As stated previously, the volume-to-capacity ratio (V/C) indicates the overall performance of the roadway segment or intersection and corresponds to a rating of A through F identifying its level of capacity utilization and relative level of congestion. LOS A represents free-flow traffic with little or no delay whereas LOS F represents a breakdown of traffic flow and a high incidence of delay. The City of Cathedral City has adopted an LOS standard of “D” for its roadways and intersections. The following Table 3.16-1 summarizes quality of traffic flow for roadways for LOS A through F:

**Table 3.16-1:
 Roadway Level-of-Service Descriptions**

Level of Service	Quality of Traffic Flow
A	Primarily free-flow operations at average travel speeds, usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.
B	Reasonably unimpeded operations at travel speed usually, about 70% of the free-flow speed of the arterial classification. Ability to maneuver within the traffic stream is only slightly restricted. Stopped delays are not bothersome, and drivers generally are not subject to appreciable tension.
C	Traffic operations are stable. However, mid-block maneuverability may be more restricted than LOS B. Longer queues, adverse signal coordination (or both) may contribute to lower travel speeds of about 50% of the average free-flow speed for the arterial classification. Motorists will experience some appreciable tension while driving.
D	Borders on a range where small increase in flow may cause substantial increases in approach delay and decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, traffic volumes or some combination of these factors. Average travel speeds are about 40% of the free-flow speed. For planning purposes, this LOS is the lowest that is considered acceptable. <i>For the Cathedral City General Plan purpose, the upper level of LOS D is assumed to be the “acceptable” LOS for a given roadway in the City.</i>
E	Characterized by significant approach delays and average travel speeds of one-third or less of the free-flow speed. Typically caused by some combination of adverse progression, high signal density (More than two signalized intersections per mile), high

	volumes, extensive queuing, delays at critical intersections, and/ or inappropriate signal timing.
F	Arterial flow at extremely slow speeds, below one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalized intersections, with high approach delays and extensive queuing. Adverse progression is frequently a contributor to this condition

Source: Highway Capacity Manual, Transportation Research Board, 1994.

The Circulation Element of the City of Cathedral City’s General Plan states that the City’s circulation network shall shall operate at a level of D or better during “in-season peak hours”, based upon minimum adequate intersection service levels.

Note: “in-season peak hours” occur during the winter months of January, February and March and between the hours of 7:00 AM and 9:00 AM and 4:00 PM and 6:00 PM each day.

The preferred method of gauging congestion is to look at intersection operations during the peak hours, since the approach lane configurations at intersections represent the limiting factor in the capacity of the transportation system. As a result, peak hour travel demands at intersections are typically used to identify the approach lanes required and the most appropriate form of traffic control. The following Table 3.16-2 summarizes quality of traffic flow for intersections for LOS A through F:

**Table 3.16-2:
 Intersection Level-of-Service Descriptions**

Level of Service	Description	Signalized Intersection Delay sec./ vehicle	Unsignalized Intersection Delay sec./ vehicle
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	< or = 10	< or + 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons or vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10 & < or =20	>10 & < or =15
C	Good operation. Occasionally drivers may have to wait more that 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20 & < or =35	>15 & < or =25
D	.Fair operation. Vehicles are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>35 & < or =55	>25 & < or =35
E6	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays	>55 & < or =80	>35 & < or =50

	may be up to several minutes		
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore volumes carried are not predictable. Potential for stop and go type traffic.	>80	>50

Source: Highway Capacity Manual, Transportation Research Board, Washington, D.C., 2000.

The analysis of traffic operations at intersections employs Traffix 7.9 software, according to the Highway Capacity Manual (HCM) delay methodology, which is described in the Highway Capacity Manual, Special Report 209 (Transportation Research Board, Washington, DC, 2000). Under this methodology, LOS is based on the average delay experienced by vehicles traveling through an intersection. The analysis incorporates the effects of the lane geometry and signal phasing at the intersection.

In summary, the following Table 3.16-3 is used to determine the LOS of a particular roadway segment. It describes daily vehicle volumes at the upper limit of each LOS, based on the roadway classification and average daily traffic volume.

**Table 3.16-3:
 Daily Roadway Volume Estimates for Each Level-of-Service (1)**

Classification	Typical Lane Configuration	Ave. Daily Traffic Volume @ Upper Limit of Each LOS (1)				
		LOS A(2)	LOS B(2)	LOS C(3)	LOS D(2)	LOS E(3)
Freeway	8-lane divided	74,000	103,000	132,000	161,000	190,000
Arterial Highway	6-lane divided	17,000	27,500	38,000	48,500	59,000
Major Highway	4-lane divided	10,000	17,000	24,000	31,000	38,000
Secondary Highway	4-lane undivided	10,000	15,000	20,000	25,000	30,000
Collector	2-lane undivided	6,000	9,000	12,000	15,000	18,000

- (1) The upper limit of LOS D was assumed to be the “design” capacity in Cathedral City. All capacities are based upon improvement to full city standards under optimum operating conditions.
- (2) Source: Endo Engineering, based on LOS C and LOS E values provided by Riverside County.
- (3) Source: Riverside County Road Dep., “Information Pamphlet for Riverside County Traffic Circulation and Roadway Improvement Requirements”, revised 11/24/87.

Source of Table: “Cathedral City General Plan Update Traffic Background Study” prepared by Endo Engineering, January, 2002

Congestion Management Program (CMP)

The Congestion Management Program (CMP,) prepared by the Riverside County Transportation Commission (RCTC,) is intended to link land use, transportation and air quality with reasonable growth management methods, strategies and programs that effectively utilize new transportation funds to alleviate traffic congestion and related

impacts. As the designated Congestion Management Agency (CMA), the RCTC prepares the CMP that designates a system of highways and roadways to include all State Highway facilities within Riverside County and a system of “principal arterials” to be included as the Congestion Management System (CMS.) It is the responsibility of local agencies, when reviewing and approving development proposals to consider the traffic impacts to the CMS. All development proposals and circulation projects to be included within the City of Cathedral City are required to comply with the current policies and procedures set forth by the Riverside County Transportation Commission’s Congestion Management Program. Interstate Highway 10, Bob Hope Drive and Varner Road are regionally significant arterials in the study area that have been nominated and included in the CMP system.

In addition, the Coachella Valley Association of Governments has developed a Transportation Uniform Mitigation Fee (TUMF) that complements the objectives of the Congestion Management Program. In addition, The City is in compliance with the Riverside County CMP, requiring all developments to participate in the TUMF program. The City will continue to participate in the TUMF program in order to assured that appropriate fees are assessed for development projects as a means of supporting the financing of regional transportation infrastructure. Impact fees will be collected prior to the issuance of building permits and may be incrementally assessed in conformance with the TUMF program.

Transportation Demand Management (TDM)

The City of Cathedral City will be able to preserve or extend the capacity of existing roadways through the development and implementation of Transportation Demand Management (TDM) strategies. Cathedral City has adopted a Traffic Demand Management (TDM) Ordinance. This involves goals, policies and programs that encourage the use of a wider range of transportation alternatives, including public transit and bicycles. Such techniques may include encouraging the use of car/ van pooling and flex-time work schedules, and the continued utilization and expansion of public transit service.

Air Traffic

There are approximately 60 airports in the Southern California area. The greater part of passenger air traffic is carried out by six commercial airports: Los Angeles International, Burbank, John Wayne/Orange County, Ontario International, and the Palm Springs and Long Beach Municipal Airports. The Palm Springs Airport provides the only passenger air service within Riverside County (County of Riverside Transportation and Land Management Agency, 2003.) Ontario International Airport (San Bernardino County) provides significant passenger service to Riverside County Residents.

The Palm Springs International Airport is the primary commercial airport serving the Coachella Valley and is located less than one-half mile west of Cathedral City, at the northwest corner of Ramon road and Gene Autry Trail. It is classified as a long-haul commercial serviced airport and is capable of supporting non-stop commercial service to destination more than 1,500 miles away. The airport is also classified as a small hub air passenger airport, with major destinations to San Francisco, Chicago, Seattle, Dallas and New York. Commercial traffic demand is seasonal, with the peak service period extending from January through March, and the slowest period occurring in the summer months. Annual commercial operations are projected to continue to grow, with passenger enplanements anticipated to reach 809,256 by year 2015.

Rail Traffic

The Union Pacific Railroad line traverses the area just south of the SP and Interstate Highway 10. A grade separated railroad crossing exists where Bob hope Drive crosses over the railroad line, south of the project site. The recently completed I-10 interchange project at Bob Hope Drive included the construction of a new six-lane bridge over the Union Pacific Railroad.

Within Riverside County, freight rail is an important backbone of the goods movement and distribution industry. The Union Pacific Railroad provides freight rail service to Riverside County, with up to fifty freight trains per day passing through the area to/from major cities throughout the continental United States. Union Pacific added a full second track parallel to the existing one in 2003, and is projecting an associated 50% - 70% increase in freight rail traffic.

AMTRAK currently provides the Coachella Valley with passenger services from the Palm Springs Station and the Indio platform, providing access to AMTRAK's Desert Wind Service which features connections to points west including Riverside and Los Angeles and to points east including Tucson, Arizona and El Paso, Texas. (County of Riverside Transportation and Land Management Agency 2003)

The North Palm Springs AMTRAK train station is a stop three times per week on the Sunset Limited passenger service between Los Angeles and New Orleans. The North Palm Springs train station is located 0.6 miles south of I-10, at the intersection of North Indian Canyon Drive and Palm Springs Station Road. AMTRAK does not currently provide commuter rail services.

A second passenger rail station is planned near the Agua Caliente Casino/ Resort/ Spa which is located at Bob Hope Drive and Ramon Road, just south of the project. The station site is owned by the Coachella Valley Association of Governments (CVAG) and is being master planned as a multi-modal Transportation Center, including passenger rail and SunLine Transit Agency public transit services.

Bus Traffic

Trips by transit currently represent less than 2 percent of all trips made in the County. Public transportation, where service is available, is utilized primarily by a transit-dependent population (senior citizens, students, low-income residents and the physically disabled) that generally do not have access to automobiles. (County of Riverside Transportation and Land Management Agency 2003)

The SunLine Transit Agency (SunLine) provides public transit services for the Coachella Valley area, covering approximately 366 square miles with a permanent population of over 270,000 residents. SunLine operates 12 fixed routes, with approximately 900 stop locations, serving over 2.8 million passengers annually. SunLine also operates the SunDial System which provides curb to curb demand responsive (dial-a-ride) service for members of the community requiring such service. The SunLine fleet consisted of buses powered by compressed natural gas (CNG)

Twelve SunLine transit lines provide public bus service with a fleet of 27 buses throughout the Coachella Valley seven days a week (excluding Thanksgiving and Christmas.) SunLine has bicycle racks on every bus in its fleet. These racks can carry up to two bicycles per bus (Endo Engineering 2007.)

The SunLine Transit Agency provides public transportation to the City of Cathedral City as well as to the City of Rancho Mirage and the Thousand Palms Community. Line 32 provides service between Palm Springs and Palm Desert. At its closest point to the North City Extended SP, Line 32 extends along Ramon Road, from Date Palm Drive to Monterey Avenue. Bus Stop # 410 and #426 are located on Ramon Road, west of Harry Oliver Trail in Thousand Palms. Line 32 provides service to downtown Palm Springs as well as College of the Desert in Palm Desert.

Greyhound Bus Lines provides private transportation services that link the principal population centers of the County with other regions. This includes east-west service connecting Blythe, Indio, Palm Springs, Banning/Beaumont and Riverside. The service continues westward to downtown Los Angeles and intermediate stops.

Truck Traffic

Cathedral City designates truck routes which are designed to provide access to commercial, industrial and other areas of the community that utilize truck service. Cathedral City has designated the following truck routes in the project vicinity: Varner Road; Date Palm Drive; Vista Chino and Ramon Road. In the future, DaVall Drive and Rio Del Sol Road will undoubtedly need to also be classified as truck routes due to the amount of Light Industrial and Commercial land designated within the project and connectivity with Interstate Highway 10.

Designated truck routes are designed to support the weight of heavier vehicles and provide intersections with sufficient room for turning movements by vehicles with large turning radii. They also provide efficient routes for through truck traffic that avoid residential areas, congested streets and landscaped boulevards such as the proposed Valley Center Boulevard within the project. Trucks making local deliveries are allowed to divert from these routes to businesses.

Scenic Corridors

The *Cathedral City General Plan* designates Interstate Highway 10, Varner Road and Date Palm Drive as scenic corridors. Within this project, the proposed Valley Center Boulevard and Bob Hope Drive at I-10 will also need to receive this designation. Scenic corridors receive scenic treatments and street beautification including landscaping, wayfinding signage, parking design and setback requirements. All development adjacent to scenic corridors must incorporate within the development plan tree/ parkway themes as specified in the *Cathedral City Design Guidelines*. In addition, the *Cathedral City General Plan* incorporates several objectives to scenic corridors as well as related policies and programs to achieve the objectives.

Hazards

The City's Circulation Element contains several policies that are pertinent to managing hazards related to traffic and conflicts that may occur. There exist established access design principles that would ensure safe and efficient access to and through development. Research has shown that managing access can significantly reduce the frequency and severity of traffic accidents. The Circulation Element indicates that a project should avoid the use of long, straight roadway segments on new local streets in new residential neighborhoods, whenever possible, to discourage excessive speeds. In relation to bicycle safety, the Circulation Element also encourages the proper design and maintenance of facilities and appropriate signage to ensure the safe use of the bikeway and trail systems.

Temporary hazards during construction can arise from conflicts with construction vehicles and passenger traffic. Consultation with the City aids in determining the safety of construction staging areas and off site routes utilized for transporting construction materials and debris (including excavated soils.) Traffic control plans for construction traffic, work to maintain safety during all phases of construction.

Emergency Access

As discussed in the section on Hazards and Hazardous Materials, the City of Cathedral City has adopted the 2001 California Code with City Amendments. These provisions include construction standards in new structures, road widths and configurations

designed to accommodate the passage of fire trucks and engines, and requirements for minimum fire flow rates for water mains. (Earth Consultants International, 2005). Coordination with the City and the Fire Department during development review process ensures the adequacy of a project's internal circulation relative to emergency access.

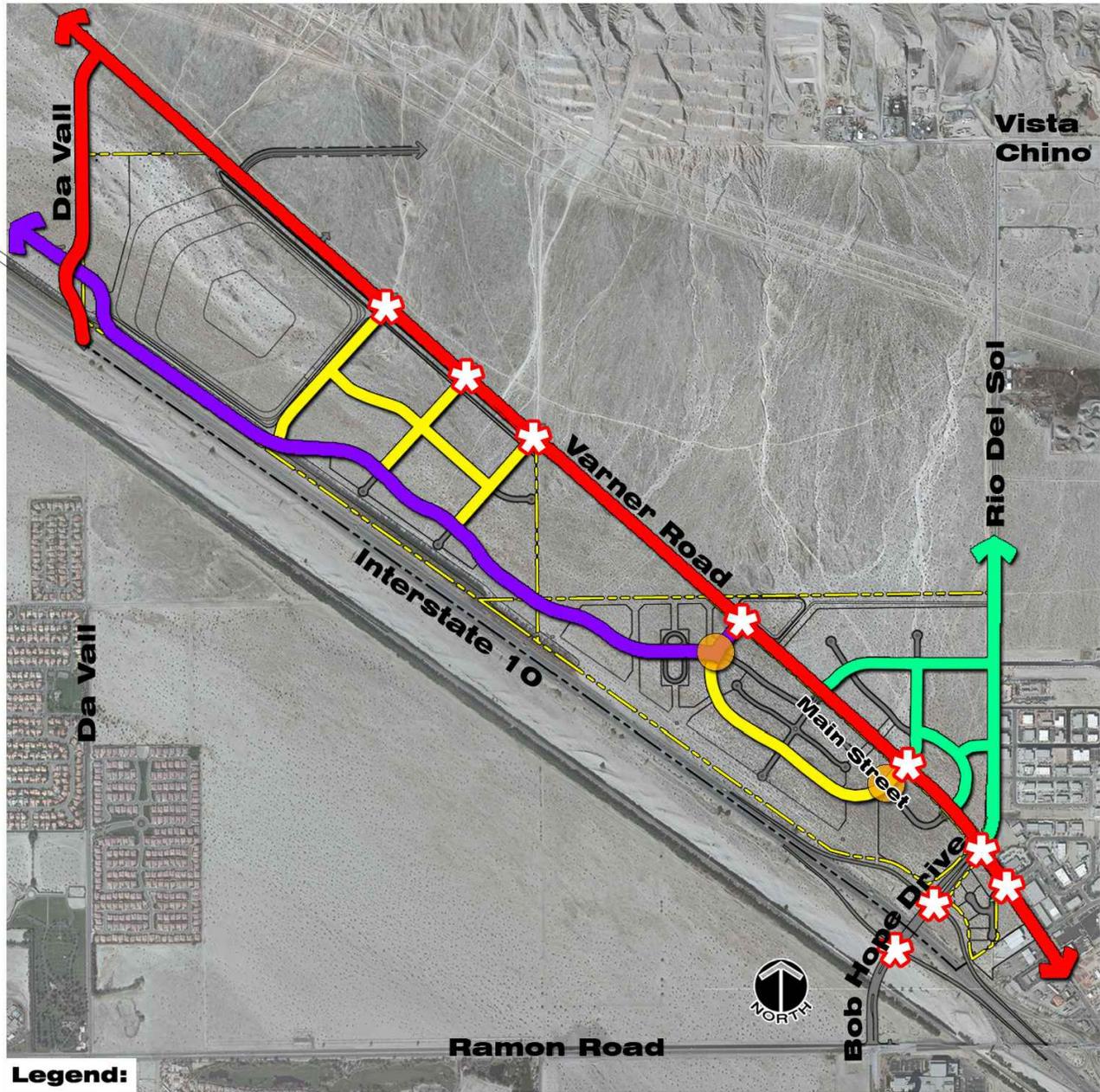
Parking Capacity

The City of Cathedral City Circulation Element includes several circulation implementation programs including one stating that the City shall require all new developments to provide off-street parking in accordance with the Municipal Code parking requirements. Required parking spaces are determined by the type and intensity of uses contained within a project and some adjustments are allowable within the framework of the Zoning Code and review structure.

Street Widths

The City of Cathedral City General Plan Circulation Element details the general location and extent of the circulation system required to serve future demands associated with buildout per the Land Use Element of the General Plan. It also details the roadway designations. Major thoroughfares are typically high capacity streets that provide four or more travel lanes within a 112-foot right-of-way. They have a limited number of cross streets and provide stacking and exclusive turn lanes at intersections.

Secondary thoroughfares are four-lane undivided roadways with 64 feet of pavement and an 88-foot right-of-way that chiefly serve locally destined traffic and secondary traffic generators. Collector streets are typically two-lane undivided roadways with 40 feet of pavement within a 60-foot to 66-foot right-of-way. Exhibit 3.16-2 shows typical cross-sections and right-of-way requirements for each classification of master planned streets.



Legend:

- **Modified Major Highway**
- **Major Highway (Valley Center Boulevard)**
- **North City Collector**
- **Modified Industrial Collector**
- **Roundabout Intersection**
- ✱ **Signalized Intersection**



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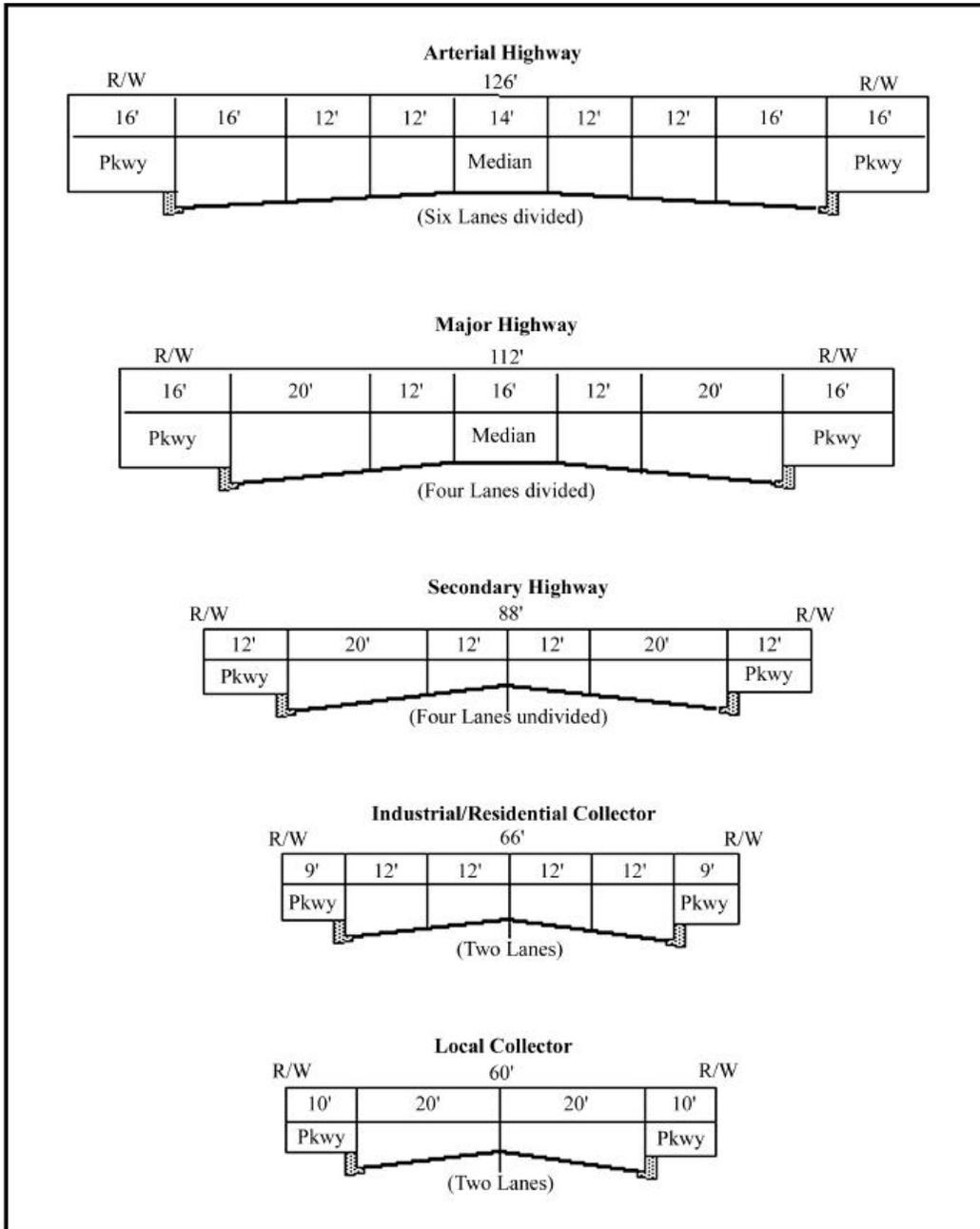
Specific Plan Roadway Classifications

North City Extended Specific Plan
 Environmental Impact Report

Exhibit 3.16-1

Page 3.16-11

Exhibit 3.16 -2
Typical Cross Street Sections



Pedestrians / Bicycles

The Southern California Association of Governments 2004 Regional Transportation Plan (RTP) states that the State of the Commute Report indicates that biking and walking have hovered around 0.5 and 1.5 percent of total work trips, respectively in the 1990's. Bicycling and walking are important elements of an integrated, intermodal transportation system. Constructing sidewalks; installing bicycle parking at transit centers; teaching children to ride and walk safely; installing curb cuts and ramps for wheel chairs; constructing exclusive bike lanes and striping bike lanes and building trails contribute to national and regional transportation goals of safety, mobility, economic growth and trade, enhancement of communities and the natural environment.

According to the traffic analysis, CALTRANS standards are used to design bikeways by most jurisdictions throughout California. The City of Cathedral City adheres to Caltrans bikeway standards. Bike lanes on existing roadways should conform to Caltrans standards or be upgraded to meet Caltrans standards. These standards apply to three different classifications of bicycle facilities: Class I, Class II, and Class III bikeways, as described below.

Class I Bikeway: A bike path that provides for bicycle travel on a right-of way completely separated from any street or highway. The paths may be located along alignments parallel to streets or unrelated alignments as long as there is no encroachment by motor vehicle or pedestrian traffic, except at intersections.

Class II Bikeway: A bike lane that provides a striped lane for one-way bike travel within the paved area of a street or highway. These bike lanes are within an exclusive right-of-way designated for use by bicyclists. However, cross traffic is permitted for driveway access.

Class III Bikeway: A bike route in which both bicycle and motor vehicle traffic share the same roadway surface area. The route is marked with signs or stenciled lettering on the pavement identifying the roadway as part of a bikeway system.

The City's Circulation Element encourages the utilization of transportation elements, particularly bicycle and hiking trails, as a means of providing recreational and educational experiences by linking up with various parks and public facilities in the City. Section 3.15 (Recreation) of this document further discusses the linkages between recreational trails and surrounding uses. The Circulation Element, mentioned previously in the "Hazards" discussion, also states that the City shall encourage the proper design and maintenance of bicycle facilities and appropriate signing to ensure the safe use of the bikeway system.

B. Existing Conditions

Location of Study Intersections

The study area and key intersections were developed through coordination with Mr. Bill Simons, the Interim City Engineer of Cathedral City. The Study Area and five existing key intersections are shown in Exhibit 3.16-4 "Study Area and Key Intersections". The traffic impacts associated with the Preferred Project were evaluated at each of the following existing key intersections: (Refer to Exhibit 3.16-5)

- (1) Bob Hope Drive @ Ramon Road,
- (2) Bob Hope Drive @ the I-10 Eastbound Ramps,
- (3) Bob Hope Drive @ the I-10 Westbound Ramps,
- (4) Bob Hope Drive/Rio Del Sol Road @ Varner Road, and
- (5) Metroplex Drive @ Varner Road

Each of the proposed full-turn site access intersections were evaluated to ensure that these intersections will provide acceptable levels of service in the Horizon Year 2035 with the project completed (refer to Exhibit 3.16-5). An operation analysis was not conducted for the two right-in/right-out access points proposed on Varner Road (east and west of Valley Center Boulevard at Street "F" and Street "H") because they would have few conflicting movements and little control delay. The site access intersections include:

- (6) Rio Del Sol Road @ Street "D";
- (7) Rio Del Sol Road @ Street "E";
- (8) Street "N" @ Varner Road;
- (9) Street "M" @ Varner Road;
- (10) Street "L" @ Varner Road;
- (11) Street "I" @ Varner Road;
- (12) Street "H" @ Varner Road;
- (13) Valley Center Boulevard @ Varner Road; and
- (14) Street "F" @ Varner Road.

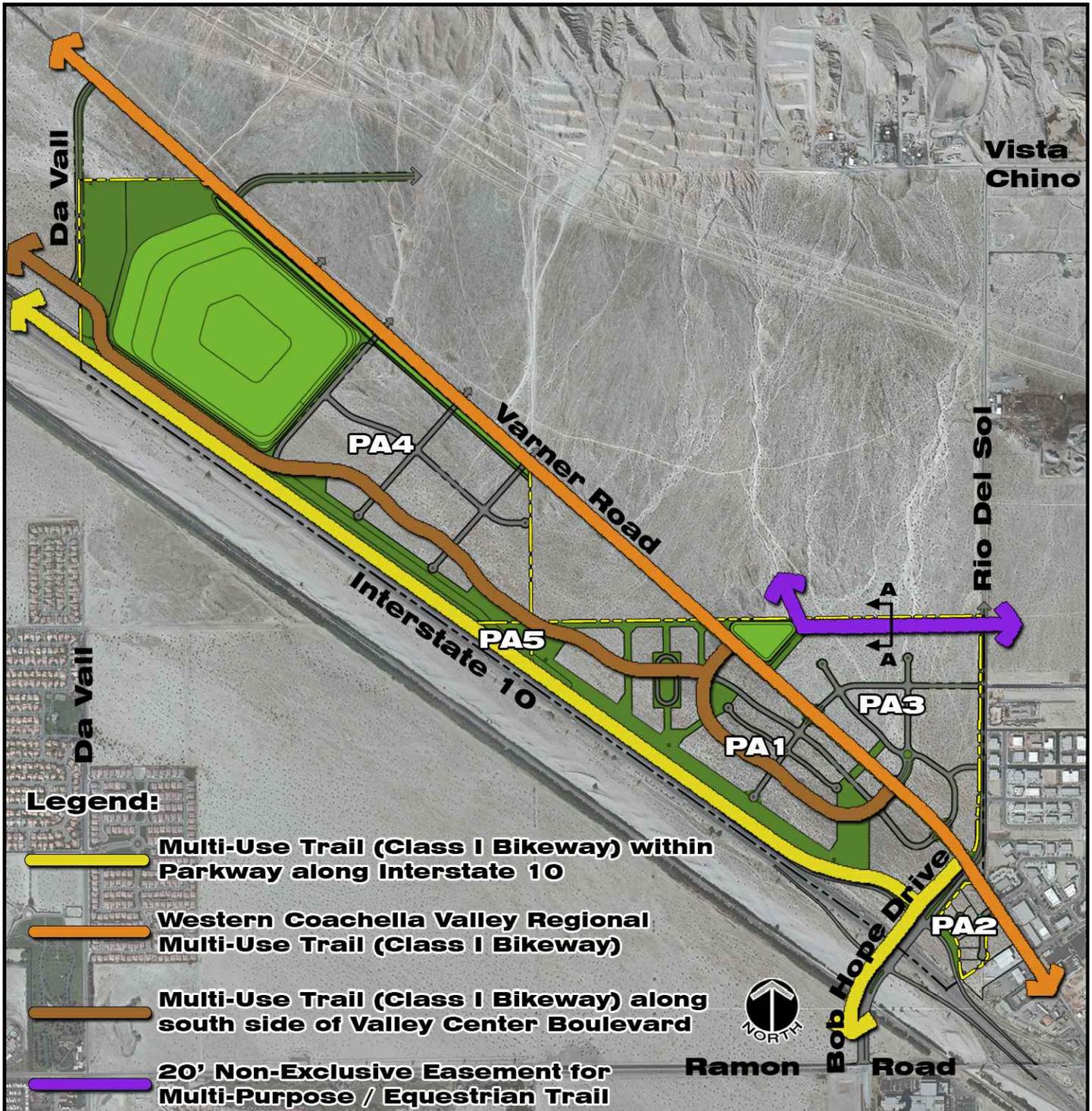
As shown in the Cathedral City General Plan, a future Interstate 10 interchange may ultimately be constructed adjacent to the western site boundary, at DaVall Drive. It is uncertain at the present time when this interchange will be constructed. Funding for this improvement is not currently available. For this Specific Plan, it was assumed that the DaVall Drive interchange will not be constructed prior to buildout of the Preferred Project.

The mitigation identified within this study was designed to achieve the Cathedral City minimum intersection performance standard without site traffic assigned to DaVall

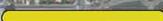
Drive. The North City Extended Specific Plan excludes this interchange at DaVall and I-10 and proposes "T" intersections for DaVall at Varner Road and the proposed Valley Center Boulevard north of I-10.

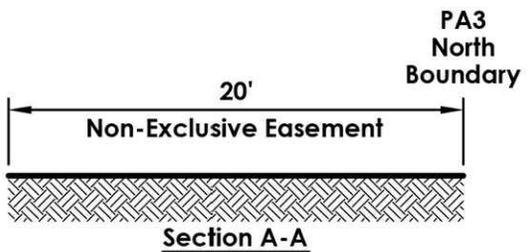
Existing Geometrics of Study Intersections

Reference should be made to Exhibit 3.16-5 "Existing Lane Geometrics" for the Study Area. This diagram identifies the current configuration and number of through travel lanes as well as exclusive left and right turn lanes for the Study Intersections as previously identified.



Legend:

-  Multi-Use Trail (Class I Bikeway) within Parkway along Interstate 10
-  Western Coachella Valley Regional Multi-Use Trail (Class I Bikeway)
-  Multi-Use Trail (Class I Bikeway) along south side of Valley Center Boulevard
-  20' Non-Exclusive Easement for Multi-Purpose / Equestrian Trail

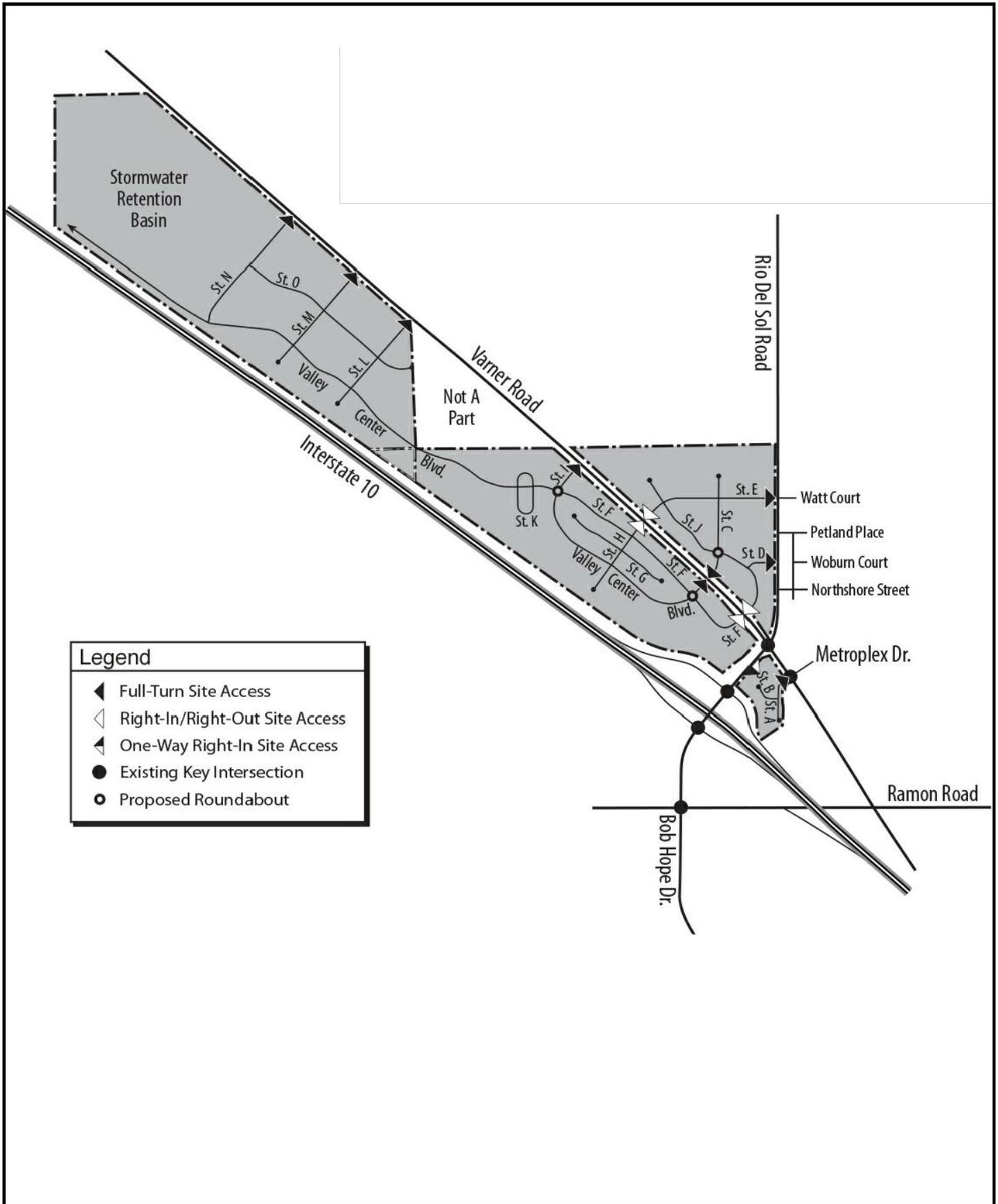


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Trail and Bikeway Network

North City Extended Specific Plan
 Environmental Impact Report

Exhibit 3.16-3
 Page 3.16-16



Legend	
◄	Full-Turn Site Access
◁	Right-In/Right-Out Site Access
◄●	One-Way Right-In Site Access
●	Existing Key Intersection
●○	Proposed Roundabout

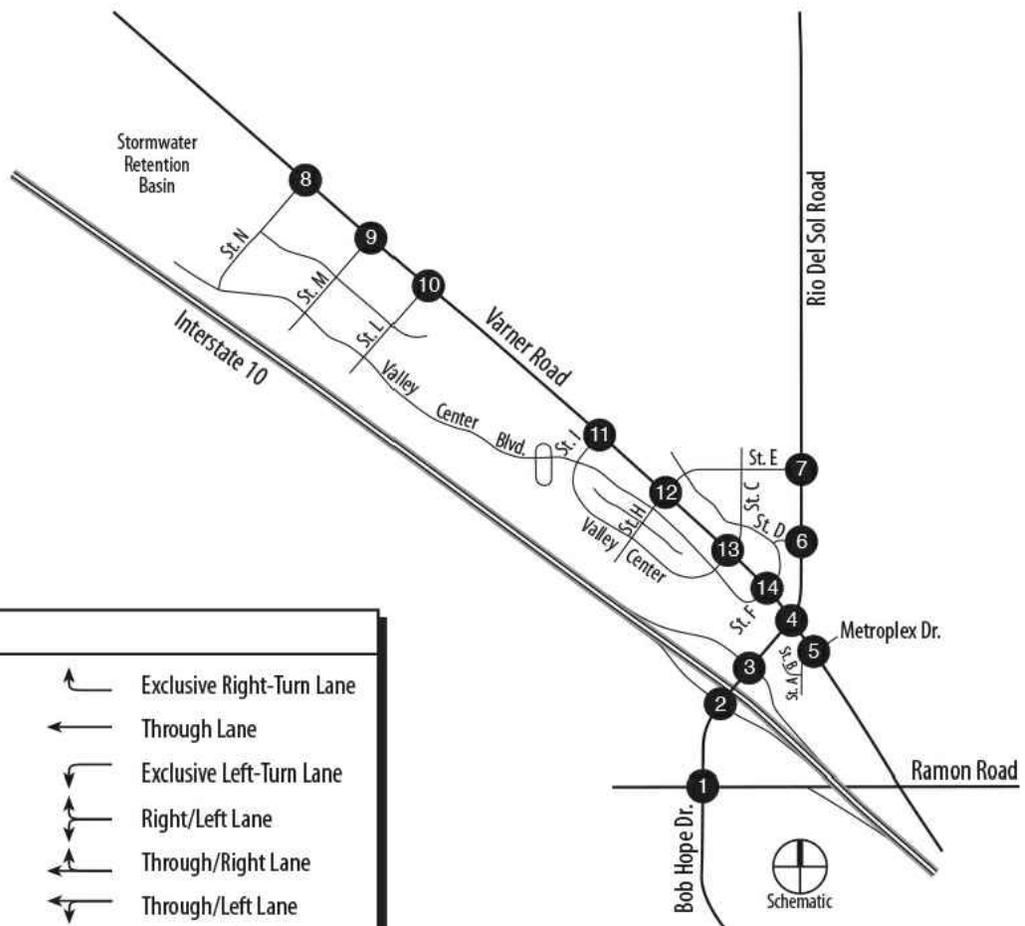


Study Area and Key Intersections

North City Extended Specific Plan
Environmental Impact Report

Exhibit 3.16-4

Page 3.16-17



Legend	
1	Intersection Number
⊙	Signalized Intersection
•	Stop Sign Control
FF	Free-Flow Right-Turn
	Exclusive Right-Turn Lane
	Through Lane
	Exclusive Left-Turn Lane
	Right/Left Lane
	Through/Right Lane
	Through/Left Lane

Bob Hope Drive @ Ramon Road	Bob Hope Drive @ I-10 Eastbound Ramps	Bob Hope Drive @ I-10 Westbound Ramps	Bob Hope Drive @ Varner Road	Metroplex Drive @ Varner Road	Rio Del Sol Road @ Street "D"	Rio Del Sol Road @ Street "E"
Street "N" @ Varner Road	Street "M" @ Varner Road	Street "L" @ Varner Road	Street "I" @ Varner Road	Street "H" @ Varner Road	Valley Center Blvd. @ Varner Road	Street "F" @ Varner Road



Existing Lane Geometrics at Key Intersections

North City Extended Specific Plan
Environmental Impact Report

Exhibit 3.16-5

Page 3.16-18

Existing Traffic Volumes

Seasonal fluctuations in traffic demand reflect trip purposes and the activity in the area served by the roadways. The Coachella Valley is relatively isolated from neighboring urbanized regions and is home to hundreds of resort facilities and retirement communities. In the Coachella Valley, a large tourist and retired population, supported by large service sector employment, generates travel patterns that are, in many ways, atypical of Southern California. Approximately 3.5 million people visit the Coachella Valley each year. The tourist season extends from October to May, with the increase in the tourist population beginning to peak in January and decreasing substantially after April. Traffic volumes throughout the Coachella Valley are subject to significant seasonal fluctuations, as the population swells in the winter and spring with tourists and “snow birds,” then decreases as they leave to avoid the hot summer months.

The most recent Caltrans daily traffic count data for I-10 reflects peak month volumes in the year 2011. Caltrans data indicates that the annual average daily traffic (AADT) volume on I-10 is 91,000 vehicles per day (between Bob Hope Drive and Date Palm Drive) and 93,000 vehicles per day (between Bob Hope Drive and Monterey Avenue). East of Monterey Avenue the AADT is 94,000 vehicles per day. During the peak month, the average daily traffic (ADT) volume on Interstate 10 is 9.7 to 9.9 percent higher than the AADT adjacent to the project site. At the Monterey Avenue interchange, the ADT on Interstate 10 in the peak month is 11.8 percent higher than the AADT. The peak hour traffic volume on Interstate 10 (8,100-8,300 vehicles per hour) represents 8.9 percent of the AADT.

Before the I-10 interchange project at Bob Hope Drive was completed, the eastbound offramp at Ramon Road served 7,000 vehicles per day (VPD) in 2008 and the westbound offramp served 8,100 VPD in 2005. The eastbound I-10 onramp at Ramon Road accommodated 9,200 VPD and the westbound onramp served 6,900 VPD in 2005. 2 Therefore, 13,900 vehicles per day were using I-10 to travel to and from the west and 17,300 VPD were using I-10 to travel to and from the east from the vicinity of the project site. The volume using I-10 for regional access to/from the east is increased substantially by the number of motorists from Palm Springs and Cathedral City, using Ramon Road as the shortest travel path to I-10 for travel to/from the east (as opposed to the interchanges at Gene Autry Trail and Date Palm Drive).

Interstate 10 serves a substantial volume of heavy trucks transporting freight. The heavy vehicles using Interstate 10 currently comprise approximately 23.6 percent of the daily traffic volume, east of Indian Canyon Drive. The Riverside County Department of Public Health specifies a truck mix of 8 percent for Major Highways and Arterial Highways for modeling noise impacts. An 8 percent truck mix was assumed for the peak hour operational analysis of intersections in the study area.

Relative to new traffic count data, annual intersection turning movement counts were made by Counts Unlimited, Inc. at all of the existing key intersections to document current travel patterns in the study area. The intersection counts were collected continuously for two hours in the morning (from 7:00 a.m. to 9:00 a.m.) and for two hours in the evening (from 4:00 p.m. to 6:00 p.m.) on Wednesday, September 5, 2012. This data was needed to document existing conditions during the peak travel hours on the adjacent streets. On the same day, 24-hour directional machine counts were collected along ten roadway segments in the vicinity of the key intersections.

These 24-hour traffic counts were used to identify the relationship between the daily two-way traffic volumes on area roadways and the peak hour traffic volumes on those roadways. The traffic count data was used to identify existing travel patterns in the project vicinity at different times during a typical weekday. These patterns not only establish the time of day when the travel demand peaks but also the directional orientation of the traffic flows in the peak hours on the adjacent streets. Understanding the directional orientation of existing traffic in the project vicinity is useful when estimating the future site traffic distribution and site traffic assignment.

The highest hourly two-way volumes at the ten 24-hour count locations that occurred between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m. were added together and then divided by the 24-hour volume to identify the percentage of the daily volume that occurs in the morning and evening peak hours on the streets in the study area. It was determined from the count data that the combined morning and evening peak hour volume on all of the roadway segments combined represents approximately 15 percent of the daily volume on the roadways. This relationship was used to estimate daily non-site traffic volumes on roadway segments adjacent to the key intersections from the peak hour non-site traffic volumes.

Level of Service

All of the key intersections are currently providing acceptable levels of service in the peak hours of the peak season with the traffic controls and existing approach lane geometrics shown in Exhibit 3.16-5 "Existing lane Geometrics at Key Intersections". The peak hour traffic volumes do not currently warrant traffic signalization at the unsignalized intersection of Metroplex Drive and Varner Road. The project site has adequate access for the uses proposed.

Existing Street Widths

Regional access for the project site is currently available from Interstate 10, via the new interchange at Bob Hope Drive. Motorists can access I-10 in both directions via the Bob Hope Drive interchange which includes a new eight-lane overcrossing at I-10 and new ramps configured as a spread diamond interchange. Motorists from Palm Springs,

Cathedral City, Rancho Mirage, and Thousand Palms who are destined to the east via Interstate 10 can also access the freeway from Ramon Road, east of Bob Hope Drive, via the eastbound on ramp.

Interstate Highway 10 is an eight-lane freeway in the vicinity of the project site, under the jurisdiction of Caltrans. It is a six-lane freeway east of Monterey Avenue (approximately 1.5 miles east of the project site). The newly reconfigured interchange at Bob Hope Drive provides a two-lane westbound offramp which flares to three westbound lanes at Bob Hope Drive and includes an exclusive channelized free-flow right-turn lane. The intersections of Bob Hope Drive with both the eastbound and westbound I-10 ramps are signalized. The new six-lane bridge over the Union Pacific railroad and eight-lane divided overcrossing of Interstate 10 are located immediately south of the I-10 westbound ramps.

Bob Hope Drive is classified as a six-lane divided Urban Arterial Highway in the *County of Riverside General Plan* and a six-lane divided Major Arterial in the *Rancho Mirage General Plan*. This roadway was recently improved in conjunction with the interchange improvements at Interstate 10. Where Bob Hope Drive abuts the project site, it currently provides three northbound through lanes and two southbound through lanes. The flared approach to Varner Road provides dual left turn lanes, two through lanes and an exclusive channelized free-flow right-turn lane.

Ramon Road is located just south of the SP and provides east/west access between Palm Springs and Interstate 10. The Union Pacific railroad overcrossing on Ramon Road provides three travel lanes (one westbound and two eastbound).

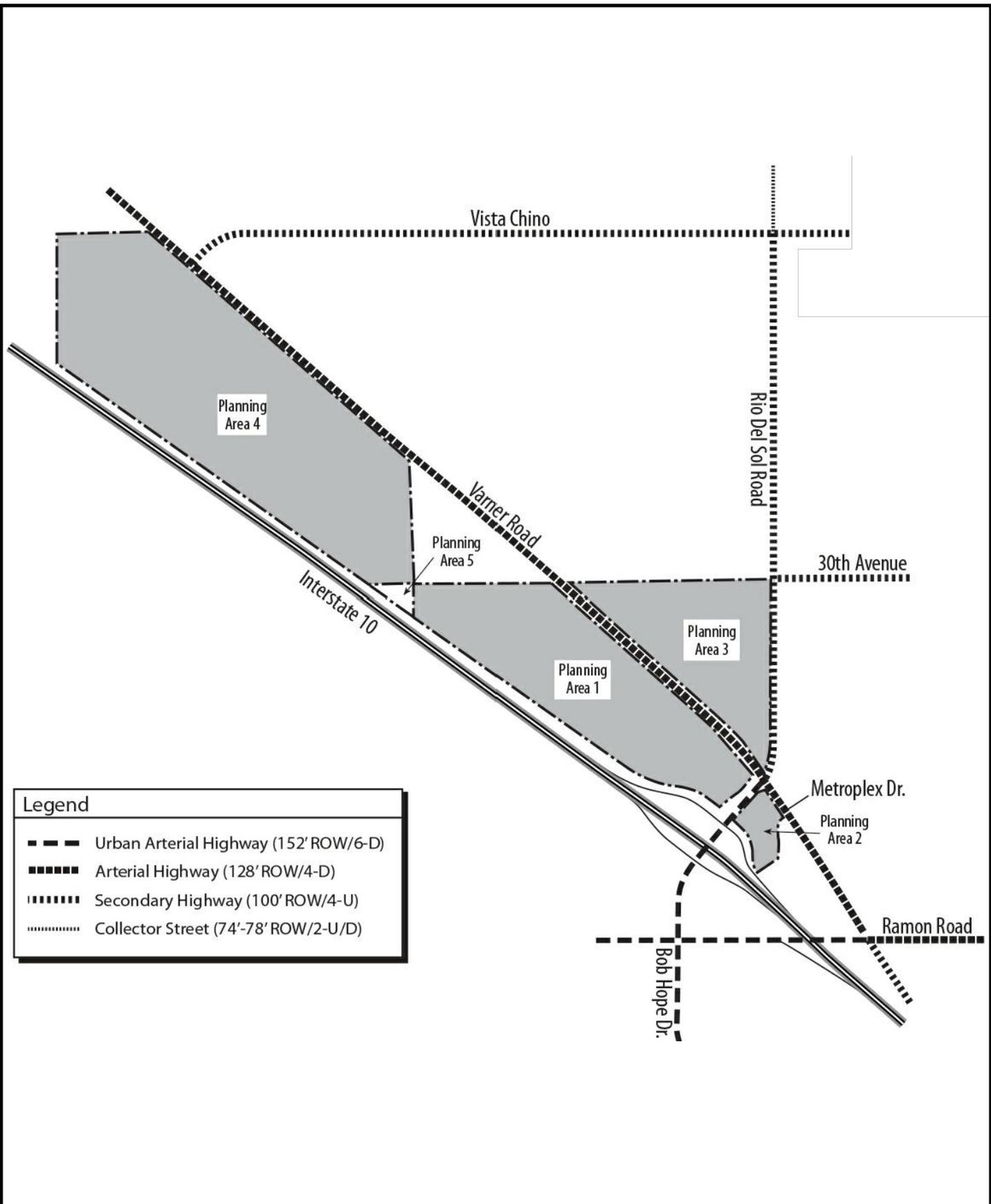
Varner Road parallels Interstate 10 and passes through the project site. It is currently constructed as a two-lane undivided roadway from Date Palm Drive southeast to a point approximately 550 feet west of Bob Hope Drive. East of that point, Varner Road was recently improved to provide a four-lane divided cross-section in conjunction with the I-10 interchange project at Bob Hope Drive. West of the recently improved section, Varner Road is currently constructed with two travel lanes and a pavement width of approximately 33 feet. Existing pavement markings include a double yellow centerline and a white solid line at the outer edge of each lane. Graded shoulders exist on both sides of Varner Road (with no curbs, gutters, or sidewalks).

Rio Del Sol Road is classified as a Secondary Highway north of Varner Road. It is currently improved as a two-lane undivided north/south roadway from Northshore Street to the future alignment of Vista Chino. Rio Del Sol Road has a four-lane divided cross-section south of Northshore Street. The roadbed is flared, north of Varner Road, to provide two through lanes in each direction as well as dual southbound left-turn lanes and an exclusive southbound right-turn lane.

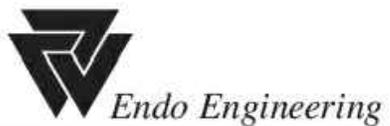
South of Interstate 10, DaVall Drive is currently constructed north of Ramon Road as a four-lane undivided roadway that narrows to a two-lane undivided roadway before terminating south of the Union Pacific Railroad and Interstate 10.

Metroplex Drive extends north of Varner Road and functions as a main access to the light industrial area constructed along both sides of Corporate Way. This area has partially occupied warehouse, office, and light industrial space. Curbs, gutters, and sidewalks exist along both sides of Metroplex Drive. On-street parking is permitted along both sides of this 64-foot wide two-lane street. Metroplex Drive is located approximately 560 feet (centerline-to-centerline) east of Bob Hope Drive.

Reference should be made to Exhibit 3.16-6 "Circulation System of the Riverside County General Plan".



Legend	
	Urban Arterial Highway (152' ROW/6-D)
	Arterial Highway (128' ROW/4-D)
	Secondary Highway (100' ROW/4-U)
	Collector Street (74'-78' ROW/2-U/D)



Parking Capacity

The North City Extended Specific Plan is currently undeveloped, vacant desert lands. There is no off-street or on-street parking currently provided within this area. However, this issue is addressed in the Specific Plan in a manner that adequately addresses Cathedral City's General Plan policies and Parking Ordinance standards.

Alternative Transportation

Currently, there are no existing pedestrian/ bicycle trails within the project area. However, there is a designated future Regional Trail linkage along Varner Road. Further, SunLine Transit Agency does not currently provide service to this area. However, both issues are addressed within the North City Extended Specific Plan in a manner consistent with Cathedral City's General Plan and SunLine operating standards for service.

C. 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 Transportation and Traffic perspective. Would the project:

- a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?
- b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- e) Result in inadequate emergency access?
- f) Result in inadequate parking capacity?
- g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

D. Project Impacts Found Not To Be Significant

North City Extended Project Description

The proposed project includes a request for annexation, zone change, and approval of the *North City Extended Specific Plan* to guide the future development of the project site. The proposed zoning designations include: Mixed Use-Urban (MU-U), Mixed Use-Neighborhood (MU-N), Industrial (I-1), and Open Space (OS).

At buildout, the Preferred Project could include a total of: 595,000 square feet of light industrial gross floor area (GFA); 200,000 square feet of retail/commercial GFA; 120,000 square feet of restaurant GFA; 190,000 square feet of office/services GFA; 400 hotel rooms; 1,900 multiple-family residential dwellings; and 1,140 single-family residential dwellings.

Approximately 1,425 of the multiple-family residential dwellings are expected to be apartments. The remaining 475 multiple-family dwellings are expected to be condominiums. Approximately 160 of the single-family dwellings are expected to be attached units. The remaining 140 units are expected to be detached dwellings. The phased full buildout of the project is projected for completion by the Year 2028.

Level of Service

Throughout each development phase and at project buildout, all street segments and intersections are projected to operate at LOS D or better, thus maintaining consistency with Cathedral City General Plan policies and standards. Further presentation of impacts related to LOS is found in the following tables (3.16-4 through 3.16-10).

Table 3.16-4
Year 2015 Weekday Peak Hour Delay and LOS
At the Signalized Key Intersections ^a

Signalized Intersection	No-Project			With Project (Phase 1A & 1B)			Change In	
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS
Bob Hope Drive @ Ramon Road (1) - Morning Peak Hour (PHF=0.90) - Evening Peak Hour (PHF=0.91)	20.1 20.8	0.52 0.51	C C	20.5 21.3	0.55 0.54	C C	0.4 0.5	No No
Bob Hope Drive @ I-10 EB Ramps (2) - Morning Peak Hour (PHF=0.84) - Evening Peak Hour (PHF=0.90)	9.7 11.1	0.36 0.27	A B	13.4 15.6	0.40 0.40	B B	3.7 4.5	A-B No
Bob Hope Drive @ I-10 WB Ramps (3) - Morning Peak Hour (PHF=0.88) - Evening Peak Hour (PHF=0.94)	15.1 19.4	0.28 0.33	B B	12.7 16.0	0.35 0.41	B B	-2.4 -3.4	No No
Bob Hope Drive @ Varner Road (4) - Morning Peak Hour (PHF=0.82) - Evening Peak Hour (PHF=0.85)	21.9 21.8	0.38 0.32	C C	24.9 26.6	0.63 0.60	C C	3.0 4.8	No No
Metroplex Drive @ Varner Road (5) - Morning Peak Hour (PHF=0.82) - Evening Peak Hour (PHF=0.91)	Unsignalized. NA NA	See Table 5-3. NA NA	NA NA NA	Signalize & Improve St "A" 31.7 29.7	0.65 0.61	C C	NA NA	NA NA

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown on Figure 6-2 and an eight percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤ 10 sec./veh.=LOS A; >10 and ≤ 20 sec./veh.=LOS B; >20 and ≤ 35 sec./veh.=LOS C; >35 and ≤ 55 sec./veh.=LOS D; >55 and ≤ 80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix 2 for the signalized intersection HCS worksheets. NA=Not Applicable. The change in delay and LOS associated with site traffic cannot be determined because this intersection would be unsignalized without the project but signalized and improved with the project.

Note: In Table 3.16-4 through 3.16-10, the word "No" in the "Change In/LOS" column at far right side of each table refers to "No Change in LOS" as projected for the "With Project (Phase 1A & 1B column)"

Table 3.16-5
Year 2028 Weekday Peak Hour Delay and LOS a
At the Unsignalized Site Access Intersections

Unsignalized Intersection	No-Project			With Preferred Project Buildout			Change In	
	Major Left ^b Delay/LOS	Minor Approach ^c Move	Delay/LOS	Major Left ^b Delay/LOS	Minor Approach ^c Move	Delay/LOS	Minor Approach Delay	LOS
Metroplex Drive @ Varner Road (5) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	8.7/A 9.2/A	SB SB	14.7/B 15.1/C	Signal warrants met. See Table 5-6. NA NA NA NA NA NA			NA NA	NA NA
Rio Del Sol Road @ Street "D" (6) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	NA NA	NA NA	NA NA	7.7/A 8.2/A	EB EB	9.1/A 11.9/B	NA NA	NA NA
Rio Del Sol Rd. @ St. "E"/Watt Court (7) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	Existing T-Intersection 7.6/A WB 10.2/B 7.6/A WB 10.2/B			Four-Leg Intersection. 7.6/A WB 12.0/B 7.6/A WB 12.5/B			1.8 2.3	No No
Street "N" @ Varner Road (8) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	This intersection would not exist. NA NA NA NA NA NA			Signal warrants would not be met. 10.6/B NB 22.4/C 9.5A NB 19.8/C			NA NA	NA NA
Street "I" @ Varner Road (11) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	This intersection would not exist. NA NA NA NA NA NA			Signal warrants would be met. 13.3/B NB 71.0/F 11.0/B NB 98.2/F			NA NA	NA NA
Valley Center Blvd. @ Varner Road (13) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	This intersection would not exist. NA NA NA NA NA NA			Signal warrants would be met. 258.9/F NB Failure 189.7/F NB Failure			NA NA	NA NA

- a. Appendix 2 includes all of the HCS unsignalized intersection peak hour worksheets. Assumes intersection geometrics shown in Figure 6-3 and a five percent truck mix. NA=Not Applicable. The change in delay and LOS associated with site traffic cannot be determined if an intersection is unsignalized without the project but signalized with the project.
- b. Delay=average control delay (seconds/vehicle) for the left-turn move from the major street onto the minor street. LOS was determined from the delay (0-10 sec./veh.=LOS A; 10-15 sec./veh.=LOS B; 15-25 sec./veh.=LOS C; 25-35 sec./veh.=LOS D; 35-50 sec./veh.=LOS E; 50+ sec./veh. = LOS F) per HCM 2000 page 17-2 and 17-32.
- c. EB=Eastbound. WB=Westbound. NB=Northbound. Delay=average approach control delay (seconds/vehicle) for the minor-street approach that exhibits the most delay at these intersections. LOS was determined per HCM 2000 page 17-2 and 17-32.

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Table 3.16-6

Year 2028 Weekday Peak Hour Delay and LOS^a
 At the Signalized Key Intersections

Signalized Intersection	No-Project			With Preferred Project			Change In	
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS
Bob Hope Drive @ Ramon Road (1) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	21.2 21.6	0.66 0.53	C C	24.0 25.1	0.74 0.71	C C	2.8 3.5	No No
Bob Hope Drive @ I-10 EB Ramps (2) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	8.9 9.5	0.42 0.34	A A	18.3 25.7	0.63 0.80	B C	9.4 16.2	A-B A-C
Bob Hope Drive @ I-10 WB Ramps (3) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	15.2 19.3	0.35 0.46	B B	11.9 17.9	0.58 0.80	B B	-3.3 -1.4	No No
Bob Hope Drive @ Varner Road (4) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	26.9 27.6	0.45 0.32	C C	28.1 46.1	0.68 0.95	C D	1.2 18.5	No C-D
Metroplex Drive @ Varner Road (5) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	Unsignalized. See Table 5-5.			29.1 28.9	0.63 0.69	C C	NA NA	NA NA

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown on Figure 6-3 and a five percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤ 10 sec./veh.=LOS A; >10 and ≤ 20 sec./veh.=LOS B; >20 and ≤ 35 sec./veh.=LOS C; >35 and ≤ 55 sec./veh.=LOS D; >55 and ≤ 80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix 2 for the signalized intersection HCS worksheets. NA=Not Applicable. The change in delay and LOS associated with site traffic cannot be determined because this intersection would be unsignalized without the project but signalized and improved with the project.

Table 3.16-7

Year 2028 Weekday Peak Hour Delay and LOS^a
 At the Signalized Key Intersections

Signalized Intersection	No-Project			With Preferred Project			Change In	
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS
Street "M" @ Varner Road (9) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	This intersection would not exist. NA NA NA NA NA NA			6.9 6.2	0.45 0.36	A A	NA NA	NA NA
Street "L" @ Varner Road (10) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	This intersection would not exist. NA NA NA NA NA NA			7.0 6.0	0.47 0.38	A A	NA NA	NA NA
Street "I" @ Varner Road (11) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	This intersection would not exist. NA NA NA NA NA NA			8.6 9.7	0.54 0.46	A A	NA NA	NA NA
Valley Center Blvd. @ Varner Road (13) - Morning Peak Hour (PHF=0.95) - Evening Peak Hour (PHF=0.95)	This intersection would not exist. NA NA NA NA NA NA			24.0 28.1	0.84 0.86	C C	NA NA	NA NA

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown on Figure 6-3 and a five percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤ 10 sec./veh.=LOS A; >10 and ≤ 20 sec./veh.=LOS B; >20 and ≤ 35 sec./veh.=LOS C; >35 and ≤ 55 sec./veh.=LOS D; >55 and ≤ 80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix 2 for the signalized intersection HCS worksheets. NA=Not Applicable. The change in delay and LOS associated with site traffic cannot be determined because this intersection would be unsignalized without the project but signalized and improved with the project.

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Table 3.16-8

Horizon Year 2035 Weekday Peak Hour Delay and LOS^a
 At the Unsignalized Site Access Intersections

Unsignalized Intersection	No-Project			With Preferred Project			Change In	
	Major Left ^b Delay/LOS	Minor Approach ^c Move	Delay/LOS	Major Left ^b Delay/LOS	Minor Approach ^c Move	Delay/LOS	Minor Approach Delay	LOS
Rio Del Sol Road @ Street "D" (6) - Morning Peak Hour (PHF=1.00) - Evening Peak Hour (PHF=1.00)	NA NA	NA NA	NA NA	9.4/A 7.8/A	WB WB	15.6/C 22.4/C	NA NA	NA NA
Rio Del Sol Road @ Street "E" (7) - Morning Peak Hour (PHF=1.00) - Evening Peak Hour (PHF=1.00)	8.0/A 7.9/A	WB WB	12.3/B 12.4/B	8.0/A 8.0/A	WB WB	15.0/B 16.2/C	2.7 3.8	No B-C
Street "N" @ Varner Road (8) - Morning Peak Hour (PHF=1.00) - Evening Peak Hour (PHF=1.00)	NA NA	NA NA	NA NA	11.9/B 9.8/A	NB NB	29.2/D 22.9/C	NA NA	NA NA

- a. Appendix 2 includes all of the HCS unsignalized intersection peak hour worksheets. Assumes intersection geometrics shown in Figure 6-3 and a five percent truck mix. NA=Not Applicable. The change in delay and LOS associated with site traffic cannot be determined if an intersection is unsignalized without the project but signalized with the project.
- b. Delay=average control delay (seconds/vehicle) for the left-turn move from the major street onto the minor street. LOS was determined from the delay (0-10 sec./veh.=LOS A; 10-15 sec./veh.=LOS B; 15-25 sec./veh.=LOS C; 25-35 sec./veh.=LOS D; 35-50 sec./veh.=LOS E; 50+ sec./veh. = LOS F) per HCM 2000 page 17-2 and 17-32.
- c. WB=Westbound. NB=Northbound. Delay=average approach control delay (seconds/vehicle) for the minor-street approach that exhibits the most delay at these intersections. LOS was determined per HCM 2000 page 17-2 and 17-32.

Table 3.16-9

Horizon Year 2035 Weekday Peak Hour Delay and LOS^a
 At the Signalized Key Intersections

Signalized Intersection	No-Project			With Preferred Project			Change In			
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS		
Bob Hope Drive @ Ramon Road (1) - Morning Peak Hour (PHF=1.00) - Evening Peak Hour (PHF=1.00)	23.4 25.5	0.64 0.74	C C	24.7 27.7	0.72 0.83	C C	1.3 2.2	No No		
Bob Hope Drive @ I-10 EB Ramps (2) - Morning Peak Hour (PHF=1.00) - Evening Peak Hour (PHF=1.00)	9.9 9.8	0.46 0.39	A A	19.6 25.6	0.68 0.81	B C	9.7 15.8	A-B A-C		
Bob Hope Drive @ I-10 WB Ramps (3) - Morning Peak Hour (PHF=1.00) - Evening Peak Hour (PHF=1.00)	15.4 21.1	0.38 0.50	B C	12.6 18.5	0.61 0.79	B B	-2.8 -2.6	No C-B		
Bob Hope Drive @ Varner Road (4) - Morning Peak Hour (PHF=1.00) - Evening Peak Hour (PHF=1.00)	29.5 35.4	0.50 0.38	C D	Add a third SB through lane. 29.6 49.1			0.71 0.96	C D	0.01 13.7	No No
Metroplex Drive @ Varner Road (5) - Morning Peak Hour (PHF=1.00) - Evening Peak Hour (PHF=1.00)	Unsignalized without project. NA NA			28.0 27.8	0.62 0.70	C C	NA NA	NA NA		

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown on Figure 6-3 and a five percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤ 10 sec./veh.=LOS A; >10 and ≤ 20 sec./veh.=LOS B; >20 and ≤ 35 sec./veh.=LOS C; >35 and ≤ 55 sec./veh.=LOS D; >55 and ≤ 80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix 2 for the signalized intersection HCS worksheets. NA=Not Applicable. The change in delay and LOS associated with site traffic cannot be determined if the intersection does not exist without the project or is improved and signalized with the proposed project.

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Table 3.16-10

Horizon Year 2035 Weekday Peak Hour Delay and LOS^a
 At the Signalized Key Intersections

Signalized Intersection	No-Project			With Preferred Project			Change In	
	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	Critical V/C	LOS	Delay (Sec./Veh.)	LOS
“M” Street @ Varner Road (9) - Morning Peak Hour (PHF=1.00) - Evening Peak Hour (PHF=1.00)	This intersection would not exist.							
	NA	NA	NA	6.9	0.52	A	NA	NA
	NA	NA	NA	5.8	0.42	A	NA	NA
“L” Street @ Varner Road (10) - Morning Peak Hour (PHF=1.00) - Evening Peak Hour (PHF=1.00)	This intersection would not exist.							
	NA	NA	NA	7.1	0.54	A	NA	NA
	NA	NA	NA	5.6	0.44	A	NA	NA
“I” Street @ Varner Road (11) - Morning Peak Hour (PHF=1.00) - Evening Peak Hour (PHF=1.00)	This intersection would not exist.							
	NA	NA	NA	8.7	0.61	A	NA	NA
	NA	NA	NA	9.1	0.46	A	NA	NA
Valley Center Blvd. @ Varner Road (13) - Morning Peak Hour (PHF=1.00) - Evening Peak Hour (PHF=1.00)	This intersection would not exist.							
	NA	NA	NA	26.2	0.89	C	NA	NA
	NA	NA	NA	27.4	0.86	C	NA	NA

a. Delay = Intersection Control Delay (seconds per vehicle). Assumes intersection geometrics shown on Figure 6-3 and a five percent truck mix. Based upon the *Highway Capacity Manual* signalized operation methodology implemented by the Highway Capacity Software (HCS+ Version 5.3). LOS is the intersection level of service. LOS was determined from the delay (≤ 10 sec./veh.=LOS A; >10 and ≤ 20 sec./veh.=LOS B; >20 and ≤ 35 sec./veh.=LOS C; >35 and ≤ 55 sec./veh.=LOS D; >55 and ≤ 80 sec./veh.=LOS E; >80 sec./veh. = LOS F) per 2000 HCM page 10-16. See Appendix 2 for the signalized intersection HCS worksheets. NA=Not Applicable. The change in delay and LOS associated with site traffic cannot be determined if the intersection does not exist without the project or is improved and signalized with the proposed project.

Air Traffic

The airport closest to the project is Palm Springs International Airport, located approximately 6 miles from the Specific Plan. Due to the phased development of this project, less than significant impacts are expected related to air traffic. No change in air traffic patterns will result due to the project, since the projected numbers of residential units accompanying commercial and light industrial development are not expected to cause a significant increase in population or air delivery services that would result in a resultant significant increase in air traffic levels.

Hazards

All planned roadway improvements are to be constructed in accordance with existing City standards. The SP does not propose any design features that would result in hazards or incompatible uses. Further, the Cathedral City General Plan Circulation Element indicates that a project should avoid the use of long, straight roadway segments on new local streets in new residential neighborhoods, whenever possible, to discourage excessive speeds. The project design includes streets that organically follow the existing site characteristics and has eliminated the opportunity for a new straight “cut through” route. Impact is less than significant.

In relation to bicycle safety, the Circulation Element encourages the proper design and maintenance of facilities and appropriate signage to ensure the safe use of the bikeway and trail systems. Landscaped intersections of trails and project roadways warn users of both systems of potential conflict areas. Impact is less than significant.

Emergency Access

The existing emergency access to the SP includes Interstate Highway 10, Varner Road and Bob Hope Drive. Currently, the SP is undeveloped and proposed traffic improvements and mitigation measures would improve access into the project. Therefore, impact is less than significant.

Parking Capacity

Vehicular parking for the SP would be provided per City standards for associated land uses and therefore ample parking is proposed to be provided in each Planning Area’s design. All shared parking agreements will be approved by the City. Therefore, it is not anticipated that implementation of the SP would result in inadequate vehicular parking. A less than significant impact is identified.

Alternative Transportation

As previously discussed, the project includes an integrated system of bicycle and pedestrian trails within its common open space, along separated multi-use pathways in parkways parallel and adjacent to major roadways. Section 2.0 of this document (Project Description) describes the trail system. Depending on their location, trails are composed according to City of Cathedral City standards. The trail system provides public access to bicyclist and hikers throughout the site and serves to connect the existing development to the east and proposed development to the west. A less than significant impact is identified.

The SunLine Transit Agency currently provides transit service within the City Limits of Cathedral City. Because the SP is currently undeveloped, existing public transit service is not provided for the project area, but is provided along Ramon Road to its south and to the Thousand Palms Community to its east. The Varner Road corridor provides a logical future route to serve the North City SP and the NCESP as well as the Thousand Palms Community. The proponents of this project will maintain coordination with the SunLine Transit Agency in order to secure appropriate routes, sheltered bus stops and schedules for service as they become feasible. A less than significant impact is identified.

The following potentially significant transportation constraints and impacts are presented within the Traffic Study, attached as Appendix J to this section.

E. Potentially Significant Impacts

The following circulation impacts are presented within the Traffic Impact Study associated with the proposed project:

Traffic Generation

The preferred project would generate approximately 64,860 “unadjusted” daily trips on a typical weekday. This trip-generation estimate is referred to as “unadjusted” because it does not include reductions to eliminate the double counting of internal trips in Table 3.16-11. Each of the internal trips made between two land uses within the site was include twice in Table 3.16-11, in conjunction with the land use where the trip originated and again for the destination land use. The unadjusted trip-generation forecast shown in Table 3.16-11 does not incorporate reductions associated with pass-by trips. Pass-by trips are diverted into the site from the traffic stream on adjacent arterials with site access connections. An example would be a vehicle that typically travels eastbound on Varner Road between work and home but stops on the way home from work at the gasoline refueling station after it is constructed in Planning Area 2.

On typical weekdays, the Preferred Project would generate approximately 6,169 unadjusted trips during the evening peak hours, of which 3,132 would be inbound to the various land uses within the site. During the morning peak hour, approximately 5,090 unadjusted trips would be generated, of which 2,489 would be inbound trips and 2,601 would be outbound trips.

Trip Generation by Phase

Phase 1A of the Preferred Project (in PA2) would generate approximately 21 percent of the site traffic (i.e., 13,500 unadjusted weekly trips). Phase 1B (in PA 4) would generate approximately 13 percent of the site traffic (i.e., 8,650 unadjusted weekday trips). Therefore, the initial phase of development including both Phase 1A and 1B would generate 34 percent of the unadjusted weekday trip generation associated with the Preferred Project.

Phase 2 would generate 11,510 unadjusted weekday trips or 18 percent of the trips associated with buildout of the Preferred Project. Phase 3 would generate approximately 16,860 unadjusted weekday trips of 26 percent of the site trip generation. Phase 4 would generate 16 percent of the unadjusted site trip generation (i.e., 10,380 weekday trips). Phase 5 would generate 3,960 weekday trips or six percent of the unadjusted site trip generation.

**Table 3.16-11
Unadjusted Weekday Trip Generation Forecast^a
(North City Extended Specific Plan - Preferred Project)**

Land Use Category	Land Use Quantity ^b	Morning Peak Hour			PM Peak Hour			Daily 2-Way
		In	Out	Total	In	Out	Total	
Planning Area 1								
Commercial Retail	190 TSF	137	88	225	479	499	978	10,310
Restaurant (Sit-Down)	80 TSF	479	442	921	526	366	892	10,170
General Office	190 TSF	276	38	314	50	242	292	2,190
Hotel	300 Room	97	62	159	94	83	177	2,310
Residential - SFD	140 DU	27	81	108	90	53	143	1,420
Apartments	1,425 DU	140	562	702	521	280	801	8,760
Residential - MFA/SFA	635 DU	39	188	227	183	90	273	3,210
Subtotal		1,195	1,461	2,656	1,943	1,613	3,556	38,370
Planning Area 2								
Commercial Retail	7.5 TSF	20	13	33	55	57	112	1,260
Fast Food With Drive Through	10 TSF	252	242	494	176	162	338	4,960
Restaurant (Sit-Down)	30 TSF	180	166	346	197	137	334	3,810
Hotel	100 Room	25	16	41	31	28	59	520
Service Station/Conv. Market	2.5 TSF	101	97	198	121	121	242	2,950

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Subtotal		578	534	1,112	580	505	1,085	13,500
Planning Area 3								
Light Industrial	595 TSF	539	74	613	83	610	693	4,340
Planning Area 4								
Residential (SFD)	1,000 DU	177	532	709	526	309	835	8,650
Specific Plan Buildout		2,489	2,601	5,090	3,132	3,037	6,169	64,860

- a. Based upon trip generation data published by the ITE in *Trip Generation* (8th Edition, December, 2008). The ITE Land Use Codes assumed were: 945 for a service station with convenience market; 820 for commercial/retail uses; 932 for high turnover sit-down restaurants; 934 for fast food restaurants with drive through facilities; 710 for general offices; 310 for hotels; 230 for MFA residential; 220 for apartments; 210 for SFD residential; and 210 for SFD residential; and 110 for light industrial land uses. SFD=Single-family detached. MFA/SFA=Multi-family/Single-family attached.
- b. DU=dwelling units. TSF=Thousand square feet of building floor area.

Traffic Impact Findings

The following circulation impacts are associated with the proposed project:

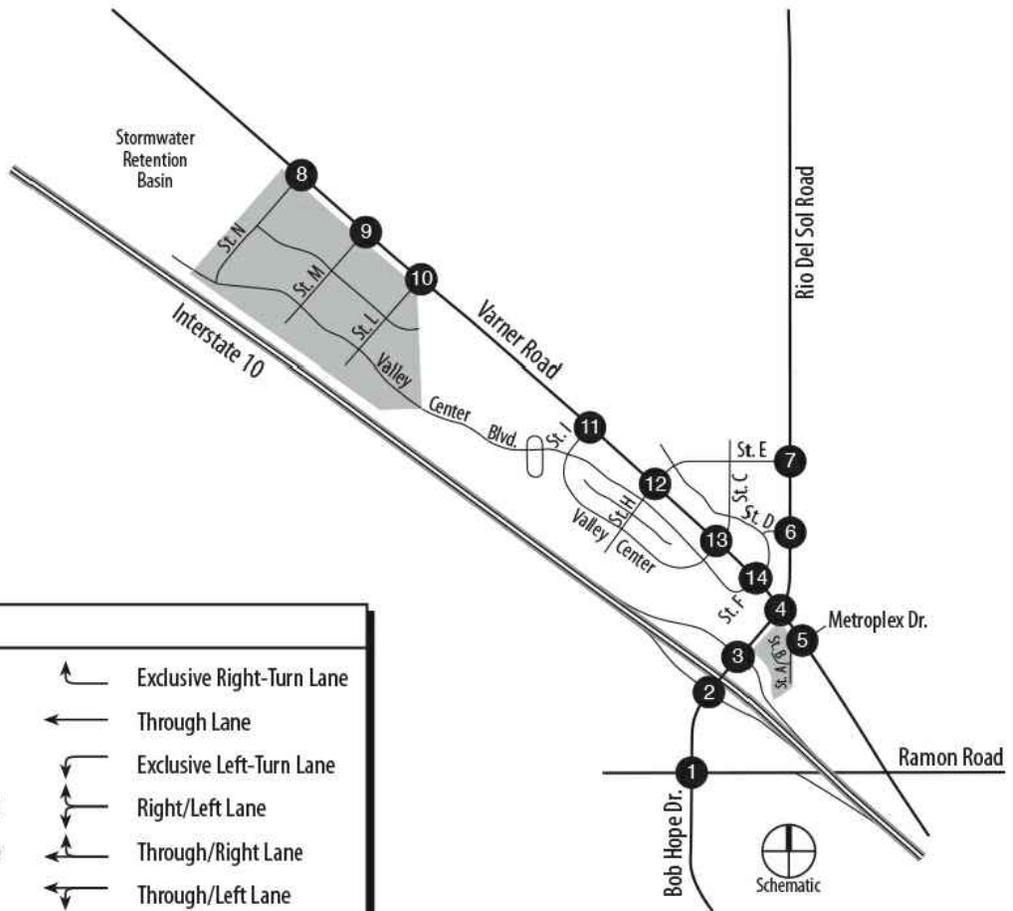
1. The trip generation associated with buildout of the Preferred Project (following adjustments to remove the double-counted internal trip interactions) would total approximately 58,580 adjusted daily trip-ends, of which 4,586 would occur during the morning peak hour (2,237 inbound and 2,349 outbound) and 5,549 would occur during the evening peak hour (2,822 inbound and 2,727 outbound).
2. The traffic volumes projected for the primary access to the Phase 1A development proposed in Planning Area 2 (Metroplex Drive/Street "A" @ Varner Road) would exceed the peak hour traffic signal volume warrants in the year 2015 when site traffic is added. Traffic control signals would be required at this intersection to maintain acceptable levels of service during the peak hours in the peak season following the addition of the Phase 1A site traffic.
3. The projected year 2015+ project traffic volumes at the proposed eastern site access intersection adjacent to Planning Area 4 (Street "L" at Varner Road) would exceed the peak hour traffic signal volume warrants but the northbound approach at this intersection is projected to operate at LOS C with two-way stop control upon completion of the Phase 1B development. Traffic control signals would be required at this intersection upon buildout of the Preferred Project in the year 2028 to maintain acceptable levels of service during the peak hours in the peak season.

4. The projected year 2015+ project traffic volumes at the central site access intersection adjacent to Planning Area 4 (Street “M” at Varner Road) would exceed the peak hour traffic signal volume warrants but the northbound approach at this intersection is projected to operate at LOS C with two-way stop control upon completion of the Phase 1B development. Traffic control signals would be required at this intersection upon buildout of the Preferred Project in the year 2028 to maintain acceptable levels of service during the peak hours in the peak season.
5. The western site access intersection proposed adjacent to Planning Area 4 (Street “N” at the Varner Road) is projected to provide acceptable levels of service in the peak hours with two-way stop control, provided a median acceleration lane is provided on Varner Road at Street “N”. The traffic generated by the development proposed within Planning Area 4 is not projected to be sufficient to meet or exceed peak hour traffic signal warrants at this intersection.
6. The intersection of Valley Center Boulevard and Varner Road would not provide acceptable levels of service in the peak hours with two-way stop control upon completion of the Phase 2 development. Peak hour traffic signal warrants would be met and traffic signal control would be required at this intersection in conjunction with the proposed Phase 2 development to maintain acceptable levels of service during the peak hours.
7. To maintain acceptable levels of service during the peak hours in the peak season, an exclusive eastbound right-turn lane would be required on Varner Road at the intersection of Bob Hope Drive in conjunction with the Phase 2 development.
8. The future traffic projections for the two site access intersections proposed along Rio Del Sol Road (at Street “D” and Street “E”) are not projected to meet signal warrants. Both of these intersections are projected to operate at acceptable levels of service with two-way stop control, following buildout of the Preferred Project in the horizon year 2035.
9. The traffic volumes generated by the Phase 5 development would exceed the peak hour traffic signal volume warrants at the intersection of Street “I” and Varner Road. Traffic signal control would be required at this intersection in conjunction with the Phase 5 development to maintain acceptable levels of service during the peak hours.
10. Without the addition of a second exclusive eastbound right-turn lane on Varner Road at Bob Hope Drive and a third southbound through lane on Rio

Del Sol Road through the intersection of Varner Road, the intersection of Bob Hope Drive and Varner Road would not provide acceptable levels of service in the peak hours upon buildout of the Preferred Project in the year 2028.

11. The master planned street system depicted in the *County of Riverside General Plan 2008* would provide adequate capacity to accommodate projected horizon year 2035+project traffic volumes at acceptable levels of service. Auxiliary lanes shall be used along Varner Road, between Bob Hope Drive and Valley Center Boulevard, to meet corridor capacity needs and provide exclusive left-turn and right-turn lanes at intersections to increase capacity. This segment of Varner Road is located entirely within the Specific Plan boundary.

12. All of the site access intersections are projected to provide acceptable levels of service following buildout of the Preferred Project in the year 2028 with traffic controls and approach lanes shown in Exhibit 3.16-8, provided a median acceleration lane is provided on Varner Road at the intersection of Street "N" which permits northbound left turns to be completed in two stages by crossing the eastbound lane(s) then pausing in the median when necessary before accelerating and merging with the westbound traffic in the far lane(s).



Legend	
1 Intersection Number	↔ Exclusive Right-Turn Lane
⊙ Signalized Intersection	← Through Lane
• Stop Sign Control	↙ Exclusive Left-Turn Lane
⊙ New Traffic Signal Required	↕ Right/Left Lane
← Bolding Indicates New Lane	↗ Through/Right Lane
FF Free-Flow Right-Turn	↖ Through/Left Lane

1 	2 	3 	4 	5 	6 	7
Bob Hope Drive @ Ramon Road	Bob Hope Drive @ I-10 Eastbound Ramps	Bob Hope Drive @ I-10 Westbound Ramps	Bob Hope Drive @ Varner Road	Metroplex Drive @ Varner Road	Rio Del Sol Road @ Street "D"	Rio Del Sol Road @ Street "E"
8 	9 	10 	11 	12 	13 	14
Street "N" @ Varner Road	Street "M" @ Varner Road	Street "L" @ Varner Road	Street "I" @ Varner Road	Street "H" @ Varner Road	Valley Center Blvd. @ Varner Road	Street "F" @ Varner Road

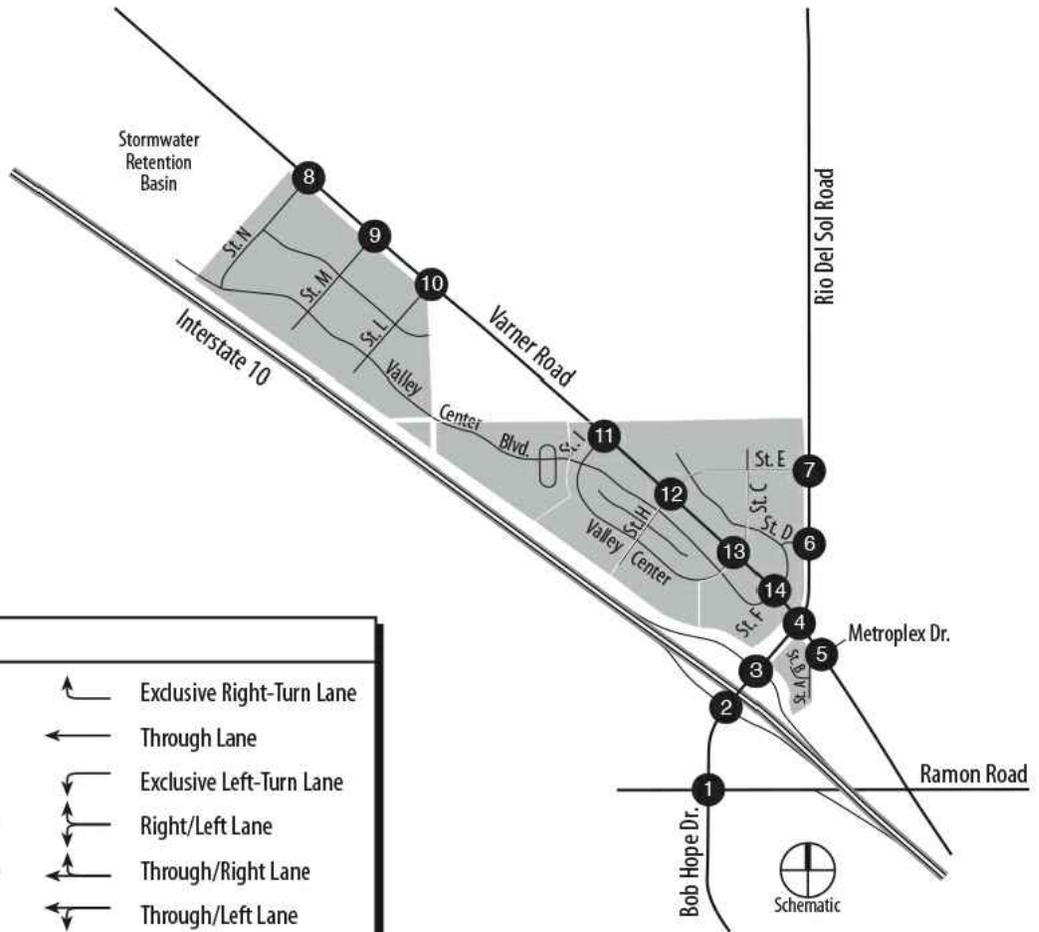


Lane Geometrics Required for Initial Phase

North City Extended Specific Plan
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Exhibit 3.16-7

Page 3.16-39



Legend	
1 Intersection Number	↶ Exclusive Right-Turn Lane
⊙ Signalized Intersection	↔ Through Lane
• Stop Sign Control	↷ Exclusive Left-Turn Lane
⦿ New Traffic Signal Required	↶↷ Right/Left Lane
↶ Bolding Indicates New Lane	↶↷ Through/Right Lane
FF Free-Flow Right-Turn	↶↷ Through/Left Lane

Bob Hope Drive @ Ramon Road	Bob Hope Drive @ I-10 Eastbound Ramps	Bob Hope Drive @ I-10 Westbound Ramps	Bob Hope Drive @ Varner Road	Metroplex Drive @ Varner Road	Rio Del Sol Road @ Street "D"	Rio Del Sol Road @ Street "E"
Street "N" @ Varner Road	Street "M" @ Varner Road	Street "L" @ Varner Road	Street "I" @ Varner Road	Street "H" @ Varner Road	Valley Center Blvd. @ Varner Road	Street "F" @ Varner Road



Lane Geometrics Required for Project Buildout Year 2028

North City Extended Specific Plan Environmental Impact Report

Exhibit 3.16-8

Page 3.16-40

LOS

The traffic study indicates that if all of the key intersections included in the Specific Plan are signalized in the year they will reach a LOS D. Therefore, acceptable levels of service will be maintained throughout the phased project development if the recommendations of the Traffic Study implemented as specified.

Hazards

The project is not expected to substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment.) The project design incorporates landscape markers at all locations in which the internal hiking and biking trails intersect. See landscape discussion for further description of the trail amenities. Circulation design will require review and approval by the City Engineering and Fire Departments.

Impacts related hazards to pedestrians at the intersections between roadway and trail have the potential to occur. The Traffic Study indicates that the details of the pedestrian trails will require additional analysis by the City Engineering Department and City Engineer.

Clear unobstructed sight distances shall be provided at the site access points on Varner Road, Rio Del Sol Road, and Bob Hope Drive as well as all internal intersections to ensure that motorists can enter and exit the site with minimal hazard and disruption of through traffic.

Emergency Access:

If bollards are used to restrict motorized access to the trails on-site, provisions should be made for emergency access to the proposed trails at select locations so that emergency personnel can treat and transport any hikers who may become injured or incapacitated.

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

The site is suitable for the proposed development provided, that the recommendations contained within this EIR and the site specific Traffic Report are followed in the design and construction of the project.

The following Cathedral City ordinance or policy requirements apply to all development as conditions of approval and most are presented within the Traffic Study:

SC 3.16-1: The project proponent shall dedicate appropriate right-of-way, as needed, to accommodate the ultimate improvements of all public roadways abutting the site.

SC 3.16-2: The Cathedral City General Plan Circulation Element and NCESP roadways shall be implemented, as required by the City of Cathedral City.

SC 3.16-4: All required off-site public and on-site private streets shall be designed in accordance with City of Cathedral City design standards, as required by the City Engineer

SC 3.16-5: The project developer/applicant shall submit street improvement plans for construction of required streets to the Cathedral City Engineer for review and approval.

SC 3.16-6: Ingress and egress design shall include adequate vehicle maneuvering and stacking space to avoid conflicts with internal and external traffic and circulation patterns.

SC 3.16-7: The controlled primary entryways to the site shall include provisions to facilitate access by emergency vehicles in a manner approved by the chief of police per *Cathedral City Municipal Code* Section 8.04.190. All power-operated controlled access devices shall have a radio-controlled override system capable of opening the gate or barrier when activated by a special transmitter located in emergency vehicles and be equipped to facilitate opening in the event of a power failure.

SC 3.16-8: The project proponent will comply with City requirements regarding the master planned bikeway. Bike lanes shall be provided within and adjacent to the site along the General Plan roadways, as required by the City of Cathedral City.

SC 3.16-9: A traffic control plan shall be submitted and approved. Schedules and Routes of construction traffic will be included in the plan.

SC 3.16- 10: The project proponent shall coordinate with the SunLine Transit Agency regarding the need for public transit facilities on and adjacent to the project site.

SC 3.16- 11: Adequate off-street parking shall be provided on-site to meet the requirements of the *Cathedral City Municipal Code*.

SC 3.16- 12: The proposed internal circulation layout and site access plans shall be subject to the review and approval of the City Engineer during the development review process to ensure compliance with City access and design standards.

SC 3.16-13: The project proponent shall contribute on a fair-share basis to area wide roadway improvements by participating in the TUMF (Transportation Uniform Mitigation Fees) program and may also be required to contribute on a fair-share basis to the cost of circulation improvements required on roadways and/or at intersections that are not in the TUMF program.

The following mitigation measures are presented to reduce potential circulation and/or site access impacts.

Roadway and Intersection Improvements Needed

The General Plan street system in the study area will be adequate to provide the capacity needed to serve the projected traffic volumes following project completion in the year 2035. No changes in the General Plan street classifications of the roadways in the study area are required to accommodate site traffic in the year 2035. However, localized widening will be necessary to accommodate the required lanes at the following locations:

- (1) Eastbound Varner Road @ Bob Hope Drive;
- (2) Westbound Varner Road @ Valley Center Boulevard
- (3) Southbound Rio Del Sol Road @ Varner Road; and
- (4) Southbound Bob Hope Drive south of Varner Road

The required changes in approach lane geometrics for each phase of development are outlined below. Figure 3.16-8 shows the improvements required for all phases of the Preferred Project.

Improvements Needed Upon Completion of Initial Phase (Year 2015)

- 1) Construct a directional (right-in only) access connection to Planning Area 2 on Bob Hope Drive, between Varner Road and the I-10 Westbound Ramp terminus.
- 2) Metroplex Drive @ Varner Road
 - add a westbound left-turn lane
 - add a northbound shared through/left-turn lane
 - add a northbound right-turn lane
 - signalize intersection
- 3) Street "N" @ Varner Road
 - add a northbound left-turn lane;
 - add a northbound right-turn lane;
 - add a westbound left-turn lane.
- 4) Street "N" @ Varner Road
 - add a northbound left-turn lane;
 - add a northbound right-turn lane;
 - add a westbound left-turn lane.
- 5) Street "L" @ Varner Road
 - add a northbound left-turn lane;
 - add a northbound right-turn lane;
 - add a westbound left-turn lane.

Improvements Needed Upon Completion of Phase 2 (Year 2018)

- 1) Varner Road
 - Widen Varner Road to provide four through lanes and a raised median from Bob Hope Drive to Street “H”.
- 2) Bob Hope Drive @ Varner Road
 - add an exclusive eastbound right-turn lane;
- 3) Street “H” @ Varner Road
 - add a northbound right-turn lane;
 - add a southbound right-turn lane;
- 4) Valley Center Drive @ Varner Road
 - add dual westbound left-turn lanes;
 - add an eastbound left-turn lane;
 - add a northbound left-turn lane;
 - add a northbound through lane;
 - add a northbound right-turn lane;
 - add a southbound left-turn lane;
 - add a southbound shared through/right-turn lane;
 - signalize intersection.
- 5) Street “F” @ Varner Road
 - add a northbound right-turn lane;
 - add a southbound right-turn lane;

Improvements Needed Upon Completion of Phase 3 (Year 2021)

- 1) Varner Road
 - Widen Varner Road to provide four through lanes and a raised median along the entire NCESP frontage.
- 2) Rio Del Sol Road
 - Widen Rio Del Sol Road to its ultimate half-width from Street “E” to Varner Road.
- 3) Rio Del Sol Road @ Street “D”
 - Construct Street “D” with a single eastbound shared through/right/left lane and two-way stop control opposite the alignment of Woburn Court.
- 4) Rio Del Sol Road @ Street “E”
 - Construct Street “E” opposite Watt Court with a single eastbound shared through/right/left lane and two-way stop control.

Improvements Needed Upon Completion of Phase 4 (Year 2024)

- 1) Rio Del Sol Road
 - Widen Rio Del Sol Road to its ultimate half-width from the northern project boundary to Street “E”.

- 2) Street "I" @ Varner Road
 - add a westbound left-turn lane;
 - add a northbound left-turn lane;
 - add a northbound right-turn lane.

Improvements Needed Upon Project Buildout (Horizon Year 2028)

- 1) Bob Hope Drive
 - Widen Bob Hope Drive to provide three southbound continuous through lanes from Varner Road to, north of the I-10 westbound ramp terminus.
- 2) Rio Del Sol Road/Bob Hope Drive @ Varner Road
 - Construct a third exclusive southbound through lane on Rio Del Sol Road at Varner Road.
 - add a second exclusive eastbound right-turn lane;
- 3) Street "I" @ Varner Road
 - replace two-way stop control with traffic signal control.
- 4) Street "L" @ Varner Road
 - replace two-way stop control with traffic signal control.
- 5) Street "M" @ Varner Road
 - replace two-way stop control with traffic signal control.
- 6) Street "N" @ Varner Road
 - retain two-way stop control and add a westbound median acceleration lane.

Safety and Operational Improvements

MM 3.16-1: Project proponent shall ensure that all proposed full-turn site access intersections that will be signalized shall include at least two approach lanes on the minor-street approach during the construction of all roads.

MM 3.16-2: Project proponent shall ensure that clear unobstructed sight distances shall be provided at the site access points on Varner Road, Rio Del Sol Road, and Bob Hope Drive as well as all internal intersections to ensure that motorists can enter and exit the site with minimal hazard and disruption of through traffic during all construction activities.

MM 3.16-3: Project proponent shall ensure that a raised median shall be constructed on Varner Road opposite Street "F" and Street "H" and provide positive control of prohibited left-turn ingress and egress moves and prevent vehicles from attempting to cross Varner Road at these locations.

MM 3.16-4: on-street curb parking should be prohibited along Valley Center Boulevard, Street "F", Street "H", Street "I", Street "L", Street "M", Street "N"

(approximately 300 feet south of Varner Road) to maximize the capacity of the minor-street approaches.

Site Access and Internal Circulation

The proposed site access and internal circulation concept will accommodate site traffic at acceptable levels of service. With the site access improvements proposed in conjunction with the project, all of the site access intersections will operate at acceptable levels of service, following buildout of the Initial Phase of the Preferred Project in the year 2015.

MM 3.16-5: Signalization is proposed and will be warranted at the following full-turn site access intersections: (1) Street “A”/Metroplex Drive @ Varner Road; (2) Valley Center Boulevard @ Varner Road; (3) Street “I” @ Varner Road; (4) Street “L” @ Varner Road; and (5) Street “M” @ Varner Road. All five of these required traffic signals should include provisions to permit signal interconnection.

Because the traffic demand is from the south, the proposed project will not benefit from traffic signals on Rio Del Sol Road. To avoid creating the need for a traffic signal to serve the existing development on Northshore Street, east of the project site,

MM 3.16-6: The intersections of Street “F” at Varner Road and Street “H” at Varner Road will be constructed as channelized right-in/right-out access connections. Left-turn ingress and left-turn egress maneuvers will not be permitted and no vehicles will be permitted to cross Varner Road at these intersections. A raised median is recommended on Varner Road adjacent to Planning Area 1 to provide positive control of left-turns across Varner Road.

G. Level of Significance after Mitigation

Impacts related to Transportation are expected to be less than significant and the site is suitable for the proposed development provided the recommendations contained within this EIR and the site specific Traffic Report are followed in the design and construction of the project.

H. Resources

City of Cathedral City General Plan Update Environmental Impact Report, Terra Nova (March 2002)

Cathedral City Annexation and North City Extended Specific Plan Traffic Impact Study, Endo Engineering (August, 2013)

2004 Regional Transportation Plan, Southern California Association of Governments (October 2003.)

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

3.17 UTILITIES AND SERVICE SYSTEMS

Implementation of the North City Extended Specific Plan 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 Cathedral City Amended 2009 Comprehensive General Plan and Comprehensive General Plan EIR (April 2002), 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 District (CVWD), Desert Water Agency (DWA), Burretec, Southern California Edison (SCE), The Gas Company, Verizon, and Time Warner Cable.

B. Existing Conditions

The proposed project is located in the Coachella Valley region of Riverside County, California, and lies within the City of Cathedral City, Sphere of Influence. The project proposes the annexation 591.38 acres into the City of Cathedral City from the County of Riverside. The project site is located north of Interstate 10, north and south of Varner Road, within Section 13 and Rio Del Sol Road. The project site is situated on both sides of the newly constructed Bob Hope Drive/Interstate 10 Interchange. Surrounding land uses in the project vicinity include undeveloped Indian Reservation land belonging to the Agua Caliente Band of Cahuilla Indians, there are also portions of vacant land under Riverside County's jurisdiction.

The unincorporated community of Thousand Palms lays to the east of the project site and has recently formed part of the Cathedral City Sphere of Influence. This community includes, light industrial, residential and commercial development. Existing commercial establishments largely serve the I-10 corridor with fueling stations, hotels and fast-food chains. Land to the south of the proposed project includes Interstate 10 and the Union Pacific Railroad corridor, beyond this corridor is vacant land within the City of Rancho Mirage Sphere of Influence. Undeveloped Tribal land within Section 10 is located to the west of the project. A portion of areas north of Interstate 10 form part of the adopted North City Specific Plan located in the City limits of Cathedral City.

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

Wastewater Services

Wastewater services in the Cathedral City corporate limits, including the NCESP project site, are provided by the Coachella Valley Water District. Wastewater is conveyed through sewer lines ranging from 4 to 24 inches in diameter. Water Reclamation Plant 7 would serve the NCESP project. This plant serves portions of the cities of Cathedral City, Rancho Mirage, Palm Desert, La Quinta and Indio.

WRP-7 is located in north Indio. The plant is a 5.0 mgd secondary treatment facility with a current tertiary treatment capacity of 2.5 mgd. The average annual flow in 2010 is estimated to be 3 mgd (3,300 AFY). The plant consists of aeration basins, circular clarifiers, polishing ponds and filtration. Recycled water not used for irrigation is percolated at on-site and off-site percolation ponds. A plant expansion is currently under design that will increase the plant capacity to 7.5 mgd (CVWD 2010 Urban Water Management Plan).

The plant is located at the corner of Ave 38 and Madison Street in Indio. Secondary treated wastewater is treated and distributed to parks and golf courses for irrigation. Operations, maintenance, and safety of all CVWD Water Reclamation Plants are conducted in accordance to environmental and regulatory standards.

Per the Cathedral City adopted Comprehensive General Plan (Amended 2009) development of land north of Interstate 10 is sparse. All wastewater in this area is accommodated through private septic systems. At this time there is no sewer system within the NCESP project area.

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 Cathedral City, the Engineering 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

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 3.8 Hazards and Hazardous Materials and Section 3.9 Hydrology and Water Quality.)

The NCESP project area currently has no flood prevention facilities or storm drain facilities. There are small drainage devices located at Bob Hope Drive, including curb inlet catch basins which collect water from the street, curb and gutter. A concrete box structure collects storm water from small storm events and conveys water from the Specific Plan area south under Bob Hope Drive to an existing vacant lot on the southern side of the traveled way.

The Riverine Drainage Area is a strip of land approximately 2,000 feet wide located north and adjacent to Interstate 10. A Riverine is defined as being related to or resembling a river. It extends from Palm Drive and Avenue 22 at the north of Adams Street at the south end. The tributary areas contributing to the storm flows for the Specific Plan include the Morongo Wash as well as alluvial fan flooding from the canyons to the north. Surface hydrology within the proposed project is largely dictated by natural topography, and soil characteristics. Although the project is part of the Riverine Area Drainage Corridor, there is no defined floodway channel. Storm flows and large flood events will sheet flow across the Specific Plan in an easterly direction between Interstate 10 and Varner Road.

The project has been designated as an "AO" flood zone according to the Federal Emergency Management Plan (FEMA) Flood Insurance Rate Maps (FIRM). The site is subject to 1% or greater chance of flooding with a depth of one to two feet of sheet flow across the site. The average flooding depth is approximately 2 feet based on the FIRM panel with velocities ranging from five feet per second to seven feet per second.

Storm flows across the Specific Plan sheet flow over a wide spread area and is not concentrated in a defined channel or wash, therefore, a concrete channel storm drain system or small detention basin is not feasible. Three regional retention basins are recommended to capture and infiltrate runoff from the Riverine Drainage Area Corridor, thereby minimizing the flood potential to the Specific Plan. Each basin shall be a shallow open design intended to provide wide runoff capture areas. Stormwater sheet flows

which enter into the basins are captured and held allowing for the contained water to percolate into the soil.

Domestic Water Service

Water services will be provided by Coachella Valley Water District (CVWD). The Water District serves the upper and lower Coachella Valley which includes the City of Cathedral City. CVWD covers 640,000 acres and provides 100,000 domestic water connections for homes and business. Water is supplied from wells drilled into an aquifer with a capacity estimated at 39.2 million acre feet. The water related services provided to most of the valley include irrigation water, fire protection system and domestic water delivery, wastewater reclamation and recycling.

The principal water supplies of the Coachella Valley are local groundwater, imported Colorado River water and imported SWP water. The Coachella Canal, which brings in Colorado River water from the All-American Canal near the Mexico-U.S. border, traverses the southeastern margin of the Valley. The Canal turns southwest around the northern end of Indio and terminates at man-made Lake Cahuilla, south of La Quinta. CVWD and DWA also obtain imported water from the SWP. Since CVWD and DWA do not have a direct connection to the SWP, this water is exchanged with Metropolitan for water from its Colorado River Aqueduct north of Palm Springs.

Groundwater is the principal source of municipal water supply in the Coachella Valley. CVWD obtains groundwater from both Whitewater River and the Mission Creek subbasins. The Whitewater River subbasin 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 other private groundwater producers.

The Whitewater River subbasin underlies a major portion of the Coachella Valley and encompasses approximately 400 square miles. This subbasin underlies the cities of the Coachella Valley, from Palm Springs to the unincorporated community of Mecca.

The groundwater basin is not adjudicated; rather it is jointly managed by CVWD and DWA under the terms of the 1976 Water Management Agreement. DWA and CVWD jointly operate a groundwater replenishment program whereby groundwater pumpers (other than minimal pumpers) pay a per AF charge that is used to pay the cost of importing water and recharging the aquifer.

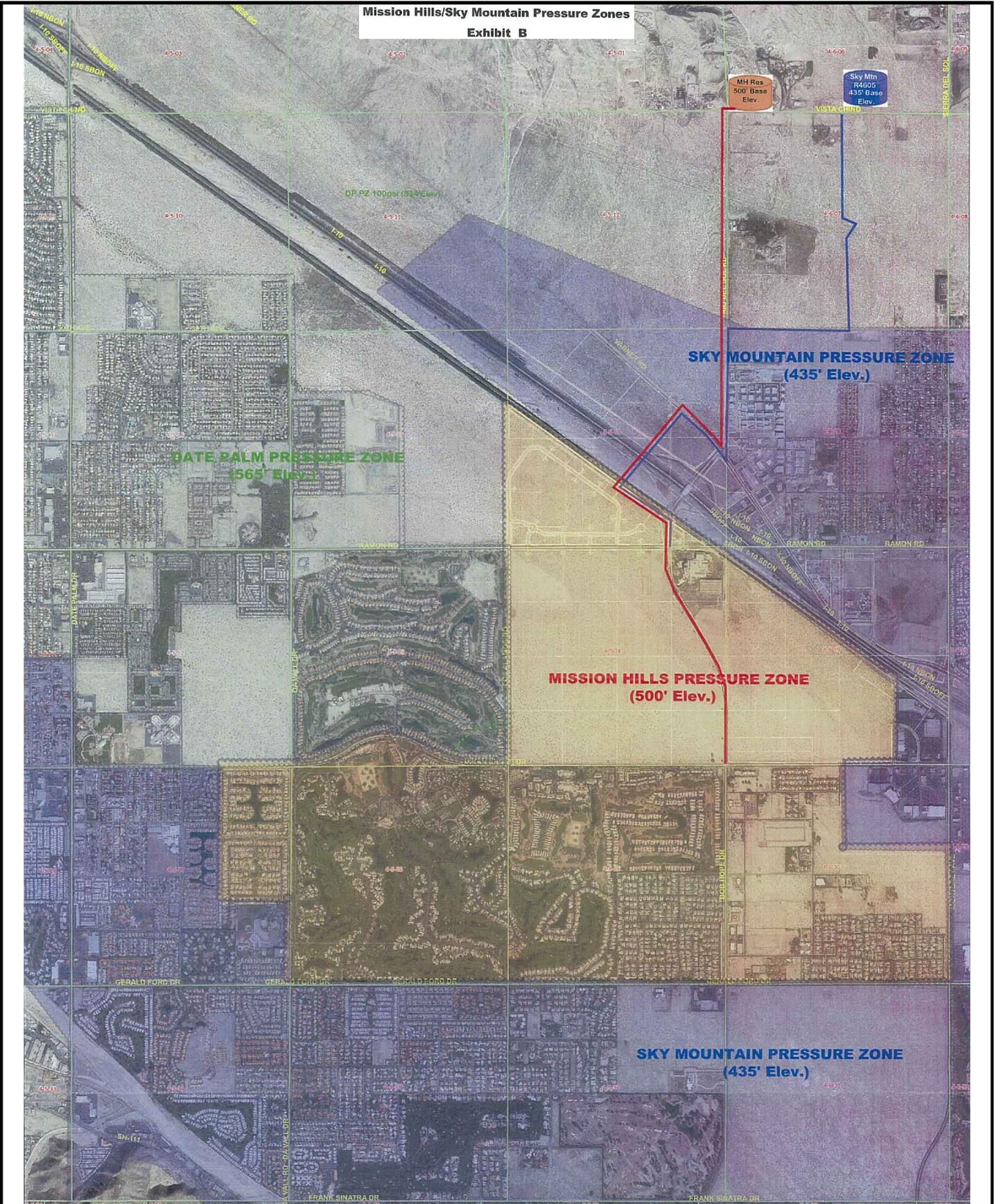
Per the CVWD 2010 Urban Water Management Plan, the Whitewater River Subbasin is divided into four subareas: Palm Springs, Thermal, Thousand Palms and Oasis. The Palm Springs Subarea is the main area of recharge to the Subbasin and the Thermal Subarea comprises the pressure or confined area within the basin. The other two subareas are

peripheral areas having unconfined groundwater conditions (CVWD, 2010a). The historical fluctuations of groundwater levels within the Whitewater River Subbasin indicate a steady decline in the levels throughout the Subbasin prior to 1949. With the importation of Colorado River water from the Coachella Canal after 1949, the demand on the groundwater basin declined in the East Valley (generally east and south of Washington Street) below Point Happy and the groundwater levels rose sharply. Water levels in the deeper aquifers of the East Valley rose from 1950 to 1980. However, since the early 1980s, water levels in this area have again declined, at least partly due to increasing urbanization and groundwater usage. Recharge activities with SWP Exchange water commenced in 1973 at the Whitewater River Recharge Facility. Recharge activities at this location have varied with the availability of SWP Exchange water. Groundwater levels in the vicinity of the recharge basins have stabilized since recharge commenced.

The North City Extended Specific Plan is under the Sky Mountain Pressure Zone (SMPZ). Currently the SMPZ zone cannot support proposed expansion projects without infrastructure improvements. CVWD is underway with the design for the improvements to both the MHPZ and SMPZ. The improvements will provide water supply and reliability to existing and future customers in the Sky Mountain Pressure Zone and Mission Hills Pressure Zone.

CVWD currently operates a 36-inch diameter water line in Rio Del Sol Road north of Varner Road and a 24-inch diameter water line in Varner Road, east of Rio Del Sol Road. In addition, CVWD has procured easements across the subject property for the future installation of transmission mains to connect to the future reservoirs to be located in the Mission Hills Pressure Zones (MHPZ) and the Sky Mountain Pressure Zone (SMPZ) (Exhibit 3.17-1 CVWD Pressure Zone Exhibit).

Mission Hills/Sky Mountain Pressure Zones
Exhibit B



Legend

- MISSION HILLS PIPELINE
- SKY MOUNTAIN PIPELINE

Coachella Valley Water District
 25550 Thunder Mountain
 Palm Springs, CA 92262
 (760) 325-3333
 FAX: (760) 325-3334
 FAX: (760) 325-3335

Scale: 0 1000 2000 4000

C.V.W.D. Pressure Zones

North City Extended Specific Plan
Environmental Impact Report

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Page 3.17-6

Solid Waste Management

Burrtec Waste & Recycling provides solid waste disposal services to the City Cathedral City and its sphere-of-influence areas. Burrtec waste industries have provided service to various communities for over 50 years. They are the largest privately held solid waste company in California. Their services include residential and commercial solid waste collection, recycling and green waste collection. Collected solid waste is transported to the Edom Hill transfer station.

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 Cathedral City and other major cities in the Coachella Valley, to include a portion of the surrounding unincorporated areas of Riverside County. The Edom Hill Transfer Station is operated by Burrtec. 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 145,530,00 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, carcinogenicity, 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 Cathedral City is an active participant in the Household Hazardous Waste program. The City encourages the community to utilize this service. The new Palm Springs location is open every Saturday from 9:00 am – 2:00 pm (Oct-May) and 7:00 am – 12:00 pm (June – Sept).

Additional discussions regarding hazardous materials are also included in Section 3.8 Hazards and Hazardous Materials and Section 3.9 Hydrology and Water Quality of this EIR.

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 be either be recycled or brought to a recycling facility. In addition to Assembly Bill 939, the State also recently passed Assembly Bill 341 which calls for mandatory commercial recycling. According to the 2008 Statewide Waste Characterization data, the commercial sector generates nearly three fourths of solid waste, much of it being readily recyclable.

Burrtec provides residential recycling programs to all Cathedral City residents free of charge. Residents are provided one 96 gallon gray cart for recyclable materials such as aluminum cans, plastic bottles and milk jugs, phone books, newspapers, and corrugated cardboard. Recycling centers for bottles and cans are also located at the Edom Hill Transfer Station, Stater Bros Shopping Center on Ramon Road and the Food 4 Less shopping center on Date Palm Drive.

Commercial business generating 4 cubic yards or more of commercial solid waste per week must have a recyclable program in place. Burrtec Waste & Recycling in partnership with Cathedral City have engaged commercial business so that they are in compliance with the State mandated law.

Other Solid Waste Disposal Services

Cathedral City offers green waste collection service to all single-family residents in Cathedral City. Burrtec's Pick up schedule for green waste, such as tree and grass clippings, is once a week. They will then transport the materials to a composting facility. Additional services provided by Burrtec Waste & Recycling, include motor oil disposal and bulk item hauling.

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 Cathedral City 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.

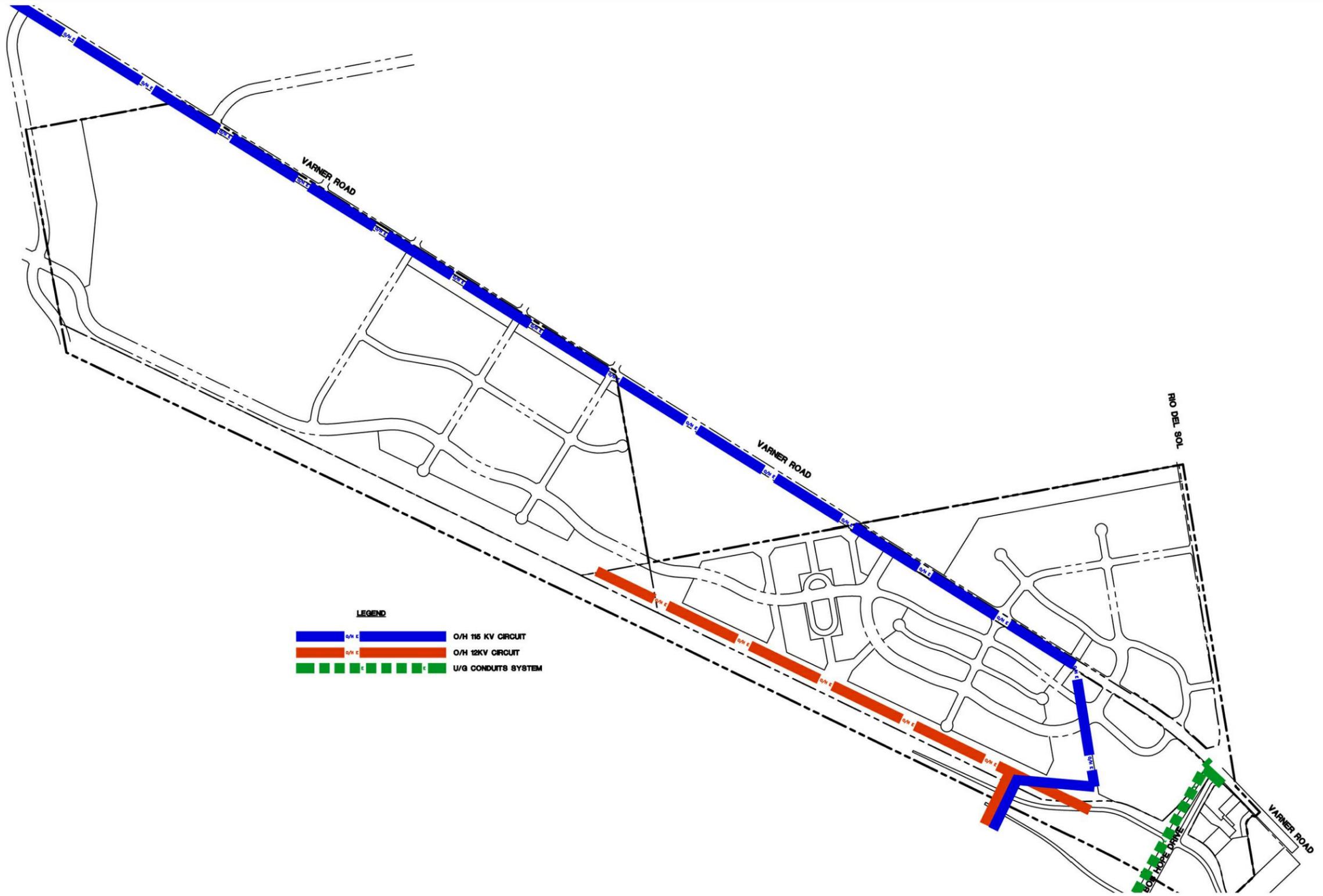
The North City project site is within the service area of Southern California Gas Company. The project site currently is undeveloped and no natural gas facilities are located onsite. According to the Gas Company, gas service to the project could be provided from the nearest existing 4" gas main located at the intersection of Varner Road and Rio Del Sol. No special Gas Company conditions or requirements are anticipated.

Electric Service

Southern California Edison (SCE) is the electric service provider to the Cathedral City 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 distribution and transmission lines on the subject property. The distribution overhead line begins at Bob Hope and Interstate 10 and continues northwest running parallel to Interstate 10 and terminates near the east corner of Section 11. This distribution line is fed from an overhead line coming from the south side of Interstate 10. This line could potentially provide all the power needs to the project site. Improvements east of Bob Hope in Planning Area 2 would be fed from the underground vault system located at Bob Hope and Varner Road. All overhead distributions are typically conditioned by the City to be undergrounded.

It should be noted that Rio Del Sol Road is the territorial divide between Southern California Edison (SCE) and Imperial Irrigation District (IID). Everything east of Rio Del Sol Road is served by SCE and any improvements east of the section line in PA 2 would be served by IID. It is assumed at this time that no improvements extend east of the section line, see Exhibit 3.17-2.



LEGEND

	O/H 115 KV CIRCUIT
	O/H 12KV CIRCUIT
	U/G CONDUITS SYSTEM



MSA CONSULTING, INC.
 PLANNING ■ CIVIL ENGINEERING ■ LAND SURVEYING
 34200 BOB HOPE DRIVE ■ RANCHO MIRAGE ■ CA 92270
 TELEPHONE (760) 320-9811 ■ FAX (760) 323-7893

Existing Electrical System

North City Extended Specific Plan Environmental Impact Report	Exhibit 3.17-2 Page 3.17-11
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Telephone Services

Verizon provides telecommunication services to Cathedral City. 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 North City Extended project site is within the service boundaries of Verizon. Currently, there is a direct buried cable system along the north side of Varner Road. While this existing cable is active it is insufficient to serve the site. The future pickup point of connection for Verizon is a manhole located at Varner Road and Rio Del Sol. This Verizon manhole can serve the entire site, however it is not equipped with Verizon's Fios Service. At present conditions the site would likely be fed by a copper system for typical dial tone usage. Services would also be available for broadband commercial uses. Per communication with Verizon it should be assumed that FIOS will not be available unless individual developers cover the improvement costs for this service.

Cable Services

The City of Cathedral City is served by Time Warner Cable as a distributor of cable internet, phone and television services. The subject site is currently vacant, the nearest facility and pick up point is at the southeast corner of Varner Road and Rio Del Sol. Communication with TWC indicates that no unusual constraints are associated with serving the project site.

C. 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?

D. Potential Impacts Found Not to be Significant

No significant impacts to dry utilities are expected as a result of the proposed NCESP development. Individual developers within the North City Extended Specific Plan will be responsible for any cost of connection to utilities. Project developers will also coordinate all proposed development and design with utility agencies.

All solid waste activities resulting from the NCESP development will be carried out in compliance with all State, Federal and local statutes regulating solid waste. Therefore no impacts are expected to this issue.

E. Potentially Significant Impacts

The North City Specific Plan includes an extensive master-planned infrastructure system for water, sewer and storm water. These facilities will be designed and installed at the expense of developers of the property in a phased manner in accordance with agency and utility purveyor requirements.

Wastewater Services

Build-out of the NCESP will add demand and increase services to CVWD wastewater. The existing 15-inch sewer main will not be sufficient to serve the entire project.

At the request of MSA Consulting, Inc., CVWD prepared a Preliminary Domestic and Water and Sanitary Sewer Hydraulic Modeling for the proposed project. The results from the modeling indicate the construction of sewer improvements will be necessary to accommodate the proposed project.

The sanitary sewer hydraulic loading is based on the calculation numbers provided to CVWD by MSA Consulting, Inc. Please refer to Exhibit 3.17-3 “Density and Water Demand Table” for a tabulation of demand calculations constructed by MSA. The CVWD models provide for annual and dry weather peak sewer loadings of 200 gallons per day (gpd/EDU) and 400 gpd/EDU. Peak wet-weather flow is three times the annual average loading. The total sewer loadings for the North City Extended Specific Plan are 530 gpm annual average flow and 1060 gpm peak-dry weather flow. The peak wet-weather flow is 1,591 gpm.

Exhibit 3.17-4 “Existing and Proposed Sanitary Sewer Mains” provides pipe diameters, lengths, inverts and individual manhole loadings as assumed by CVWD staff to verify the piping meets the criteria summarized in the Density and Water Demand Table.

Per CVWD’s Hydraulic Modeling Result letter dated January 23, 2013 developers of the NCESP are responsible for the following off-site improvements to the sanitary sewer system:

- Replace approximately 260 linear feet of an existing 15-inch sewer with a 24-inch sewer main on Varner Road east of Jack Ivey Drive. CVWD may elect to upsize this pipe to 36-inch at its expense.
- Install approximately 1,600 linear feet of 24-inch sewer main on Varner Road beginning 260 feet east of Jack Ivey Drive and extending to Cook Street. CVWD may elect to upsize this pipe to 36-inch at its expense.

The required sewer infrastructure will comply with all applicable wastewater treatment requirements and City standards. Project developers will pay sewer fees associated with project development. Specific sanitation system modeling will depend on the timing and size of development. Project developers may be required to install additional off-site sewer requirements, beyond those identified above. All proposed development will be reviewed by the City and appropriate agencies to determine specific improvements.

DENSITY AND WATER DEMAND CALCULATIONS

Planning Area	Description	Rooms/EDU	Building Area (SF)	Net Land Area (AC)	Rate Category	Rate (gpd)	Rate (gpd)	Daily Demand (gpm)	Demand Adjustment Factor	Average Daily Demand ADD adjusted (gpm)	Peak Daily Demand (2xADD) (gpm)	EDU (@ 0.59gpm per edu) (ix)
1	Single Family Residential	300			Residential	-	255,000	177.08	100%	177.08	354.17	300
1	Multi-Family Residential	1900			Residential	-	1,615,000	1,121.53	100%	1121.53	2,243.06	1,900
1	Hotel	300			Hotel	-	127,500	88.54	100%	88.54	177.08	300
1	MIXED-USE Retail /Commercial		190,000		Office Building	18,219		12.65	100%	12.65	25.30	22
1	MIXED-USE Restaurant		80,000		Restaurant	72,548		50.38	100%	50.38	100.76	86
1	MIXED-USE Office/Services		190,000		Office Building	18,219		12.65	100%	12.65	25.30	22
1	OPEN SPACE			50.6	Open Space	-	180,655	125.46	5%	6.27	12.55	11
2	Hotel	100			Hotel	-	42,500	29.51	100%	29.51	59.03	100
2	MIXED-USE Retail /Commercial		10,000		Office Building	959		0.67	100%	0.67	1.33	2
2	MIXED-USE Restaurant		40,000		Office Building	3,836		2.66	100%	2.66	5.33	5
3	Light Industrial		595,000	74.2	Office Building	57,055		39.62	100%	39.62	79.24	68
3	OPEN SPACE			16.8	Open Space	-	59,885	41.59	5%	2.08	4.16	4
4	Single Family Residential	1000		92.5	Residential	-	850,000	590.28	100%	590.28	1,180.56	1,000
4	OPEN SPACE			168.9	Open Space	-	603,065	418.80	5%	20.94	41.88	36
5	OPEN SPACE			3.8	Open Space	-	13,641	9.47	5%	0.47	0.95	1
		3600	1,105,000							2,155.35	4,310.69	3,857

Domestic Demand Rate Categories:

Office Building Domestic Demand is established using prior accepted reference (Rate of 35 gallons/year/square foot of office space as obtained from Commercial and Institutional End Uses of Water, AWWA Research Foundation Table 6.18)

Restaurant Domestic Demand is established using prior accepted reference (Rate of 331 gallons/year/square foot of Restaurant space as obtained from Commercial and Institutional End Uses of Water, AWWA research Foundation Table 6.16)

Landscape Irrigation Demand

Rate of 4 AC-ft per year per acre is applied to the landscaped area (either 10, or 15% of the Net Land Area is used to reflect desert scape type landscaping)

Retention Basins are minimally landscaped and only over perimeter only (5% of Net Land Area)

Domestic Demand Rates stated above include an irrigation demand component,

Fire Flow Required

The fire flow can be reduced up to 75% (Based on existing Cathedral City Ordinance) when buildings are protected with a fire sprinkler system.

The largest fire flow of 8,000 gpm would be reduced by 75% down to 2,000 gpm.

9/10/2013



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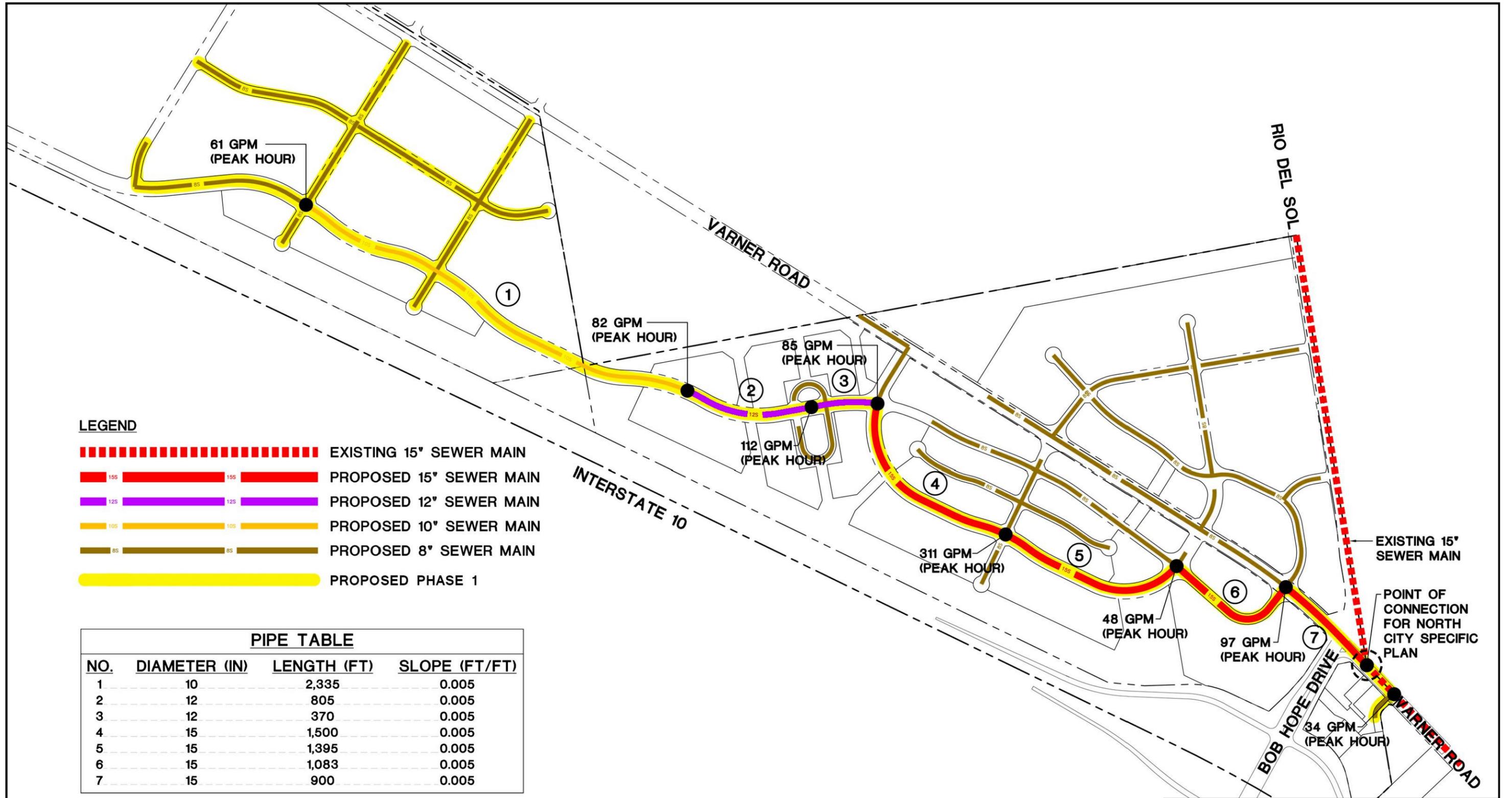
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Density and Water Demand Table

North City Extended Specific Plan Environmental Impact Report

Exhibit 3.17-3

Page 3.17-15



LEGEND

- EXISTING 15" SEWER MAIN
- PROPOSED 15" SEWER MAIN
- PROPOSED 12" SEWER MAIN
- PROPOSED 10" SEWER MAIN
- PROPOSED 8" SEWER MAIN
- PROPOSED PHASE 1

PIPE TABLE

NO.	DIAMETER (IN)	LENGTH (FT)	SLOPE (FT/FT)
1	10	2,335	0.005
2	12	805	0.005
3	12	370	0.005
4	15	1,500	0.005
5	15	1,395	0.005
6	15	1,083	0.005
7	15	900	0.005



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Existing and Proposed Sanitary Sewer Mains

North City Extended Specific Plan
 Environmental Impact Report

Exhibit 3.17-4

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Stormwater Management

Due to the site being vacant and undeveloped there are no flood prevention facilities or storm drain facilities within the NCESP. Projects developed in the NCESP are required to construct flood control basins in order to decrease flood hazard potential. Below is a brief description of each basin, also see Exhibit 3.17-5 "Preliminary Infiltration Basin Design".

Infiltration Basin # 1 – The main regional retention basin is the largest of the three proposed basins. Basin #1 will be located northwest of the proposed Specific Plan improvements. The basin will span from Varner Road south to the Interstate 10 Right of Way, in order to catch sheet flow across the entire span of the Riverine Drainage Area. The upstream most edge of the basin will maintain existing grades and then gradually flow into the basin bottom which will be approximately three feet below the existing grades.

The basin slope will range from 2 percent to 5 percent and be clear of brush. The basin sides will have a 22 foot wide berm with a 20 foot wide access road on top of the berm. Side slopes of the berm will be sloped at 3:1 and have a height providing a minimum of three feet of freeboard. The preliminary basin design has an approximate width of 2,000 feet wide and a length of 2,700 feet with an approximate capacity of 428 acre feet.

Infiltration Basin #2 - An additional retention basin is proposed to be located just east of the larger main basin #1, described above. Basin #2 will collect stormwater runoff which sheet flows from the northern alluvial slopes which would enter the proposed project across Varner road between Basin #1 and the northern portions of the proposed project. The basin includes a 50 foot wide narrow channel adjacent to and along the south side of Varner Road.

The channel will capture sheet flow crossing Varner road from the north and convey it south to the man retention area. The basin slope will range from 2 percent to 5 percent and be clear of brush. The basin sides will have a 22 foot wide berm with a 20 foot wide access road on top of the berm. Side slopes of the berm will be sloped at 3:1 and have a height providing a minimum of three feet of freeboard. The preliminary basin design has an approximate width of 450 feet and a length of 500 feet with an approximate capacity of 125 acre feet.

Infiltration Basin #3 – An additional retention basin is proposed to be located north of the proposed Central Valley Business Park development. Basin #3 will collect stormwater runoff which sheet flows from the northern alluvial slopes. The basin slope will range from 2 percent to 5 percent and be clear of brush. The basin sides will have a 22-foot berm with a 20-foot wide access road on top of the berm. Side slopes of the

berm will be sloped at 3:1 and have a height providing a minimum of three feet of freeboard.

The preliminary basin design has an approximate width of 750 feet wide and a length of 450 feet with an approximate capacity of 250-acre feet, depending on the final design. The proposed debris basins would prevent conveyed sediment and debris from being transported downstream to local streets, drainage devices, and storm drains. The runoff would be captured and allowed to percolate into the soil within the proposed retention basins. The implementation of the retention basins will eliminate the proposed project's risk of flooding and therefore, would fall outside of the FEMA classifications. This would be an improvement in site conditions with no significant impact to the site from flooding.

Floodwall – Commercial 9 acre Eastern Site (PA2) Coachella Valley Water District (CVWD) has indicated that a backwater condition adversely affects the 9 acre portion of the proposed development, from the Riverine flows building up south and east of the site. Review of the site and flow conditions provided by the District indicate that the 9 acre commercial site could be protected by a floodwall, located along the south and eastern boundary.

If required, the exact height, location and design will be required during development review. Such a mitigation measure will need to be designed in accordance with the rules and regulations of the FEMA CLOMR process, and will be processed and approved accordingly.

Local Drainage Improvements - Development of the Specific Plan project would result in a reduction in the total amount of pervious surface currently located onsite. There are currently no impervious surfaces onsite. Approximately 583 acres would be utilized for development of impervious surfaces, such as structures and roadways, natural areas and landscaped areas.

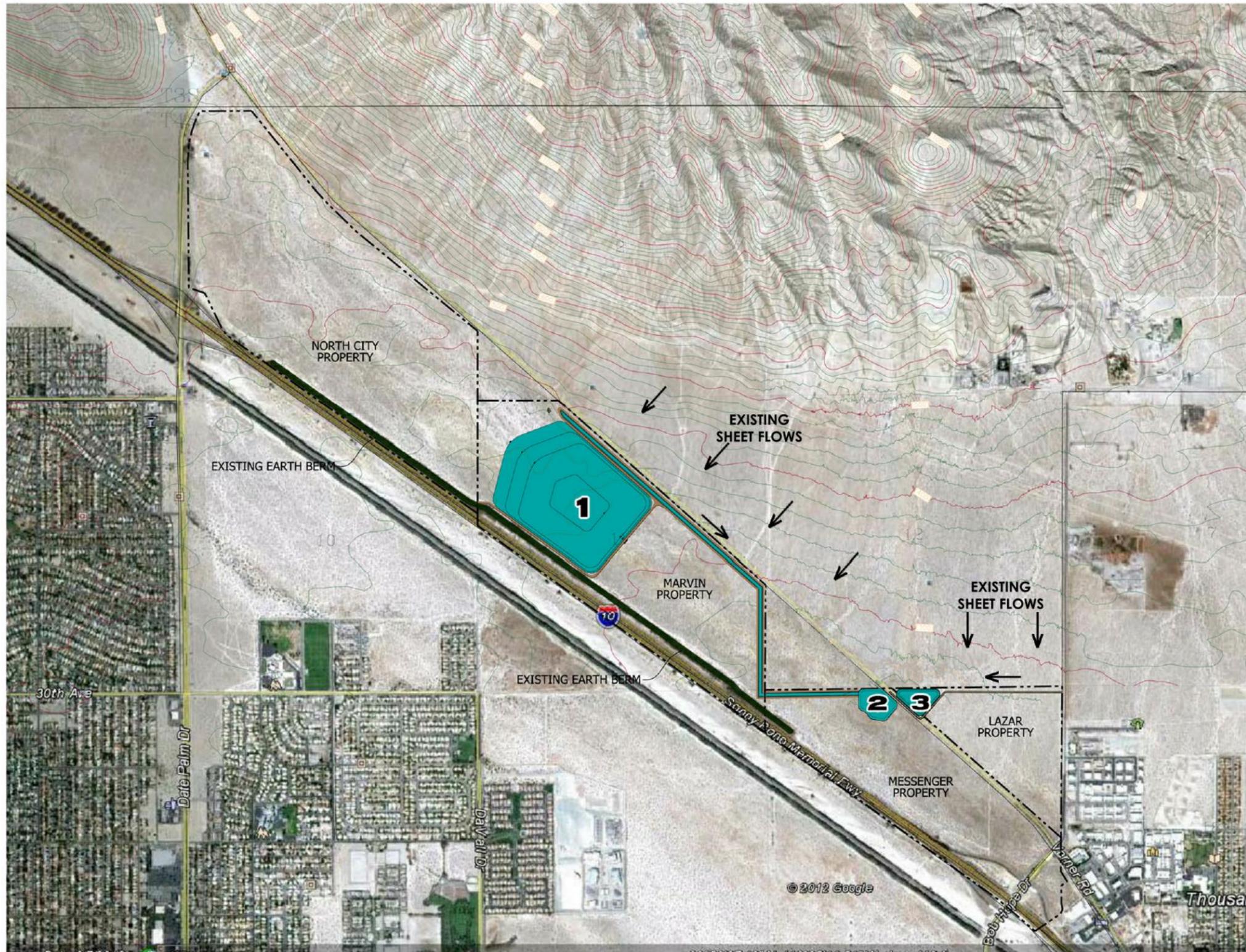
As part of the Specific Plan development, a system of localized retention basins, storm drains, inlet structures, and roadways with curbs and gutters would be constructed to handle the estimated runoff from the project site. Graded slopes would be protected by the erosive effects of their own runoff by a system of drains, erosion control mats and landscaping. V-ditches, catch basins, roof drains, trench drains and area drain systems will be utilized to convey water away from building foundations.

Streets within the project site would have integral concrete curbs and gutters which will convey the runoff from the street surfaces, street parkways, parking lots, adjacent planter islands, commercial/industrial lots, and landscaped areas. Catch basins and area drain systems would remove storm runoff from the streets.

The Specific Plan development drainage facilities shall be sized in order to minimize erosion, flooding, and other drainage impacts. Property owners within the NCESP area shall provide a drainage design as well as supportive hydrologic and hydraulic calculations to the appropriate agencies for review and approval.

It should be further noted that ongoing maintenance of the Storm Drain System, including Debris Basins #1, #2, and #3 as well as narrow sheet flow channels attached to basins #1, #2 and #3 will be the responsibility of a single entity as jointly identified and established by the project developer and the City of Cathedral City. Responsible Agencies for this system include, Coachella Valley Water District (CVWD); Riverside County Flood Control and Water Conservation District (RCFCWCD); U.S. Army Corps of Engineers (USACE); and City of Cathedral City.

Implementation of these requirements will result in less than significant impacts to Stormwater management.



PREPARED BY:



RJR ENGINEERING GROUP

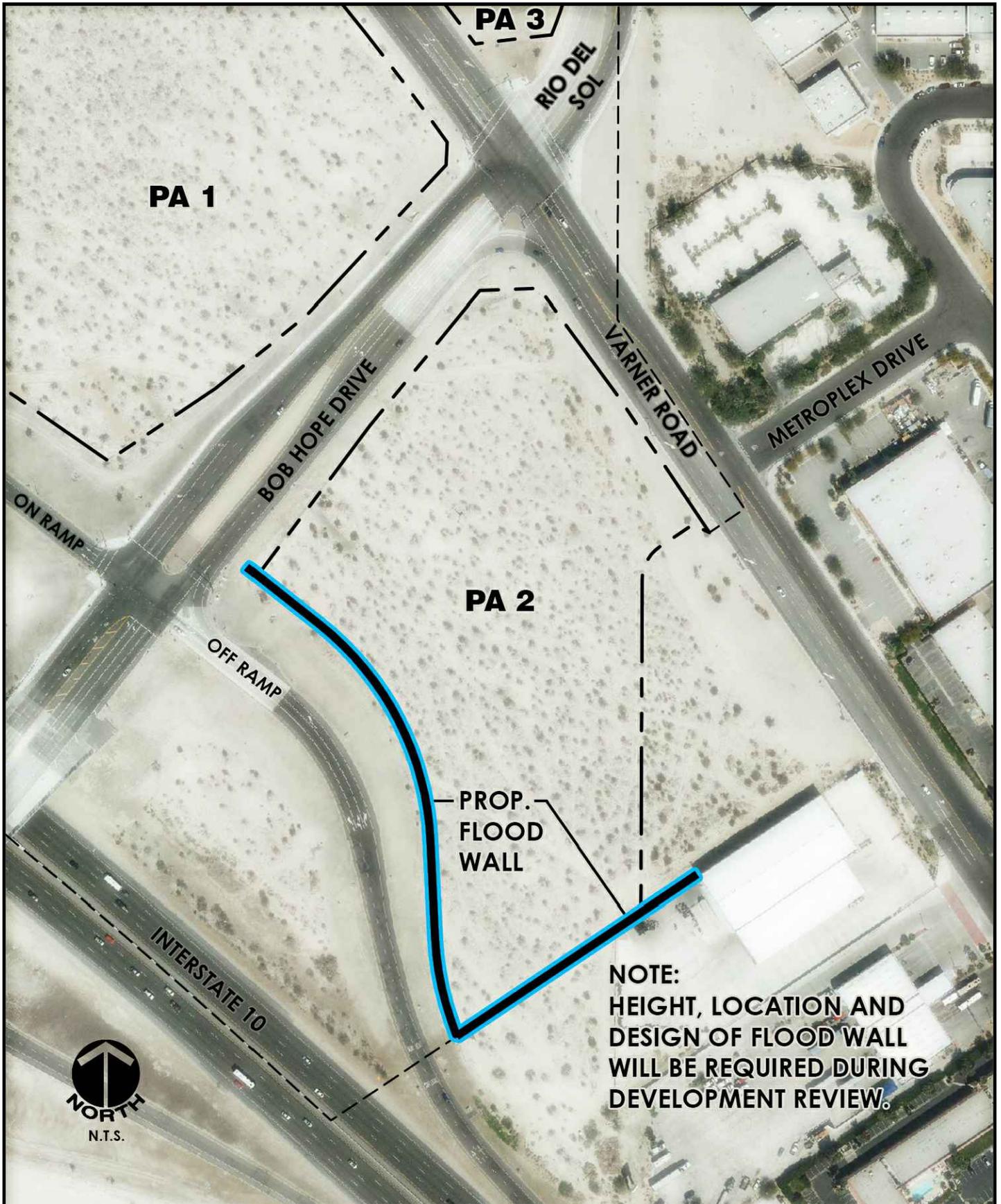
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Preliminary Infiltration Basin Design

North City Extended Specific Plan
 Environmental Impact Report

Exhibit 3.17-5

Page 3.17-20



**NOTE:
HEIGHT, LOCATION AND
DESIGN OF FLOOD WALL
WILL BE REQUIRED DURING
DEVELOPMENT REVIEW.**



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Proposed Flood Wall Location

North City Extended Specific Plan
 Environmental Impact Report

Exhibit 3.17-05a
 Page 3.17-20a

Domestic Water Services

Based on the grade elevations of the project site, the North City Extended Specific Plan is located in the Sky Mountain Pressure Zone (SMPZ). According to analysis done by CVWD the SMPZ cannot currently support this project or other large projects without infrastructure improvements that include additional supply wells, transmission mains, and reservoir storage (Exhibit 3.17-1).

Per CVWD as of January 2013, the Sky Mountain Pressure Zone provides water and fire protection to approximately 15,200 existing CVWD customers. This zone includes 15 supply wells and 10.5 MG of storage. CVWD conducted master planning and evaluated the domestic water storage and transmission main needs for the SMPZ. Exhibit 3.17-6 shows existing and proposed water supply and distribution facilities”.

The following improvements are required to serve the entire pressure zone at buildout:

- 15.3 million gallons (MG) of storage at a proposed CVWD reservoir site (4605) located north of Interstate 10 and east of the intersection of Rio Del Sol Road and Vista Chino.
- A 36-inch domestic water transmission main extended from intersection of Bob Hope Drive and Ramon Road to the proposed CVWD reservoir site (4605).

Domestic water hydraulic modeling results prepared by CVWD at the request of MSA Consulting, Inc. analyzed the NCESP using 2,730,00 square feet of mixed use and light industrial development, 400 hotel rooms, 310 SFR units and 1,900 MFR. MSA provided water demands in combination with CVWD’s conceptual water plans in order to complete the modeling and determine that the Development Design Requirements are met. The Hydraulic Modeling Results from CVWD can be found in Appendix K.

The estimated domestic water demands are 2,155 gallons per minute (gpm) for average daily demand and 4,310 for peak daily demands. The projects fire flow has been estimated at 2,000 gpm for a four-hour duration while maintaining a 20 pound per square inch (psi) operating pressure during construction.

The following improvements will be required prior to domestic water service to the NCESP:

Offsite Elevated Reservoir Storage

- Based upon the projected water demand and fire flow requirements, the NCESP requires 6.7 MG of storage capacity for domestic water demands, operational standby and fire flow. CVWD will require the NCESP to design and construct elevated reservoir storage with the base elevation of 435 feet prior to the installation of the first domestic water meter. CVWD

may participate in upsizing the reservoir within the SMPZ and will pay the associated upsizing costs.

Offsite Domestic Water Pipeline

- Design and construct a 30-inch diameter ductile iron domestic water pipeline from the proposed reservoir to the existing 30-inch waterline located at the intersection of Bob Hope Drive and Ramon Road. CVWD may elect to upsize the waterline at their expense.

Water Supply and Well Site

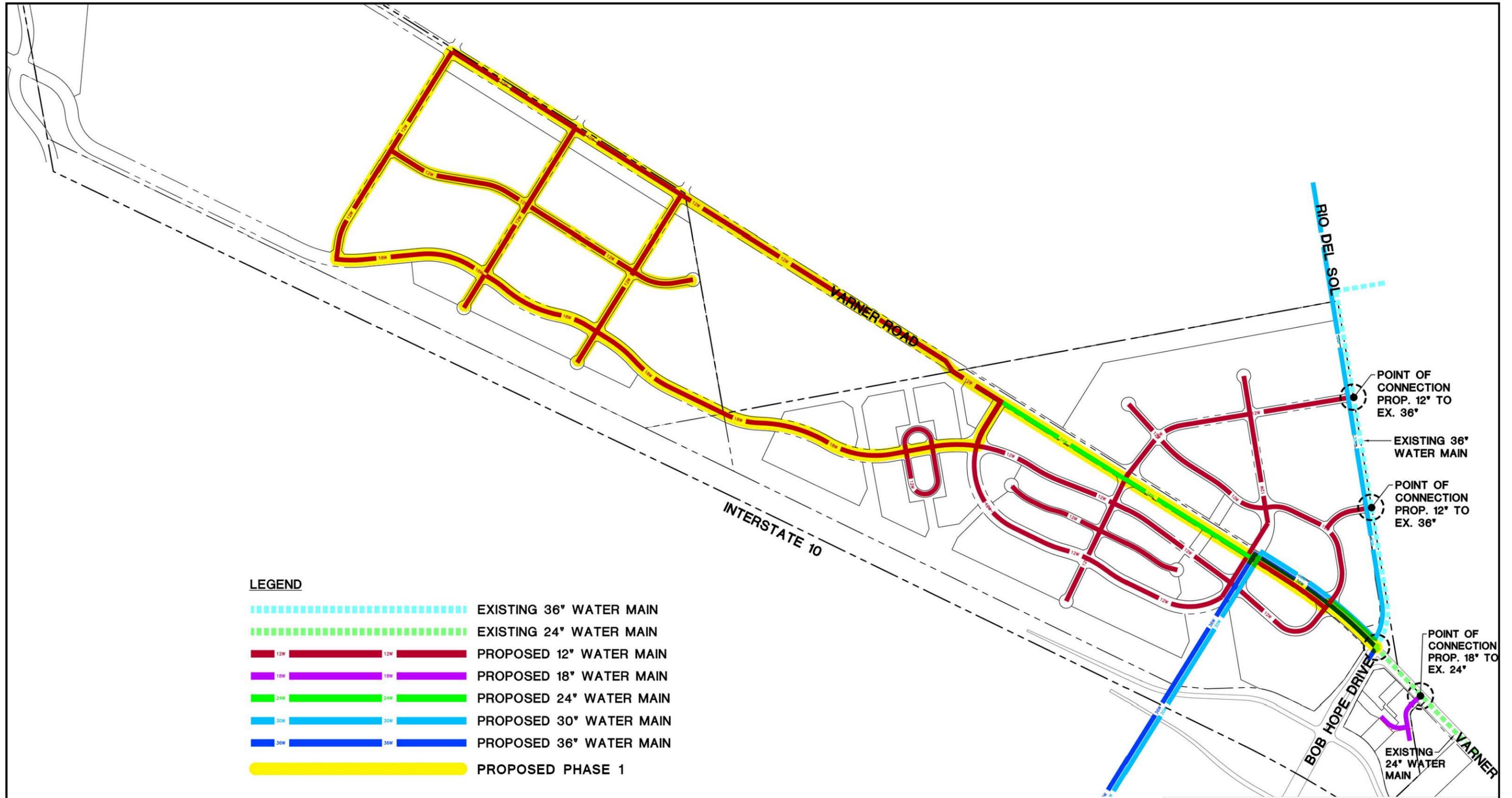
- Based on the water demands, the NCESP project will require two pumping plants to provide supply for the projects domestic water daytime demands and operational standby needs. Due to the NCESP project's land area, 5 well sites will be required.

CVWD is currently working on infrastructure improvements and expansions for the Mission Hills and Sky Mountain Pressure Zone. CVWD intends to build a 3.2 MG reservoir and a 36-inch transmission main to serve the Mission Hill Pressure Zone (MHPZ) and a 10-acre reservoir site to hold a 10MG reservoir in the SMPZ. This additional reservoir would improve the water supply and reliability to the Sky Mountain Pressure Zone. All CEQA requirements for these improvements will be handled by CVWD.

It is anticipated that PA2, if it is the first phase of development, could be served by the existing water system. Phase 1B and future phases would require extensions and internal loops with a combination of 24, 18 and 12-inch mains to be installed as part of the project infrastructure as development occurs. In addition, due to the largeness of the parcels, fire systems could be required to surround the larger buildings to provide adequate fire protection.

The build-out and Phase One Domestic Water system improvements are illustrated on Exhibit 3.17-6. Phase one water main construction is planned for the entire length of Varner Road from Bob Hope Drive/Rio Del Sol Road to the eastern edge of Retention Basin 1 in order to serve both Phase 1A and 1B. Also, water mains are planned during Phase One along the Valley Center Boulevard and North City Collectors located in PA4. The water mains along Valley Center Boulevard through PA1 will also be constructed in order to complete a loop back to Varner Road. Other Domestic Water improvements will be made within each land development phase.

No water improvements will be needed at the time of annexation. Future development within the NCESP will be subject to final implementation of those services not already installed in accordance with CVWD. Implementation of the above infrastructure improvements will result in less than significant impacts to water demand.



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Existing and Proposed Water Supply and Distribution Facilities

North City Extended Specific Plan Environmental Impact Report	Exhibit 3.17-6 Page 3.17-23
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F. Standard Conditions (SC) and Mitigation Measures (MM)

SC 3.17-1: 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 3.17-2: 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 3.17-3: Prior to issuance of permit, Project Developer will submit onsite utility design, especially related to storm drain.

SC 3.17-4: Domestic water services to the project site shall be subject to all applicable rules, regulations, ordinances and orders of the Coachella Valley Water District (CVWD). Project Developer shall complete financial arrangements with CVWD, along with the installation of required facilities, prior to CVWD providing domestic water services.

SC 3.17-4: Sanitary sewer services to the project site shall be subject to all applicable rules, regulations, ordinances and orders of the Coachella Valley Water District (CVWD). Project Developer shall complete financial arrangements with CVWD, along with the installation of required facilities, prior to CVWD providing sewer services.

G. 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.

H. Resources

City of Cathedral City Amended Comprehensive General Plan prepared by Terra Nova Planning & Research, Inc. Adopted July 31, 2002/Amended November 18, 2009

Adopted North City Specific Plan prepared by the Arroyo Group, July 2009

The City of Cathedral City Refuse & Recycling Guide prepared by Burrtec Waste & Recycling Service and Cathedral City

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

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

4.0 GROWTH INDUCING AND CUMULATIVE IMPACTS

4.1 GROWTH INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines, as amended, requires the discussion of the ways in which a project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Such a discussion should also include project's that would remove obstacles to population growth, and the characteristics of a project, which may encourage and/or facilitate other activities that, either individually or cumulatively, could significantly effect the environment. CEQA also emphasizes that growth in an area should not be considered beneficial, detrimental, or of little significance.

Development can be considered growth inducing if it meets any of the following criteria:

- 1) Extension of urban infrastructure into isolated facilities, which are presently devoid of such facilities.
- 2) Development or urbanization of land in a remote location.
- 3) Economic expansion or growth in an area in response to the project (changes in population, revenue base, employment, etc.).

Should the project meet any one of the criteria listed above, it can be considered growth inducing. The discussion that follows looks at the project within the context of these three criteria.

A. Extension of Infrastructure into Isolated Facilities

The North City Extended Specific Plan (NCESP) would result in an increase in demand for infrastructure, which would be met by the appropriate extension of proposed service systems at the expense of the project developers to serve the Specific Plan area. Such extension of infrastructure would occur within the currently designated Cathedral City Sphere of Influence. Buildout of the project would occur in 5 phases over a 15-year period for five planning areas. The proposed installation of infrastructure will be designed and installed in a phased manner and in accordance with the agency and utility purveyor requirements. The project's phasing plan and configuration of planning areas will allow for a logical order of development, resulting in less than significant growth inducing impacts related to this topic.

B. Development or Urbanization in a Remote Location

The North City Extended Specific Plan encompasses vacant land within Cathedral City's Sphere of Influence, located north of the Interstate 10 Freeway along the Varner Road corridor. This designation of land is identified by the Riverside County Local Agency Formation Commission (LAFCO) as likely to be serviced or annexed by the City (Cathedral City) in the future. The project site is contiguous to the current Cathedral City limits to the west and Cathedral City sphere of influence areas to the north and east. Areas to the south of the project are within the Rancho Mirage sphere of influence and City limits. The property's current land use designation within the Riverside County General Plan (RCIP) is "Light Industrial" and a 9.41-acre portion has an approved Final Parcel Map designed as a small highway-oriented commercial area.

Project implementation would result in the annexation of approximately 591 acres into the jurisdiction of Cathedral City, thus extending the land use and planning objectives and community design guidelines of the City and particularly, the adopted North City Specific Plan. On-site development will occur in a phased manner. The project is not expected to result in the development of isolated or remote areas that have not previously been recognized for improvement of City services, opportunities for new development and protection of the natural environment. Development of the North City Extended Specific Plan would occur in a manner consistent with the planned objectives of the Cathedral City General Plan for this area north of Interstate 10. Less than significant impacts are anticipated.

C. Economic Expansion or Growth in Response to the Project

Development of the North City Extended Specific Plan will occur in a manner consistent with the City's General Plan as well as with "Smart Growth" principles. Smart Growth can be defined as growth that is economically sound, environmentally friendly and supportive of community livability. Smart Growth recognizes that growth and development are both inevitable and beneficial. It turns the development debate away from the traditional "growth/no growth" question to "how and where new development should be accommodated." The project's land uses and policies will result in a local increase in population, employment and revenue base for the City of Cathedral City. A goal of the project is to encourage residential, commercial and industrial development in the Specific Plan area that will enhance the long-term financial stability and fiscal viability of the City. The direct and indirect demand for services resulting from the projects promotion of economic growth will be met through implementation and buildout of the NCESP's mixture of land uses and services. Less than significant impacts are expected.

4.2 CUMULATIVE IMPACTS

A. Probable Future Projects in the Vicinity of the Project

To identify potential cumulative projects in the study area, twenty-two cumulative projects identified in the North City Specific Plan EIR were reviewed as well as the list of projects identified in the City of Rancho Mirage “Development Activity Summary” dated June 6, 2012. The categories of development in this list include residential and commercial. The list of past, present and reasonably anticipated projects primarily included developments located too distant from the project to result in a demand of resources or other impacts which would compound with the project’s growth to result in significant impacts. A majority of future projects in the vicinity would occur south of Interstate 10. Those projects occurring north of Interstate 10 would be situated within the Cathedral City Sphere of Influence and in accordance with the designated land uses and other development policies. Cumulative impacts are not expected to be significant.

B. Summary of Development Projections

The future projects within Cathedral City, the Cathedral City Sphere of Influence, Rancho Mirage and the Rancho Mirage Sphere of Influence are not expected to compound with the NCESP in a manner resulting in significant cumulative impacts.

4.3 CUMULATIVE IMPACTS BY RELEVANT CEQA TOPIC

The project is not expected to result in significant cumulative impacts to Aesthetics, Agricultural Resources, Biological Resources, Cultural Resources, Geotechnical, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation Transportation or Utilities and Service Systems. Potential cumulative impacts reaching a considerable level of significance may result upon air quality and greenhouse gases. These impacts will be reduced to the maximum extent feasible with the project’s construction phasing and best practices and through a series of mitigation measures during the life of the project that are also supported with the project’s mixture of uses.

5.0 UNAVOIDABLE SIGNIFICANT IMPACTS

1. INTRODUCTION

Unavoidable significant impacts are those that cannot be reduced to acceptable or insignificant levels by the implementation of realistic and feasible mitigation measures. The proposed project is a Mixed Use Development located on previously undeveloped land north of Interstate 10 and between the extension of Da Vall and Rio Del Sol. The project is immediately west of existing light industrial development and on lands where the proposed uses are permitted with an approved Specific Plan.

Impacts associated with buildout of the proposed project are addressed in detail in Section 3 of this EIR. The potential adverse impacts associated with the Alternative development scenarios are also presented within that section. Comprehensive mitigation measures and standard conditions imposed by the City of Cathedral City are expected to adequately mitigate all project impacts. When considered in concert with the wide range of development standards and regulatory codes and regulations of the various agencies with oversight responsibility for the project, the mitigation measures outlined herein will demonstrably and effectively reduce all potentially significant impacts to less than significant levels.

One area of special concern and sensitivity has been given focused consideration in the assessment of this project and in the development of mitigation measures, and the associated impacts are considered unavoidable based on the results of this EIR: Impacts to air quality.

A. Air Quality

The development of the proposed project will result in the generation and emission of air pollutants both locally and regionally. Emissions are expected to modestly add to an increase in potential for air quality degradation in the Coachella Valley. Most significant impacts are expected to result from site disturbance, excavation, and construction activities associated with the development of the mixed use project and storm water retention basins. Site grading will be phased and minimized to the greatest extent practicable.

Individual property developers within must follow the design guidelines outlined in the Specific Plan for the construction of Buildings, roadways and common open spaces.

All construction related activities will abide by the City's municipal code which addresses the hours per day within which these activities are permitted. The EIR provides for the review and approval of all grading and development permits, and the provisions of all reasonably available methods and technologies to assure the minimal emissions of pollutants generated by the project. The EIR also directs the City to assure the implementation of federal, state, regional, and local programs that reduce construction and operations related emissions, and monitor grading and construction activities.

Design guidelines included in the Specific Plan for the project direct property owners to, as feasible, incorporate indirect-source emissions and energy conservation management measures and features into building design. Mitigation measures are derived from the South Coast Air Quality Management District's (SCAQMD) CEQA Air Quality Handbook and from City and CVAG policies. SCAQMD's CV-SIP sets forth mandatory measures, with which the developer shall comply with as noted in this EIR. Therefore, development and operation of this project will not have a significant adverse effect on local or regional air quality.

6.0 ALTERNATIVE SUMMARIES

6.1 SUMMARY

Section 15126.6 of the CEQA Guidelines requires the consideration and discussion of alternatives to proposed projects. According to these guidelines, an EIR shall “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.

Section 15126.6 (e) (1) declares that the specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation.

The following alternatives were considered in this EIR:

- Alternative 1: “No Project”;
- Alternative 2: “Regional Stormwater Retention Basin(s) Alternative;
- Alternative 3: Current County Light Industrial Zoning”; and
- Alternative 4: Light Industrial/ Business Park Mixed use Alternative.

6.6.2) Alternative 1: “No Project”

The “No Project” alternative assumes that no land development or internal circulation/ infrastructure improvements will occur within the Specific Plan due to the very significant documented requirement to implement an adequate stormwater management system, including large retention basin(s) and supporting engineered berms and drainage channels, prior to the development of any productive use of the property within the Specific Plan. As a result, this “No Project” alternative assumes that the entire SPA will remain in its current land use as vacant, open desert lands.

Analysis of Impacts for Alternative

The “No Project Alternative” has reduced impacts versus the “Preferred Alternative” for Air Quality, Biological Resources, Cultural Resources, Noise, and Traffic all primarily due to the lack of construction and subsequent lack of new businesses and residents. However, this alternative has greater impacts than the “Preferred Alternative” on Hydrology, Public Services, Transportation and Recreation due to the lack of needed flood control system improvements, extension of vehicular circulation system improvements and open space system improvements for regional pedestrian and bicycle access.

Environmental Impact of No Project Alternative

Aesthetics: The No Project alternative assumes that no land development or internal circulation/ infrastructure improvements will occur within the Specific Plan due to the very significant documented requirement to implement an adequate stormwater management system, including large retention basin(s) and supporting engineered berms and drainage channels, prior to the development of any productive use of the property within the SP. The absence of development within this alternative would leave this area in its natural desert habitat condition and would avoid development related aesthetics impacts. Thus, this alternative would be environmentally superior from an aesthetic point of view.

Agriculture: None of the four project alternatives would have impacts on Agricultural Resources.

Air Quality: The “no project” alternative would initially reduce or eliminate potential impacts to air quality.

Biological Resources: This alternative scenario indicates no change in the existing impacts on biological resources. However it can be considered to have an indirect impact on the CVMSHCP as the conservation plan relies on development fees to maintain conservation efforts. The development of 600 acres would result in approximately (600 ac x \$5600) \$3,000,000 paid to the Coachella Valley Conservation Commission (CVCC). No fees would be paid as the result of no development.

The mentioned “no project” alternative would avoid impacts identified onsite and would be an environmentally superior alternative.

Cultural Resources: The cultural resources investigation demonstrated that no resources are present on the surface of the site. As all alternatives would involve grading of the entire site, the same standard mitigation measures would insure that buried resources

uncovered during the course of grading operations would be properly dealt with including the potential discovery of human remains

Geotechnical: The “No Project” alternative involves no development. This alternative scenario indicates no change in the existing impacts on Geological Conditions.

The mentioned “no project” alternative does not mitigate or prevent future development in surrounding land.

Green House Gas: The “no project” alternative would initially reduce or eliminate potential impacts to greenhouse gases since no construction or operation of facilities would take place in the undeveloped site.

Hazards and Hazardous Materials: The “No Project” alternative would not introduce any new potentially hazardous materials related to development or construction of the proposed project. However, the absence of development and unrestricted access to the property, particularly at a freeway interchange leaves susceptibility to illegal dumping which could include hazardous waste. Impacts would be less than the preferred project, however the preferred project is expected to have less than significant impacts to hazardous materials.

Hydrology and Water Quality: The “no project” alternative would not result in any flood control improvements at this time. The existing flood zone would remain in place and the current issues associated with this zone would continue. The concerns of flooding and debris flow would continue to threaten the community of Thousand Palms as well as the surrounding roadway infrastructure. A solution would then have to come from future public funding or a developer with a similar project that could help to fund the regional flood control facilities.

Land Use and Planning: The “No Project” alternative assumes that no land development will occur, including all lands within the project area. In addition, no stormwater management and other infrastructure systems would be constructed. As a result, this “No Project” alternative assumes that the entire Specific Plan will remain in its current land use as vacant, desert land.

Mineral Resources: The “No Project” alternative assumes that the entire Specific Plan area will remain in its current state as vacant, desert land. Impacts resulting from this alternative would be minimal and less than significant. The difference in physical impacts to the existing land conditions resulting from the “No Project” alternative would be substantially less in comparison to those of the preferred alternative. However, neither scenario would impact known mineral resources nor mineral resource recovery sites since none are found on or adjacent to the project site.

Noise: The “No Project” alternative assumes that no land development and no sensitive receptors will be created and occur within the Specific Plan. No impacts to noise would result from this alternative.

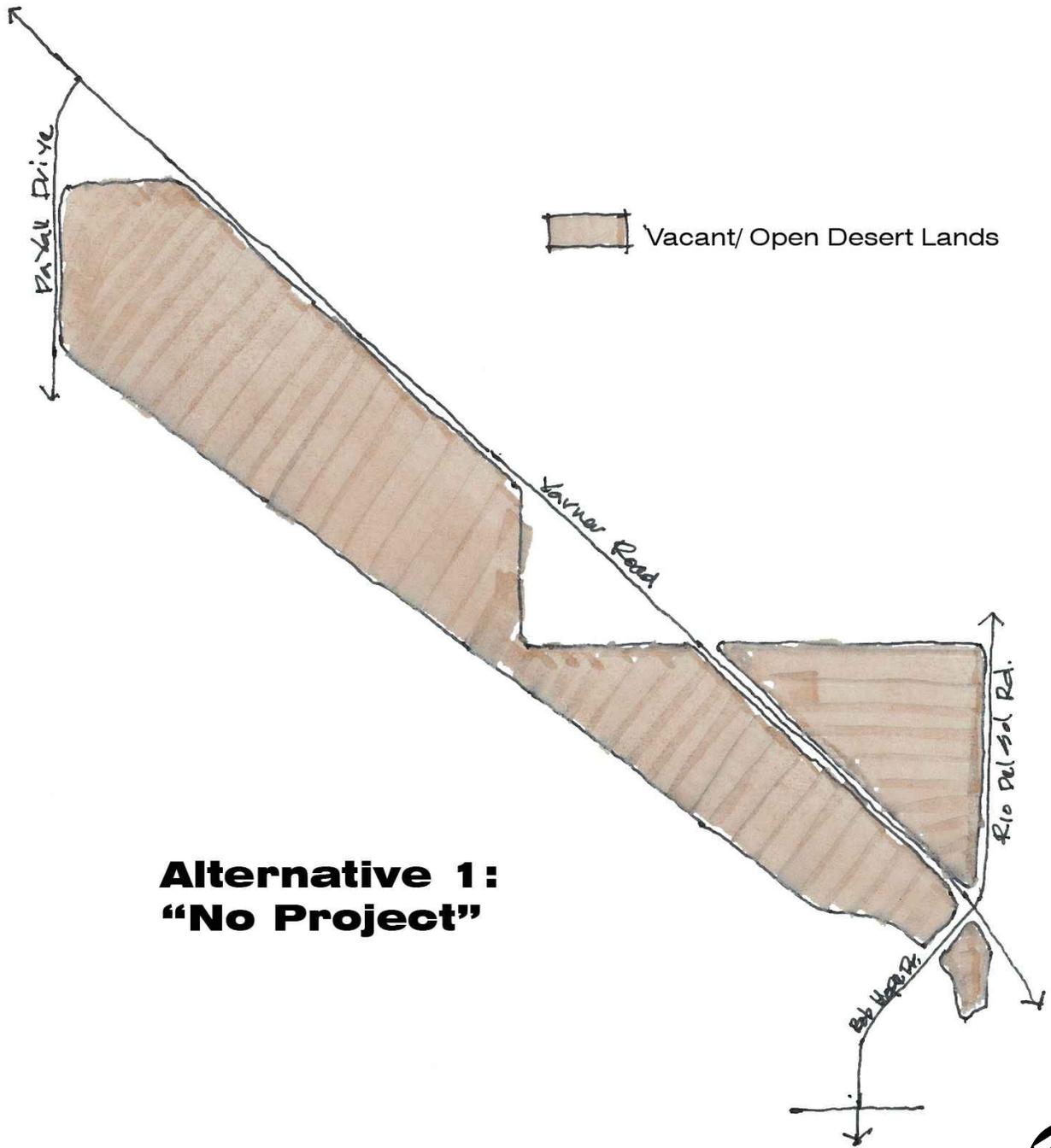
Population and Housing: The “No Project” alternative assumes that no land development will occur within the Specific Plan, and no population will emerge on the site. No impacts to housing and population would result from this alternative.

Public Services: This Alternative assumes that the entire SP area will remain vacant desert land and therefore would not have an increase in demand for fire, emergency protection, and school or library services. No impacts to public services would result from this alternative.

Recreation: Under the “No Project” alternative, it is assumed that the proposed construction of the NCESP including; residential, commercial, internal circulation and utility infrastructure does not occur and remains vacant desert land. There would be no increase for recreational demand and therefore there would be no impacts on recreational services.

Transportation: This alternative would result in no measurable increase in traffic generation, since the entire project area would remain as vacant, open desert lands. Traffic impacts are expected to be significantly less than the proposed project.

Utilities and Service System: Under this Alternative there would be no demand to dry utilities or the service systems. The overall impacts would be reduced under the “No Project” Alternative.



**Alternative 1:
"No Project"**



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Land Use - Alternative 1

North City Extended Specific Plan
 Environmental Impact Report

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6.3) Alternative 2: “Regional Stormwater Retention Basin(s)”

This alternative assumes that public source funding can be secured to construct a “least cost” regional stormwater management system within this Specific Plan which would retain/ detain projected stormwater flows coming from the North City Specific Plan and Indio Hills areas as well as provide for any incidental on-site retention/detention requirements. This system would also need to provide adequate flood protection for the Thousand Palms Community to the east of Rio Del Sol Road/ Bob Hope Drive. It is estimated that approximately 70 net acres of developable area could be allocated for “Light Industrial” use at this location, yielding a potential for approximately 350,000 square feet of gross building floor area (GFA) at ultimate build-out of the SP.

Analysis of Impacts for Alternative

The “Regional Stormwater Retention Basin(s) Alternative” has reduced impacts versus the “Preferred Alternative” for Air Quality, Biological Resources, Cultural Resources, Noise, and Traffic all primarily due to the relatively small amount of construction and, as a result, a relatively small number of new businesses and no new residents. However, this alternative has greater impacts than the “Preferred Alternative” on Aesthetics, Public Services, Transportation and Recreation due to a limited extension of vehicular circulation system improvements and open space system improvements for regional pedestrian and bicycle access.

Environmental Impact of Regional Stormwater Retention Basin(s)

Aesthetics: As a result, this alternative assumes remain in its current land use as vacant, desert land including: primarily Sonoran creosote bush habitat; recently stabilized sand hummocks; occasional wind erosion and “blowsand”; and irregular, unmaintained Tamarisk “windscreens” along the I-10 corridor. A limited area of “Light Industry” would be permitted to develop in the northeast portion of the Specific Plan. Impacts related to Aesthetics are expected to be less than the proposed project. Construction of a “least cost” regional stormwater management system could result in a negative aesthetic impact resulting from graded basins lacking landscaping. This Alternative would not be environmentally superior.

Agricultural: None of the four project alternatives would have impacts on Agricultural Resources.

Air Quality: This project alternative would result in potentially reduced impacts due to the lack of residential development.

Biological Resources: Alternative 2 has no residential component, residential uses tend to have indirect or edge effects on Biological Resources related to lighting, noise, traffic and the introduction of domestic animals. Increased density in the associated land uses of the Preferred Project contributed by the proposed industrial and commercial uses would also cause an increase in traffic when compared to this Alternative. These components can result in further indirect impacts to biological resources. Therefore in general, this alternative would have less indirect impacts relative to the Preferred Alternative

Cultural Resources: The cultural resources investigation demonstrated that no resources are present on the surface of the site. As all alternatives would involve grading of the entire site, the same standard mitigation measures would insure that buried resources uncovered during the course of grading operations would be properly dealt with including the potential discovery of human remains

Geotechnical: Alternative 2 has similar impacts compared to the preferred project because the entire property would have the opportunity to be graded and developed. However Alternative 2 has no residential component. Residential uses tend to have indirect or edge effects on Biological Resources related to lighting, noise, traffic and the introduction of domestic animals. Increased density in the associated land uses of the Preferred Project contributed by the proposed industrial and commercial uses would also cause an increase in traffic when compared to this Alternative. Therefore in general, this alternative would have less indirect impacts relative to the Preferred Alternative.

Green House Gas: The potential impacts to greenhouse gases would be reduced under this alternative in part due to the elimination of construction and operations of residential development. The intensity of industrial development would influence the level of greenhouse gas emissions resulting from project operations.

Hazards and Hazardous Materials: Under Alternative 2 there would be a moderate amount of construction activity but still less than the preferred project. During all construction activities under this Alternative, all standard conditions associated with the proposed project would be implemented, reducing impacts to less than significant.

Hydrology and Water Quality:

Under Alternative 2 construction of flood control improvements would be tied to public funding which would take a considerable investment of time to procure money for construction of the facilities. The timing would be uncertain. The existing flood zone would remain in place for an undetermined amount of time and the current issues associated with this zone would continue. The concerns of flooding and debris flow would continue to threaten the community of Thousand Palms as well as the

surrounding roadway infrastructure. This alternative would not immediately be environmentally superior relative to flood control.

Land Use and Planning: Due to the limited “Light Industrial” area to be developed, some TUMF and MSHCP fees would be paid under this alternative. Also, the development of this alternative will create the need for some design components, roadway and landscaping improvements in the “Light Industrial” area, as discussed throughout this EIR. As a result, appropriate levels of Aesthetics, Biology, Air Quality, Noise and Traffic impacts are addressed within sections of this EIR.

Mineral Resources: Implementation of this alternative would result in less than significant impacts related to mineral resources. Improvements to develop a regional stormwater management system would result in land disturbances similar to the preferred alternative, but impacts to known mineral resources, recovery operations or areas held in reserve for future mining activities would not occur.

Noise: This alternative assumes the majority of land would be committed to a regional stormwater management system to retain/ detain projected stormwater flows coming from the North City SP and Indio Hills areas. Under this alternative, it is estimated that 70 net acres of developable area could be allocated for “Light Industry” development and no sensitive receptors would be created. Less than significant impacts would result from short-term construction.

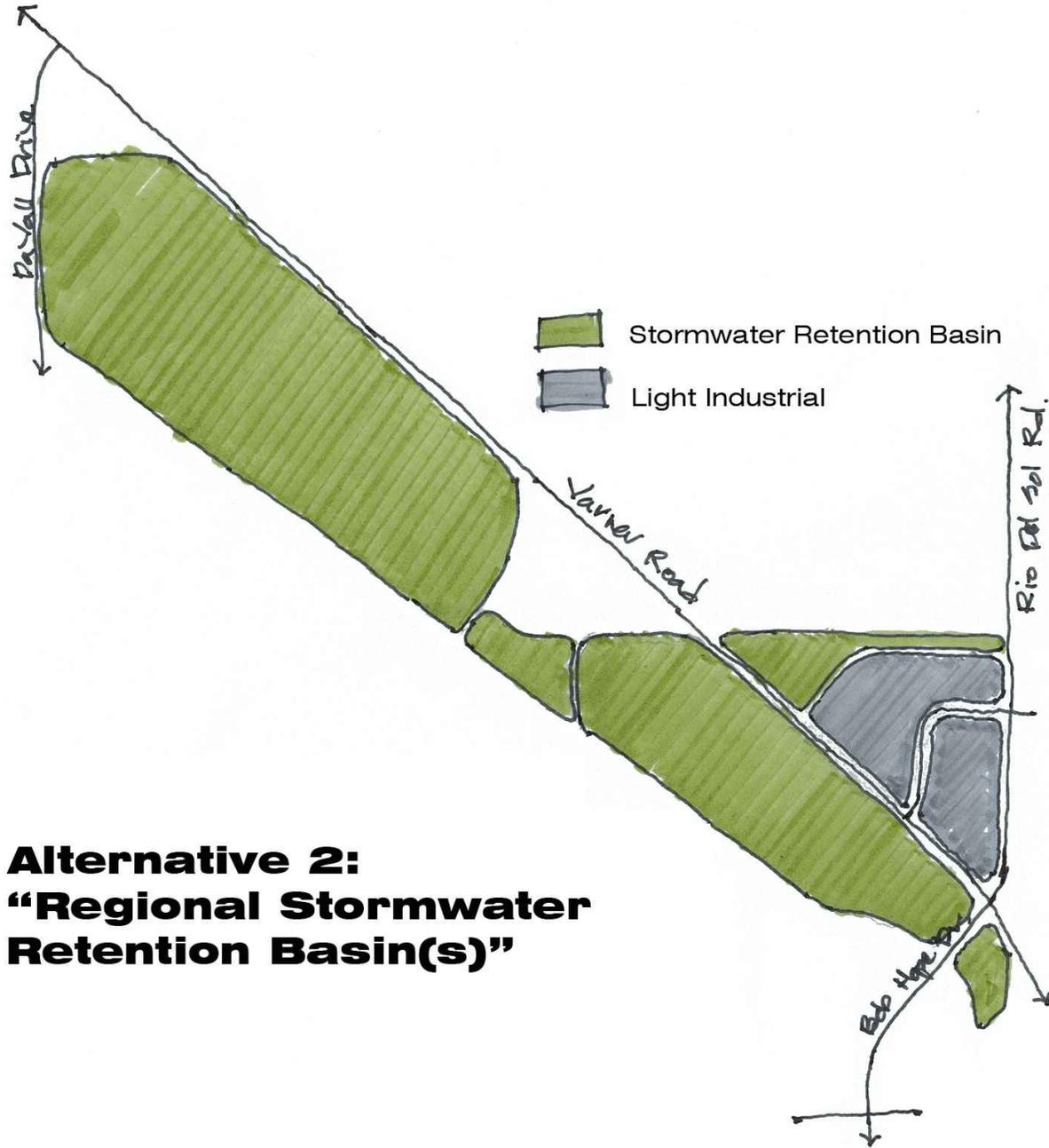
Population and Housing: Less than significant impacts, as no housing and related population would result from this alternative.

Public Services: The construction of a stormwater management system does not have a residential component, or include the implementation of the open space component, therefore would not result in an increase of population or demand to public services. No impacts to Public Services are anticipated with this alternative.

Recreation: The construction of a stormwater management system does not have a residential component, or include the implementation of the open space component, therefore would not result in an increase of residents which would impact the existing shortage of parks and recreation facilities. No impacts are anticipated under this Alternative.

Transportation: This alternative would result in modest, manageable increases in traffic generation as the 350,000 square feet of “Light Industrial” building floor area is constructed and absorbed into active use. The traffic impacts relative to this alternative are expected to be below impacts of the preferred project, and less than significant.

Utilities and Service System: The construction of a stormwater management system does not have a residential component, or include the implementation of the open space component. Demand would be reduced to serving only 70 acres as opposed to 591.38 with the Preferred Project; however, infrastructure improvements to water and sewer would still be required all though to a lesser extent.



**Alternative 2:
"Regional Stormwater
Retention Basin(s)"**



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Land Use - Alternative 2

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6.4) Alternative 3: “Current County Light Industrial Zoning”

This alternative assumes that “Light Industrial” land use would be consistently maintained on all of the net developable property within the Specific Plan except for two areas located on both sides of Bob Hope Drive and south of Varner Road, which would be logical for “Commercial” uses, including, retail, restaurant, office/ services and hotel, given their adjacency to the new Interstate Highway 10 interchange at Bob Hope Drive.

As with the proposed project, in order to develop this alternative through implementation of the Specific Plan and Land Use Equivalency Program (LUE), an integrated system of Stormwater Retention Basins and supporting engineered berms and drainage channels would need to be implemented prior to initiating any private development within the area. Approximately 200 acres of land will be required to construct a self-contained stormwater management system adequate to retain/ detain off-site flows entering the SP from the west and north and to mitigate on-site stormwater flows. This self-contained system would also provide adequate flood protection for the Thousand Palms Community to the east of Rio Del Sol Road/ Bob Hope Drive relative to stormwater flows from their west.

Within this alternative, the projected “yield” for net private development as expressed in gross floor building area (GFA), after the completion of an adequate stormwater management system and concurrent with the development of an integrated circulation system and public parks and recreation facilities, is projected as follows: Retail Commercial @ 200,000 square feet; Restaurant @ 120,000 square feet; Office/ Services @ 190,000 square feet; Light Industrial @ 2,630,000 square feet and Hotel @ 400 rooms.

Analysis of Impacts for Alternative

The “Current County Light Industrial Zoning Alternative” has somewhat reduced impacts versus the “Preferred Alternative” for Air Quality, Biological Resources, Cultural Resources, Noise, and Traffic all primarily due to the somewhat smaller amount of construction resulting from no residential development being proposed. As a result, no new residents are projected within this alternative. However, this alternative has somewhat greater impacts than the “Preferred Alternative” on Aesthetics, Public Services, Transportation and Recreation due to a comparatively reduced extension of vehicular circulation system improvements and open space system improvements for regional pedestrian and bicycle access.

Refer to the following Phased Development Program and Phasing Diagram for the Current County Light Industrial Zoning Alternative

Environmental Impact of County Light Industrial Zoning

Aesthetics: This self-contained system would also provide partial flood protection for the Thousand Palms Community to the east of Rio Del Sol Road/ Bob Hope Drive relative to stormwater flows from their west. The development of this stormwater management system will result in an environmentally superior solution when compared to Alternative 2.

Agricultural: None of the four project alternatives would have impacts on Agricultural Resources.

Air Quality: This alternative would result in somewhat reduced impacts compared to the Preferred Project due to the level of construction and intensity of operations.

Biological Resources: Alternative 3 has similar impacts compared to Alternative 2 and the Preferred Project because the entire property would be graded and developed. The MSHCP fees would be paid in entirety. However, like Alternative 2, this alternative has no residential component. As mentioned previously, residential uses tend to have indirect or edge effects on Biological Resources related to lighting, noise, traffic and the introduction of domestic animals. The land use expected in Alternative 3 can result in indirect impacts to biological resources but at levels slightly less than the Preferred Project.

Cultural Resources: The cultural resources investigation demonstrated that no such resources are present on the surface of the site. As all alternatives would involve grading of the entire site, the same standard mitigation measures would insure that buried resources uncovered during the course of grading operations would be properly dealt with including the potential discovery of human remains

Geotechnical: As mentioned previously, residential uses tend to have indirect or edge effects on Biological Resources related to lighting, noise, traffic and the introduction of domestic animals. But concurrently this Alternative provides the opportunity for the development of increased density and the land uses of Retail Commercial; Restaurant; Office/ Services feet; Light Industrial and Hotel. The land use expected in Alternative 3 can result in indirect impacts to biological resources but at levels slightly less than the Preferred Project.

Green House Gas: This alternative would result in somewhat reduced impacts compared to the Preferred Project due to the level of construction and intensity of operations.

Hazards and Hazardous Materials: As with the Preferred Project, development would occur on the project site but to a lesser extent. Impacts to hazards and hazardous materials during construction would be short term and less than significant. Permitted

and conditional uses within the zoned land use could include the usage or storage of hazardous materials such as fueling stations, and automotive repairs. This Alternative compared with the Preferred Project would result in similar levels of impacts. Standard conditions would mitigate impacts to less than significant. The City's and County's hazardous materials policies, as well as NPDES policies will be enforced.

Hydrology and Water Quality:

Under Alternative 3 construction of flood control improvements would most likely be dependent on a mix of public and private funding due to the less intense mix of land uses. This could result in a slower construction schedule; otherwise impacts would be similar to the preferred alternative.

Land Use and Planning: Due to the more intense mix of land uses indicated in Alternative 3, when compared to Alternative 2, the development of this alternative will create the need for additional and more extensive design components, roadway and landscaping improvements in the SP, as discussed throughout this EIR. As a result, appropriate levels of Aesthetics, Biology, Air Quality, Noise and Traffic impacts are addressed within sections of this EIR. Also, due to the mix of land uses to be developed, TUMF and MSHCP fees would be paid under this alternative.

Mineral Resources: Since known mineral resources or related facilities do not occur on the project area or neighboring land, project impacts resulting from this scenario would be considered less than significant, like those of the preferred alternative.

Noise: Since no residential uses or sensitive receptors would result from this scenario, the expected the expected impacts would be reduced to short-term construction-related. Fewer or no mitigation measures would be required to address on- or off-site compatibility.

Population and Housing: Since no residential dwelling units would be constructed under this scenario, the expected less than significant impacts would be anticipated.

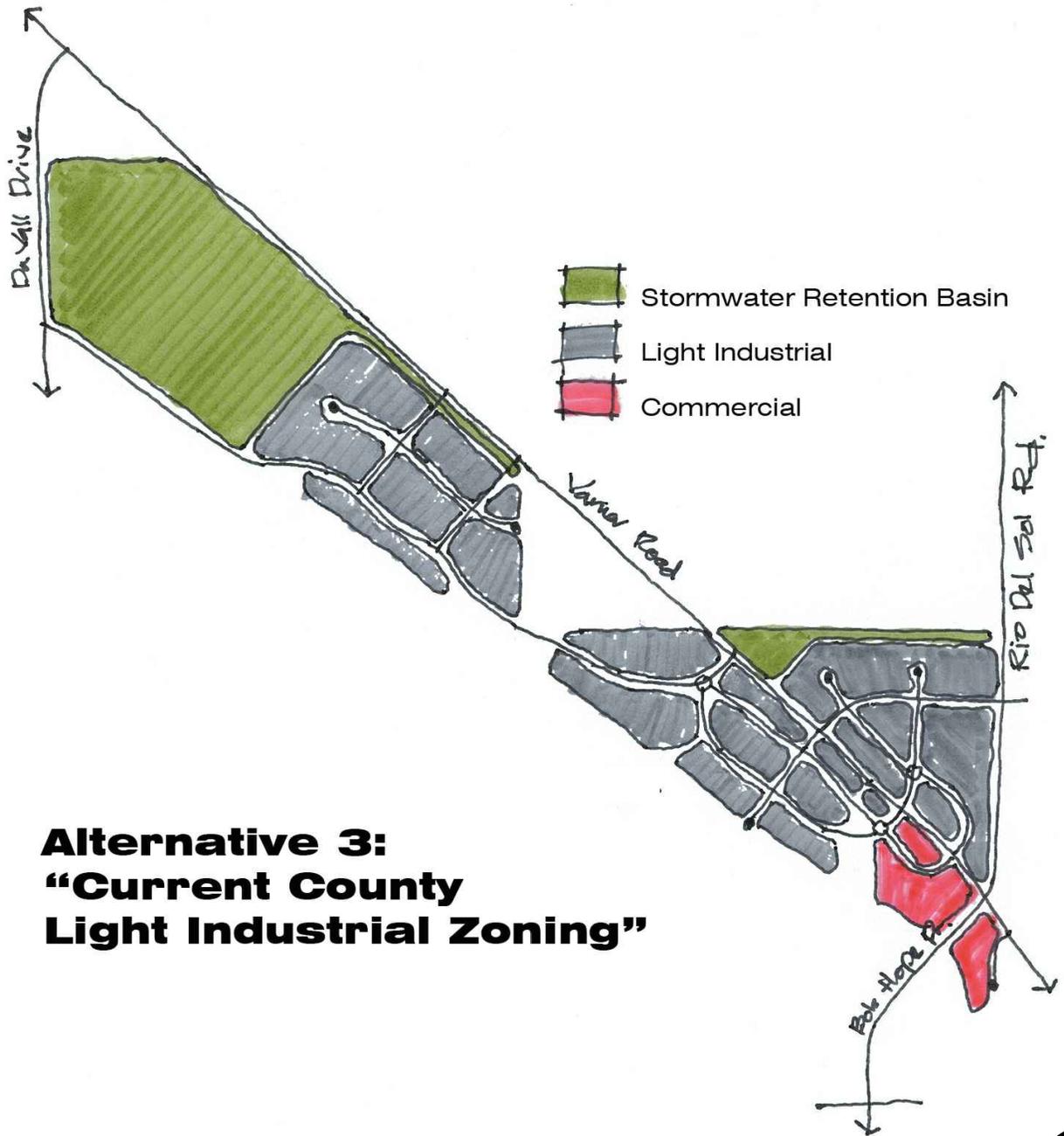
Public Services: This Alternative provides the opportunity for the development of Retail Commercial; Restaurant; Office/ Services feet; Light Industrial and Hotel. The land uses expected in this Alternative would result in impacts to Public Services but at levels slightly less than the Preferred Project. Fire and Police services would still need additional staffing in order to meet the demand of additional new development.

Recreation: Like Alternative 2, this Alternative has no residential component. This Alternative provides the opportunity for the development of increased density and the land uses of Retail Commercial; Restaurant; Office/ Services feet; Light Industrial and

Hotel. The land use expected in Alternative 3 could result in impacts to existing recreation resources but at levels slightly less than the Preferred Project.

Transportation: This alternative would result in significant traffic impacts, greater than for Alternative 2, due to the mix of Light Industrial with Retail Commercial, Restaurant, Office/ Services and Hotel uses. However, traffic generation would be less than for Alternative 4 and for the “Preferred Alternative” which is proposed in the North City Extended Specific Plan, and compliance with the SP would ensure less than significant impacts.

Utilities and Service System: Impacts under this Alternative would be similar as the Preferred Project. However, this alternative would not result in the additional demand for water and wastewater services from residential use. Extensive infrastructure improvements would still be needed to adequately serve the site with water and wastewater services.



**Alternative 3:
"Current County
Light Industrial Zoning"**



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Land Use - Alternative 3

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6.5) Alternative 4: “Light Industrial/ Business Park Mixed Use”

This “Light Industrial/ Business Park Mixed Use Alternative” assumes that the currently zoned “Light Industrial” uses would remain as the majority use of the net developable property of the Specific Plan, but somewhat reduced from the area shown in the “Current County Industrial Zoning Alternative”. The “Retail/ Commercial”, “Restaurant” and “Hotel” uses identified and quantified in that alternative, located within the two areas on both sides of Bob Hope Drive and south of Varner Road, would consistently remain within this alternative. However, a significant increase in “Office/ Services” uses is programmed for this alternative, giving it more of a “Business Park/ Mixed Use” profile in combination with the reduced remainder of “Light Industrial” uses of the plan. Also, a “Multifamily Residential/ Apartment” use is introduced into this alternative to provide for some work force housing associated with the business park emphasis.

As with the proposed project and Alternative 3, in order to develop this alternative through implementation of the Specific Plan and Land use Equivalency Program (LUE), an integrated system of Stormwater Retention Basins and supporting engineered berms and drainage channels would need to be implemented prior to initiating any private development within the area. Preliminary stormwater and drainage analyses have calculated that approximately 200 acres of land will be needed in order to construct a self-contained stormwater management system adequate to retain/ detain off-site flows entering the SPA from the west and north and to mitigate on-site stormwater flows. This self-contained system would also provide adequate flood protection for the Thousand Palms Community, to Rio Del Sol Road at the I-10 interchange, and east of Rio Del Sol Road/ Bob Hope Drive, relative to stormwater flows from the west.

Within this alternative, the projected “yield” for net private development as expressed in gross floor building area (GFA), after the completion of an adequate stormwater management system and concurrent with the development of an integrated circulation system and public parks and recreation facilities, is projected as follows: Retail/ Commercial @ 200,000 square feet; Restaurant @ 120,000 square feet; Office/ Services @ 300,000 square feet; Light Industrial @ 2,450,00 square feet; Hotel @ 400 rooms; and Residential @ 600 dwelling units.

Analysis of Impacts for Alternative

The “Light Industrial/ Business Park Mixed Use Alternative” has comparable to slightly reduced impacts versus the proposed project for, Air Quality, Biological Resources, Cultural Resources, Noise, and Traffic all primarily due to the somewhat smaller amount of construction resulting from the relatively small amount of residential development being proposed. As a result, relatively few residents are projected within this alternative. However, this alternative has somewhat greater impacts than the

“Preferred Alternative” on Aesthetics, Public Services, Transportation and Recreation due to a comparatively reduced extension of vehicular circulation system improvements and open space system improvements for regional pedestrian and bicycle access resulting from the relatively small amount of residential development.

Environmental Impact of Light Industrial/Business Park Mixed Use

Aesthetics: Stormwater retention basins, site improvements, landscaping, exterior lighting and buildings will be consistent with an adopted Specific Plan for the area, and impacts are expected to be similar to the proposed project. From an aesthetic point of view this alternative is superior to Alternative 2 & 3 and will be comparable to the proposed project.

Agricultural: None of the four project alternatives would have impacts on Agricultural Resources.

Air Quality: Impacts to air quality resulting from this alternative are anticipated to be similar to slightly reduced compared to the preferred project due to the level of construction activities and mixture of uses and facilities.

Biological Resources: Alternative 4 has similar impacts compared to Alternative 2, 3 and the Preferred Project because the entire property would be graded and developed. The MSHCP fees would be paid in entirety. However, this alternative includes a residential component. The residential density of this alternative is slightly less than that of the Preferred Project.

As mentioned previously, residential uses tend to have indirect or edge effects on Biological Resources related to lighting, noise, traffic and the introduction of domestic animals. This project would potentially contribute to these impacts to a lower degree than the Preferred Project. But concurrently this Alternative provides the opportunity for the development of increased density and the land uses of Retail Commercial; Restaurant; Office/ Services feet; Light Industrial and Hotel. The land use expected in Alternative 4 can result in indirect impacts to biological resources but at levels slightly less than the Preferred Project.

Cultural Resources: The cultural resources investigation demonstrated that no such resources are present on the surface of the site. As all alternatives would involve grading of the entire site, the same standard mitigation measures would insure that buried resources uncovered during the course of grading operations would be properly dealt with including the potential discovery of human remains

Geotechnical: Alternative 4 has similar impacts compared to Alternative 2, 3 and the Preferred Project because the entire property would have the opportunity to be graded and developed. The residential density of this alternative is slightly less than that of the Preferred Project. As mentioned previously, residential uses tend to have indirect or edge effects on Biological Resources related to lighting, noise, traffic and the introduction of domestic animals. This project would potentially contribute to these impacts to a lower degree than the Preferred Project.

But concurrently this Alternative provides the opportunity for the development of increased density and the land uses of Retail Commercial; Restaurant; Office/ Services feet; Light Industrial and Hotel. The land use expected in Alternative 4 can result in indirect impacts to biological resources but at levels slightly less than the Preferred Project.

Green House Gas: Impacts to greenhouse gases resulting from this alternative are anticipated to be similar to slightly reduced compared to the preferred project due to the level of construction activities and mixture of uses and facilities.

Hazards and Hazardous Materials: Alternative 4 has similar impacts compared to Alternatives 2& 3 and the preferred project. Commercial and light industrial uses may include the usage and or storage of hazardous materials. Residential development is not expected to generate any hazards waste beyond what is commonly found in household uses. This alternative would contain the same impacts as the Preferred Project; standard conditions would mitigate impacts to less than significant.

Hydrology and Water Quality:

Under Alternative 4 construction of flood control improvements would most likely be tied largely to private funding due to the similar mix of land uses. Impacts would be similar to the preferred alternative.

Land Use and Planning: The development of this alternative will create the need for additional and more extensive design components, roadway and landscaping improvements in the SP, as discussed throughout this EIR. As a result, appropriate levels of Aesthetics, Biology, Air Quality, Noise and Traffic impacts are addressed within this EIR. Also, due to the mix of land uses to be developed; TUMF and MSHCP fees would be paid under this alternative.

Mineral Resources: Since known mineral resources or related facilities do not occur on the project area or neighboring land, project impacts resulting from this scenario, like those of the preferred alternative, would be considered less than significant.

Noise: This scenario would result in the development of up to 600 multiple-family dwelling units, which is significantly less than the proposed 3,200 units. The project impacts are anticipated to be similar and mitigated by similar measures as the proposed project.

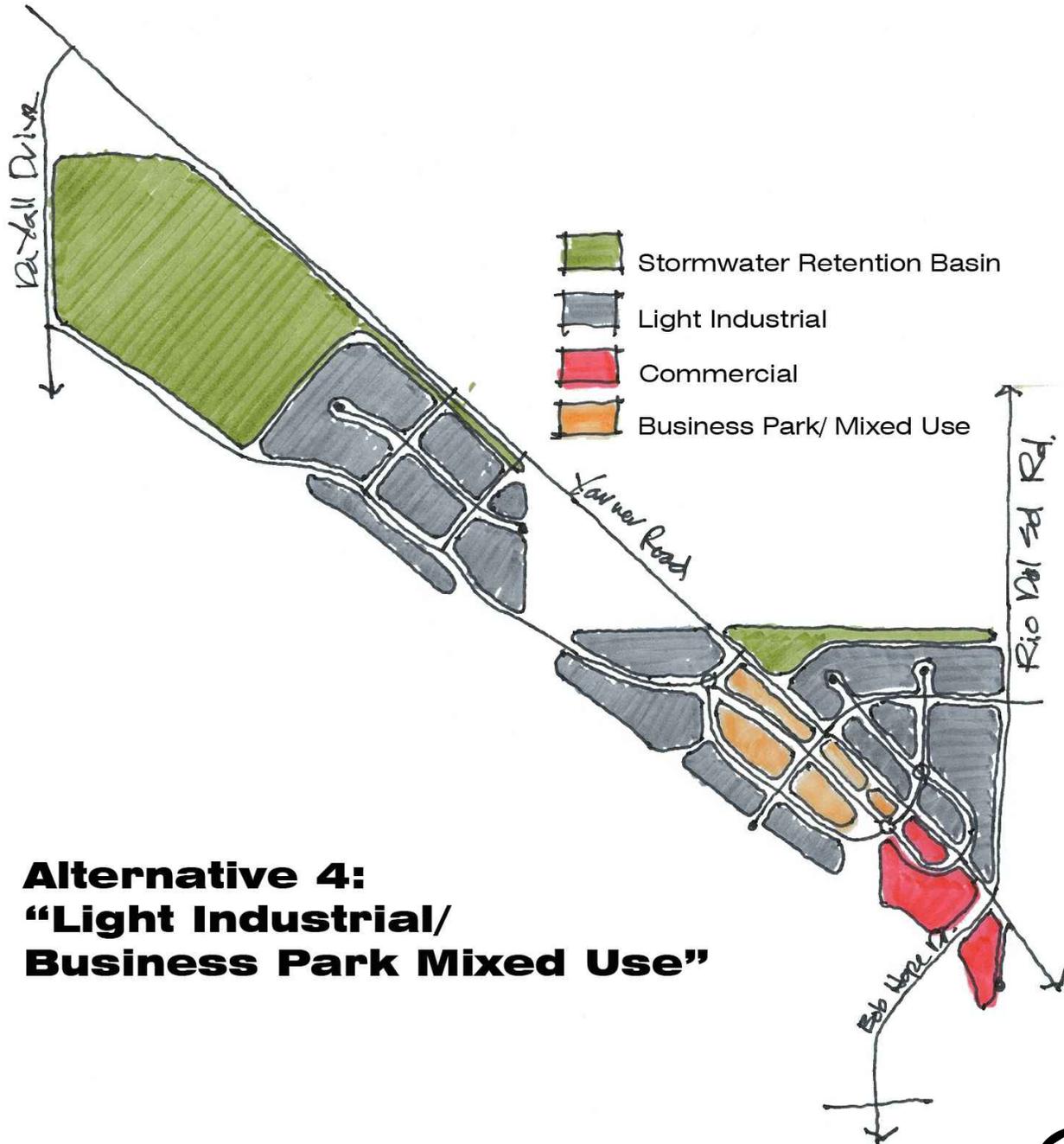
Population and Housing: This scenario would result in the development of fewer dwellings than the proposed 3,200 units. As is the case with the proposed project, this alternative would result in population or housing that is similar to the proposed project.

Public Services: The residential density of this alternative is slightly less than that of the Preferred Project. However, the residential and commercial uses will add to the demand for Public Service. Fire and Police services would still need additional staffing in order to meet the demand of additional new development. Impacts would be considered less than significant.

Recreation: Alternative 4 has similar impacts compared to Alternative 3 and the Preferred Project because the entire property would be graded and developed. However, this alternative includes a residential component. The residential density of this alternative is slightly less than that of the Preferred Project. As mentioned previously, residential uses would increase the demand for recreational facilities; the open space component would offset the impacts and assist the City with meeting the goals of the Cathedral City's General Plan.

Transportation: This alternative would also result in significant traffic impacts, greater than for Alternative 3, due to the mix of Light Industrial with Retail Commercial, Restaurant, Office/ Services, Hotel and Residential uses. However, traffic generation would be less than for the "Preferred Alternative" which is proposed in the North City Extended Specific Plan, and less than significant impacts would be expected if this alternative complied with the Specific plan.

Utilities and Service System: Impacts under this Alternative would be the same as for the proposed NCESP project.



**Alternative 4:
 "Light Industrial/
 Business Park Mixed Use"**



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Land Use - Alternative 4

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7.0 SUMMARY OF PROJECT IMPACTS BY RELEVANT CEQA TOPIC

This section summarizes the information and analyses presented in the main body of this Draft Environmental Impact Report (EIR.) Section 15123 of the California Environmental Quality Act (CEQA) Guidelines requires an EIR to include a brief summary of the Proposed Project, and its impacts in language as clear and simple as reasonably practical. The Guidelines also state that the length of this summary should normally not exceed 15 pages. In accordance with the CEQA Guidelines this summary presents general information on the Proposed Project, the potential environmental effects and measures identified to mitigate these effects.

**Table 7.0-1
 Summary Table of Project Impacts, Mitigation Measures and Residual Impact**

Environmental Topic	Standard Conditions and Mitigation Measures	Level of Significance After Mitigation
3.1 Aesthetics		
	Mitigation Measure 3.1-1: A landscape plan for infiltration Basin # 1 shall be submitted concurrently with the initial development plans implementing the NCESP that demonstrates the restoration of native vegetation at the top of any basins, exclusive of access roads.	Less than significant
	Mitigation Measure 3.1-2: Landscape plans for infiltration Basins # 2 & 3 shall be submitted concurrently with adjoining development to demonstrate the “Desert Oasis” theme & they adequately shield views into the basins.	Less than significant
3.2 Agricultural Resources		
	No mitigation measures are necessary	Not Applicable

3.3 Air Quality		
	<p>Standard Condition 3.3-1: During all grading and earth disturbing activities, the project developer shall comply with the provisions of Chapter 8.54 of the Cathedral City Municipal Code which establishes minimum requirements for construction activities to reduce fugitive dust and PM10 emissions. Prior to the issuance of any grading permits associated with the project, the developer shall prepare and submit to the City of Cathedral City for approval, a plan to control fugitive dust through implementation of reasonably available dust control measures. The plan shall specify the fugitive dust control measures to be employed.</p>	Less than significant
	<p>Standard Condition 3.3-2: Throughout all grading, earth disturbing and construction activities the project developer shall comply with all applicable SCAQMD <i>Rules and Regulations</i> including but not limited to the following:</p> <ul style="list-style-type: none"> • 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 clean up of construction-related dirt on approach routes to the site including: watering measures, chemical stabilizers, wind fencing, covering haul vehicles, bed liners in haul vehicles, wheel washers, and high wind measures; • Rule 403.1 (Coachella Valley 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 clean up of construction-related dirt on approach routes to the site including: watering measures, chemical stabilizers, wind fencing, covering haul vehicles, bed liners in haul vehicles, wheel washers, and high wind measures; • 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. 	Less than significant

	Standard Condition 3.3-3: As a condition of approval, the project developer will comply with City requirements regarding planned bikeways on and/or adjacent to the site. In addition to compliance with applicable rules, regulations and ordinances, the following measures shall be employed to reduce the potential for adverse cumulative air quality impacts during construction.	Less than significant
	Standard Condition 3.3-4: During the grading, earth disturbing and construction activities the project developer shall suspend earth-moving activities during first and second stage ozone episodes or when winds exceed 25 MPH, per the Coachella Valley PM10 State Implementation Plan and SCAQMD Rule 403.1.	Less than significant
	Standard Condition 3.3-5: 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.	Less than significant
	Standard Condition 3.3-6: During grading, earth disturbing and construction activities the project developer should 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.	Less than significant
	Standard Condition 3.3-7: During grading, earth disturbing and construction activities the project developer shall ensure that all trucks maintain at least two feet of freeboard.	Less than significant
	Standard Condition 3.3-8: 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 off before leaving the site.	Less than significant
	Standard Condition 3.3-9: During grading, earth disturbing and	Less than significant

	construction activities, adjacent streets shall be swept if silt is carried over to adjacent public thoroughfares. The project developer shall provide required street sweeping.	
	Standard Condition 3.3-10: 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.	Less than significant
	Standard Condition 3.3-11: During grading, earth disturbing and construction activities, the project developer shall ensure that construction operations affecting off-site roadways shall be scheduled for off-peak traffic hours and shall minimize obstruction of through-traffic lanes.	Less than significant
	Mitigation Measure 3.3-1: The architectural coatings used within the project should give priority to a combination of low-VOC (< 50 grams of VOC per liter), zero-VOC, and super-compliant (< 10 grams of VOC per liter) with an average of 35 grams or less of VOC per liter to reduce the projected emissions below 75 pounds per day.	Less than significant
	Mitigation Measure 3.3-2: Low emission building materials such as pre-primed and sanded wood molding and trim products and pre-primed wallboard shall be given priority for construction materials.	Less than significant
	Mitigation Measure 3.3-3: Construction activities should be prioritized to occur first on the upwind portion of the project site to reduce the potential for blowsand and fugitive dust impacts in the downwind areas.	Potentially significant
	Mitigation Measure 3.3-4: Tier 3 and Tier 4 grading equipment shall be used to avoid exceeding the SCAQMD threshold for short-term construction NOx emissions.	Potentially significant
	Mitigation Measure 3.3-5: The construction specifications shall state that only the construction equipment required for any particular building activity shall be operational on-site at any given time to reduce NOx	Potentially significant

	emissions during construction activities.	
	<p>Mitigation Measure 3.3-6: To minimize potentially significant impacts of blowsand exposure on future sensitive receptors that locate within the project site, the Specific Plan should incorporate design standards and development guidelines detailing appropriate techniques to be implemented to control and reduce wind erosion and blowsand over the long term. Permanent blowsand abatement elements should be implemented on-site to protect and stabilize the soil within the project site. Appropriate techniques to prevent the accumulation of blowsand on-site should be incorporated in the project design to minimize future damage from and exposure to blowsand.</p>	Potentially significant
	<p>Mitigation Measure 3.3-7: The incorporation of a Climate Action Plan in the North City Extended Specific Plan includes provisions for specific design features and development standards to achieve sustainable decreases in greenhouse gas emissions at the individual project level that could reduce this impact to less than significant.</p>	Potentially significant
	<p>Mitigation Measure 3.3-8: The following measures shall be implemented to reduce the impact of the air quality near Interstate 10 on all future sensitive receptors located on-site within 500 feet of the near edge of the freeway to the maximum extent feasible.</p> <ul style="list-style-type: none"> • Fixed non-openable windows shall be installed on the residential and hotel building faces with line-of-sight exposure to Interstate 10. • Active or passive filtration shall be installed in the HVAC systems of residential and hotel buildings with ventilation from the side of the building facing away from Interstate 10. • Intervening buildings or sound barriers shall be used to shield outdoor activity areas (swimming pools, playgrounds, parks, etc.) where sensitive receptors will be found. 	Potentially significant
	<p>Mitigation Measure 3.3-9: Provided that the proposed gasoline dispensing</p>	Potentially significant

	station on-site will have a throughput below 3.6 million gallons per year, the toxic impact on sensitive receptors (including transient lodging) should be mitigated by locating sensitive receptors a minimum of 50 feet from the perimeter of the service station.	
	Mitigation Measure 3.3-10: The significance of many of the short-term and long-term air quality impacts cannot be determined without more detailed information regarding the number, type, and emissions of the construction equipment that will be used for each phase of development. Cathedral City may require additional air quality studies to ensure that the appropriate mitigation is applied for future development on-site.	Potentially significant

Environmental Topic	Mitigation Measures	Level of Significance After Mitigation
3.4 Biological Resources		
	Standard Conditions 3.4-1: The project proponent shall pay the associated CVMSHCP for each phase of development prior to issuance of a Building Permit. 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.	Less than significant
	Mitigation Measure 3.4-1: The project developer shall ensure that the following mitigation measures are implemented to reduce potential impacts to Burrowing Owl during construction activities: <ol style="list-style-type: none"> 1. A preconstruction survey should take place at least 30 days prior to project grading to determine the location of active burrows on and within 550 yards of an approved project site. If no active burrows are found in the survey area, grading shall commence providing a biological monitor is onsite. 2. A biological monitor, with the authority to halt or redirect grading, should be present whenever grading or construction vehicles are 	Less than significant

	<p>present and operating on an approved project site. The function of the monitor is to protect burrowing owls that arrive on or near the project site after the clearance survey and during the construction period.</p> <ol style="list-style-type: none"> 3. The breeding season of the western burrowing owl is from February 1 through August 31 of each year. No construction disturbances of any kind should occur within 500 meters (550 yards) of an active burrow during this time period. Thus on a project site, grading should take place from September 1 until January 30 of each year to avoid restriction or cancellation of grading because of the presence of burrowing owls during the breeding season. 4. Resident owls present on or near the project site outside the breeding season may be relocated to other sites by a permitted biologist. Relocation details can be found in the Staff Report on Burrowing Owl Mitigation prepared by the California Department of fish and Game. 	
	<p>Mitigation Measure 3.4-2: The project developer shall ensure that the following mitigation measures are implemented to reduce potential impacts to Loggerhead Shrike during construction activities:</p> <ol style="list-style-type: none"> 1. If construction activities are expected between February 1 and July 1, breeding surveys should be conducted 30 days prior to construction related site disturbance. 2. If a nest is found, a buffer should be established in which construction activities are prohibited. The width of the buffer should be determined by an experience biologist. 	<p>Less than significant</p>

3.5 Cultural Resources

	<p>Standard Condition 3.5-1: Approved Native American cultural resource monitor(s) as well as archaeological monitors shall be present during all</p>	<p>Less than significant</p>
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	<p>ground disturbing activities. 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.</p>	
	<p>Standard Conditions 3.5-2: In compliance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the Riverside County Coroner must be notified immediately. If the coroner determines that the remains are not recent and may be Native American, in accordance with Public Resource Code 5097.94, the coroner will notify the Native American Heritage Commission (NAHC) within 24 hours of the find. The NAHC will then determine, in consultation with the property owner, the disposition of the human remains. No known burial grounds or cemetery occurs on the project site. Although known resources are to be avoided, excavation is likely to occur to a greater depth and area. Should human remains be discovered during construction of the proposed project, the project contractor would be subject to the Tribe’s “Treatment of Human Remains Policy” (ACBCI Tribal Historic Preservation Organization and Policies, 2004) which is consistent with State law regarding the discovery and disturbance of human remains. In that circumstance the Cultural Monitor has the authority to halt destructive activities in the immediate area.</p>	<p>Less than significant</p>
	<p>Standard Conditions 3.5.3: A qualified paleontologist shall monitor all grading that includes initial cutting. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays, and to remove samples of sediments, which are likely to contain the remains of small fossil invertebrates and vertebrates. If any paleontological resources are identified during these activities, the following activities shall occur:</p>	<p>Less than significant</p>

	<ul style="list-style-type: none"> • All recovered specimens shall be prepared to a point of identification and permanent preservation, including washing sediments to recover small invertebrates and vertebrates. • Specimens shall be identified and curated into an established, accredited, professional museum repository with permanent retrievable storage. • The paleontologist shall have a written repository agreement in hand prior to the initiation of mitigation activities. • At the end of the monitoring period, the paleontological monitor shall submit a letter report to the Director of Planning detailing the duration and results of the monitoring. A report of findings shall be prepared by the paleontologist. The report shall be submitted prior to the issuance of the Certificate of Occupancy. 	
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3.6 Geotechnical		
	<p>Standard Condition 3.6-1: 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 2010 edition of the California Building Code using the seismic coefficients given in the Geotechnical Report.</p>	Less than significant
	<p>Standard Condition 3.6-2: Design Level Geotechnical Engineering Report(s) shall be prepared for grading and construction activities.</p>	Less than significant
	<p>Standard Condition 3.6-3: Site grading shall be in strict compliance with the requirements of the South Coast Air Quality Management District. Dust control shall be implemented throughout all phases of construction. (Further discussion contained in Section 3.3 Air Quality).</p>	Less than significant
	<p>Standard Condition 3.6-4: Additional site specific geotechnical investigations may be necessary based on site specific design proposals. Local variation in soil conditions may warrant adjustments such as</p>	Less than significant

	increasing depth recompaction and over-excavation. A representative of the soils consultant shall observe site clearing and the bottoms of excavations before placing fill.	
	Standard Condition 3.6-5: 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 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.	Less than significant
	Standard Conditions 3.6-6: 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.	Less than significant
	Standard Conditions 3.6-7: Prior to issuance of a Grading Permit, the developer of the roads and infrastructure, and structures shall prepare a Storm Water Pollution Prevention Plan and a PM10 Fugitive Dust Control Plan. These plans shall be implemented throughout all construction activities.	Less than significant
	Standard Conditions 3.6-8: The grading contractor shall work in accordance with the Grading Ordinance of the City of Cathedral City, throughout all grading activities.	Less than significant
	Mitigation Measures 3.6-1: The project contractors shall adhere to the recommendations contained within the site specific Geotechnical Feasibility and Infiltration Report throughout grading and construction activities.	Less than significant
	Mitigation Measures 3.6-2: Future Planning Area developers shall be required to have a project specific Geotechnical analysis.	Less than significant
	Mitigation Measures 3.6-3: Individual developers of the NCESP area shall	Less than significant

	be required to submit plans including on-site provisions for capture of incremental storm water associated with project impervious surfaces prior to project approvals. The incremental storm water flowing off-site shall be equal to predevelopment conditions. Plans shall be reviewed and approved by the City.	
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3.7 Green House Gases		
	Refer to Air Quality Section for Standard Conditions and Mitigation Measures	

3.8 Hazards and Hazardous Materials		
	Standard Condition 3.8-1: All construction activities shall be conducted in compliance with standard regulations related to hazards and adherence to local, State and Federal agency policies including those of the South Coast Air Quality Management District, the State Water Resource Control Board and Colorado River Regional Water Quality Board.	Less than significant
	Standard Condition 3.8-2: Individual project proponents 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.	Less than significant
	Standard Condition 3.8-3: 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.	Less than significant
	Standard Condition 3.8-4: All design and construction activities shall be conducted in compliance with standard regulations related to emergency response contained with the City’s Municipal Code.	Less than significant

3.9 Hydrology and Water Quality		
	Standard Condition 3.9-1: Each project developer shall prepare and	Less than significant

	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.	
	Standard Condition 3.9-2: Each project 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.	Less than significant
	Standard Condition 3.9-3: Each project 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. R7-2008-0001 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.	Less than significant
	Standard Condition 3.9-4: Each PA developer shall insure that future 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.	Less than significant
	Standard Condition 3.9-5: Each PA developer shall ensure future development follows domestic water conservation guidelines included within the Cathedral City General Plan to mitigate impacts to public water supplies.	Less than significant
	Standard Condition 3.9-6: All project design shall be in accordance with the Riverine Drainage Area Corridor Ordinance and shall be reviewed by CVWD and the City of Cathedral City during project approvals.	Less than significant

	<p>Mitigation Measure 3.9-1: An approved CLOMR for the site shall be obtained by the Project Applicant before a Certificate of Occupancy is issued for any portion of the development, unless demonstrated to be safe from the flooding conditions to the satisfaction of the City of Cathedral City and CVWD.</p>	<p>Less than significant</p>
	<p>Mitigation Measure 3.9-2: Development of the 9 acre PA2 site will require construction of flood walls, in conjunction with the regional basins, located along the south and eastern boundary (Figure included in Appendix G). This flood control measure shall be designed in accordance with the rules and regulations of the FEMA CLOMR/LOMR process and shall be approved by the City and CVWD during project approvals.</p>	<p>Less than significant</p>
	<p>Mitigation Measure 3.9-3: Individual developers of Planning Area Projects shall be required to submit plans including on-site provisions for capture of incremental storm water associated with project impervious surfaces prior to project approvals. The incremental storm water flowing off-site shall be equal to predevelopment conditions. Plans shall be reviewed and approved by the City.</p>	<p>Less than significant</p>
	<p>Mitigation Measure 3.9- 4: Design and Construction of the 3 Basins and PA2 flood walls intended to address offsite flooding shall be reviewed and approved by all applicable agencies. Drainage plans and hydraulic calculations for the regional retention final project design shall be prepared by a civil engineer and submitted for review and approval to the following:</p> <ul style="list-style-type: none"> a. Coachella Valley Water District (CVWD); b. Riverside County Flood Control and Water Conservation District (RCFCWCD); c. U.S. Army Corps of Engineers (USACE); 	<p>Less than significant</p>

	d. FEMA; e. State Water Resource Control Board; and, f. City of Cathedral City.	
	Mitigation Measure 3.9-5: CWA Section 404 Consultation with The US Army Corps of Engineers, RWQCB and California Department of Fish and Wildlife will be required relative to potential impacts to Waters of the U.S. prior to approval of the proposed regional flood control measures.	Less than significant

3.10 Land Use and Planning

	No mitigation measures are necessary	Not Applicable
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3.11 Mineral Resources

	No mitigation measures are necessary	Not Applicable
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3.12 Noise

	Standard Condition 3.12-1: Construction is only allowed during the following hours: <u>October 1st through April 30th</u> Monday through Friday: 7:00 a.m. to 5:30 p.m. Saturday: 8:00 a.m. to 5:00 p.m. <u>May 1st through September 30th</u> Monday through Friday: 6:00 a.m. to 7:00 p.m. Saturday: 8:00 a.m. to 5:00 p.m.	Less than significant
	Mitigation Measure 3.12-1: Any commercial parking lots within 50 feet of residences should incorporate a 6 foot wall between the parking lot and	Less than significant

	residential development.	
	<p>Mitigation Measure 3.12-2: An acoustic study (or studies) shall be prepared by a Registered Engineer, once graded pad elevations are known, identifying the mitigation measures and/or site design features that will reduce all residential areas, schools, libraries, churches, hospitals and nursing homes, and destination resort areas to less than 70 CNEL and all commercial areas to less than 77 CNEL. Additionally the report shall show how sensitive uses within these uses will be mitigated to 65 CNEL or less. Specifically, rear yards, patio areas, and outdoor activity areas for residential; outside teaching areas for schools, libraries and churches; and outdoor places of relaxation for hospitals and nursing homes shall be mitigated to 65 CNEL or less. The report(s) shall be submitted to the City and approved by the City prior to the issuance of any precise grading permits or site design approvals.</p>	Less than significant
	<p>Mitigation Measure 3.12-3: An acoustic study (or studies) shall be prepared by a Registered Engineer, once graded pad elevations are known, demonstrating that indoor residential, hotel, private school, church, hospital and nursing home areas shall achieve a noise level of 45 CNEL or less. The report(s) shall be submitted to the City and approved by the City prior to the issuance of any building permits.</p>	Less than significant
	<p>Mitigation Measure 3.12-4: Commercial and office projects that experience traffic noise that regularly exceeds 65 dBA are subject to the specific requirements called out in Section 5.507.4 of CalGreen. All areas proposed for commercial and office uses would be subject to this requirement. Prior to the issuance of building permits, an acoustic study (studies) shall be prepared by a Registered Engineer demonstrating that the commercial or office project will comply with the acoustic requirements of CalGreen.</p>	Less than significant

3.13 Population and Housing		
	No mitigation measures are necessary	Not Applicable

Environmental Topic	Mitigation Measures	Level of Significance After Mitigation
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3.14 Public Services		
	Fire Protection Standard Condition 3.14 -1: Individual project plans shall be reviewed by the Cathedral City Fire Department prior to approval of project.	Less than significant
	Standard Condition 3.14-2: The Project shall adhere to the provision of the Cathedral City Municipal Code for building construction standards.	Less than significant
	Standard Condition 3.14-3: The project will comply with Uniform Fire Code, Uniform Building Code and other state and national code provisions regarding building construction, including fire sprinklers.	Less than significant
	Standard Condition 3.14-4: The project will provide onsite fire hydrants with required fire flow, approved automatic sprinkler system, as well as adequate emergency access to the project site.	Less than significant
	Police Protection Standard Condition 3.14-5: The project shall be reviewed by the Cathedral City Police Department prior to project approval.	Less than significant
	Standard Condition 3.14-6: Project design shall provide adequate access for all emergency vehicles.	Less than significant
	Standard Condition 3.14-7: Project siting and design shall promote the feasible use of defensible space concepts or high security designs to improve public safety. Examples of defensible space concepts include but are not limited to, site and building lighting, visual observation of open spaces, secured areas and screening elements.	Less than significant

	Standard Condition 3.14-8: The project will adhere to the standards for street addressing and lighting in order to enhance and facilitate emergency response time. All structures and places of business shall display visible addresses.	Less than significant
	Standard Condition 3.14-9: 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.	Less than significant

3.15 Recreation

	Standard Condition 3.15-1: The Project Developer will provide on-site recreational or open space facilities and contribute to the public development of additional facilities to offset additional demands generated by future project residents in tandem with implementing development.	Less than significant
	Standard Condition 3.15-2: The Project Developer shall ensure that the elements of the proposed project such as buildings, open spaces, landscape, and activities will be designed to enhance efficiency and compatibility with adjacent uses. Proposed landscape locations and species will be coordinated with architectural and site design.	Less than significant
	Standard Condition 3.15-3: The Project Developer will comply with the Quimby Act and will be required to pay Park Fees to the City upon development of the property.	Less than significant

3.16 Transportation/Traffic

	Standard Condition 3.16-1: The project proponent shall dedicate appropriate right-of-way, as needed, to accommodate the ultimate improvements of all public roadways abutting the site. Standard Condition 3.16-2: The Cathedral City General Plan Circulation Element and NCESP roadways shall be implemented, as required by the City of Cathedral City.	Less than significant
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	Standard Condition 3.16-3: All required off-site public and on-site private streets shall be designed in accordance with City of Cathedral City design standards, as required by the City Engineer	Less than significant
	Standard Condition 3.16-4: The project developer/applicant shall submit street improvement plans for construction of required streets to the Cathedral City Engineer for review and approval.	Less than significant
	Standard Condition 3.16-5: Ingress and egress design shall include adequate vehicle maneuvering and stacking space to avoid conflicts with internal and external traffic and circulation patterns.	Less than significant
	Standard Condition 3.16-6: The controlled primary entryways to the site shall include provisions to facilitate access by emergency vehicles in a manner approved by the chief of police per <i>Cathedral City Municipal Code</i> Section 8.04.190. All power-operated controlled access devices shall have a radio-controlled override system capable of opening the gate or barrier when activated by a special transmitter located in emergency vehicles and be equipped to facilitate opening in the event of a power failure.	Less than significant
	Standard Condition 3.16-7: The project proponent will comply with City requirements regarding the master planned bikeway. Bike lanes shall be provided within and adjacent to the site along the General Plan roadways, as required by the City of Cathedral City.	Less than significant
	Standard Condition 3.16-8: A traffic control plan shall be submitted and approved. Schedules and Routes of construction traffic will be included in the plan.	Less than significant
	Standard Condition 3.16-9: The project proponent shall coordinate with the SunLine Transit Agency regarding the need for public transit facilities on and adjacent to the project site.	Less than significant
	Standard Condition 3.16-10: Adequate off-street parking shall be provided on-site to meet the requirements of the <i>Cathedral City Municipal Code</i> .	Less than significant
	Standard Condition 3.16- 11: The proposed internal circulation layout and site access plans shall be subject to the review and approval of the City	Less than significant

	<p>Engineer during the development review process to ensure compliance with City access and design standards.</p>	
	<p>Standard Condition 3.16-12: The project proponent shall contribute on a fair-share basis to area wide roadway improvements by participating in the TUMF (Transportation Uniform Mitigation Fees) program and may also be required to contribute on a fair-share basis to the cost of circulation improvements required on roadways and/or at intersections that are not in the TUMF program.</p> <p>The following mitigation measures are presented to reduce potential circulation and/or site access impacts.</p> <p>Roadway and Intersection Improvements Needed</p> <p>The General Plan street system in the study area will be adequate to provide the capacity needed to serve the projected traffic volumes following project completion in the year 2035. No changes in the General Plan street classifications of the roadways in the study area are required to accommodate site traffic in the year 2035. However, localized widening will be necessary to accommodate the required lanes at the following locations:</p> <ul style="list-style-type: none"> (1) Eastbound Varner Road @ Bob Hope Drive; (2) Westbound Varner Road @ Valley Center Boulevard (3) Southbound Rio Del Sol Road @ Varner Road; and (4) Southbound Bob Hope Drive south of Varner Road <p>The required changes in approach lane geometrics for each phase of development are outlined below. Figure 3.16-8 shows the improvements required for all phases of the Preferred Project.</p>	<p style="text-align: center;">Less than significant</p>

	<p><u><i>Improvements Needed Upon Completion of Initial Phase (Year 2015)</i></u></p> <ol style="list-style-type: none"> 1) Construct a directional (right-in only) access connection to Planning Area 2 on Bob Hope Drive, between Varner Road and the I-10 Westbound Ramp terminus. 2) Metroplex Drive @ Varner Road <ul style="list-style-type: none"> - add a westbound left-turn lane - add a northbound shared through/left-turn lane - add a northbound right-turn lane - signalize intersection 3) Street "N" @ Varner Road <ul style="list-style-type: none"> - add a northbound left-turn lane; - add a northbound right-turn lane; - add a westbound left-turn lane. 4) Street "N" @ Varner Road <ul style="list-style-type: none"> - add a northbound left-turn lane; - add a northbound right-turn lane; - add a westbound left-turn lane. 5) Street "L" @ Varner Road <ul style="list-style-type: none"> - add a northbound left-turn lane; - add a northbound right-turn lane; - add a westbound left-turn lane. <p><u><i>Improvements Needed Upon Completion of Phase 2 (Year 2018)</i></u></p> <ol style="list-style-type: none"> 1) Varner Road <ul style="list-style-type: none"> - Widen Varner Road to provide four through lanes and a raised median from Bob Hope Drive to Street "H". 2) Bob Hope Drive @ Varner Road <ul style="list-style-type: none"> - add an exclusive eastbound right-turn lane; 	
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	<p>3) Street “H” @ Varner Road</p> <ul style="list-style-type: none"> - add a northbound right-turn lane; - add a southbound right-turn lane; <p>4) Valley Center Drive @ Varner Road</p> <ul style="list-style-type: none"> - add dual westbound left-turn lanes; - add an eastbound left-turn lane; - add a northbound left-turn lane; - add a northbound through lane; - add a northbound right-turn lane; - add a southbound left-turn lane; - add a southbound shared through/right-turn lane; - signalize intersection. <p>5) Street “F” @ Varner Road</p> <ul style="list-style-type: none"> - add a northbound right-turn lane; - add a southbound right-turn lane; <p><u><i>Improvements Needed Upon Completion of Phase 3 (Year 2021)</i></u></p> <p>1) Varner Road</p> <ul style="list-style-type: none"> - Widen Varner Road to provide four through lanes and a raised median along the entire NCESP frontage. <p>2) Rio Del Sol Road</p> <ul style="list-style-type: none"> - Widen Rio Del Sol Road to its ultimate half-width from Street “E” to Varner Road. <p>3) Rio Del Sol Road @ Street “D”</p> <ul style="list-style-type: none"> - Construct Street “D” with a single eastbound shared through/right/left lane and two-way stop control opposite the alignment of Woburn Court. <p>4) Rio Del Sol Road @ Street “E”</p>	
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	<p style="text-align: center;">- Construct Street “E” opposite Watt Court with a single eastbound shared through/right/left lane and two-way stop control.</p> <p style="text-align: center;"><u><i>Improvements Needed Upon Completion of Phase 4 (Year 2024)</i></u></p> <p>1) Rio Del Sol Road - Widen Rio Del Sol Road to its ultimate half-width from the northern project boundary to Street “E”.</p> <p>2) Street “I” @ Varner Road - add a westbound left-turn lane; - add a northbound left-turn lane; - add a northbound right-turn lane.</p> <p style="text-align: center;"><u><i>Improvements Needed Upon Project Buildout (Horizon Year 2028)</i></u></p> <p>1) Bob Hope Drive - Widen Bob Hope Drive to provide three southbound continuous through lanes from Varner Road to, north of the I-10 westbound ramp terminus.</p> <p>2) Rio Del Sol Road/Bob Hope Drive @ Varner Road - Construct a third exclusive southbound through lane on Rio Del Sol Road at Varner Road. - add a second exclusive eastbound right-turn lane;</p> <p>3) Street “I” @ Varner Road - replace two-way stop control with traffic signal control.</p> <p>4) Street “L” @ Varner Road - replace two-way stop control with traffic signal control.</p>	
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	<p>5) Street “M” @ Varner Road - replace two-way stop control with traffic signal control.</p> <p>6) Street “N” @ Varner Road - retain two-way stop control and add a westbound median acceleration lane.</p>	
	<p>Mitigation Measure 3.16-1: Project proponent shall ensure that all proposed full-turn site access intersections that will be signalized shall include at least two approach lanes on the minor-street approach during the construction of all roads.</p>	<p>Less than significant</p>
	<p>Mitigation Measure 3.16-2: Project proponent shall ensure that clear unobstructed sight distances shall be provided at the site access points on Varner Road, Rio Del Sol Road, and Bob Hope Drive as well as all internal intersections to ensure that motorists can enter and exit the site with minimal hazard and disruption of through traffic during all construction activities.</p>	
	<p>Mitigation Measure 3.16-3: Project proponent shall ensure that a raised median shall be constructed on Varner Road opposite Street “F” and Street “H” and provide positive control of prohibited left-turn ingress and egress moves and prevent vehicles from attempting to cross Varner Road at these locations.</p>	<p>Less than significant</p>
	<p>Mitigation Measure 3.16-4: on-street curb parking should be prohibited along Valley Center Boulevard, Street “F”, Street “H”, Street “I”, Street “L”, Street “M”, Street “N” (approximately 300 feet south of Varner Road) to maximize the capacity of the minor-street approaches.</p> <p>Site Access and Internal Circulation The proposed site access and internal circulation concept will accommodate site traffic at acceptable levels of service. With the site access improvements proposed in conjunction with the project, all of the</p>	<p>Less than significant</p>

	site access intersections will operate at acceptable levels of service, following buildout of the Initial Phase of the Preferred Project in the year 2015.	
	<p>Mitigation Measure 3.16-5: Signalization is proposed and will be warranted at the following full-turn site access intersections: (1) Street “A”/Metroplex Drive @ Varner Road; (2) Valley Center Boulevard @ Varner Road; (3) Street “I” @ Varner Road; (4) Street “L” @ Varner Road; and (5) Street “M” @ Varner Road. All five of these required traffic signals should include provisions to permit signal interconnection.</p> <p>Because the traffic demand is from the south, the proposed project will not benefit from traffic signals on Rio Del Sol Road. To avoid creating the need for a traffic signal to serve the existing development on Northshore Street, east of the project site,</p>	Less than significant
	<p>Mitigation Measure 3.16-6: The intersections of Street “F” at Varner Road and Street “H” at Varner Road will be constructed as channelized right-in/right-out access connections. Left-turn ingress and left-turn egress maneuvers will not be permitted and no vehicles will be permitted to cross Varner Road at these intersections. A raised median is recommended on Varner Road adjacent to Planning Area 1 to provide positive control of left-turns across Varner Road.</p>	Less than significant

3.17 Utilities and Service Systems

	<p>Standard Condition 3.17-1 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.</p>	Less than significant
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8.0 LIST OF PREPARERS, ORGANIZATIONS, AND PERSONS CONSULTED

- **Project Proponent**
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- **Engineering Consultant**
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- **Biological Consultant**
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- **Transportation/Air Quality Consultant**
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- **Public Outreach**
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34200 Bob Hope Drive
Rancho Mirage, CA 92270

- **City of Cathedral City**
Leisa Lukes, City Planner
Andy Hall, City Manager
David Leonard, Contract Planner

- **Utilities/Service Systems**
Coachella Valley Water District
Southern California Edison
The Gas Company
Verizon
Time Warner Cable
Burrtec Waste & Recycling

- **Public Agencies**
Riverside County (website)
Riverside County Flood Control
Palm Springs Unified School District
Cathedral City Fire Department

DRAFT ENVIRONMENTAL IMPACT REPORT

North City Extended Specific Plan 12-001, Cathedral City CA

8.0 List of Preparers, Organizations, and Persons Consulted

Cathedral City Police Department
California Office of Planning and Research
South Coast Air Quality Management District
Regional Water Control Board