



Draft Environmental Impact Report for the Home Depot Retail Center

State Clearinghouse #2005051047

Volume I

November 16, 2005

Prepared for:



Town of Yucca Valley
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**Volume II
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*(See Enclosed CD)

SECTION 1: INTRODUCTION

1.1 - Introduction

1.1.1 - Authority

Approval of the proposed project requires discretionary action by the Town of Yucca Valley (Town). According to the California Environmental Quality Act (CEQA) Guidelines, a discretionary action or project must be reviewed by the Lead Agency to determine its potential effects on the environment.

1.1.2 - Determination of the Lead Agency

As the agency with primary land use authority, the Town of Yucca Valley is the Lead Agency under CEQA for this project; as such, the Town is responsible for ensuring that the environmental impact report (EIR) has been prepared in conformance with the California Public Resources Code, § 2100 et seq.; the State CEQA Guidelines (California Code of Regulations, Title 14, § 15000 et seq.); and the rules, regulation and procedures for implementing CEQA as adopted by the Town of Yucca Valley. The EIR and associated technical studies were reviewed by various Town departments and the Town's EIR consultant to ensure that the EIR reflects the independent judgment of the Lead Agency.

1.1.3 - Purpose of the EIR

Town of Yucca Valley

The draft EIR has been prepared in accordance with the CEQA to evaluate the potential environmental impacts associated with the development of the Home Depot Retail Center (proposed project), including the associated discretionary actions as shown below. See Section 2.5.3 on Project Entitlements for additional description of the entitlements sought from the lead agency.

1. A Specific Plan to establish development standards and design guidelines for the Plan Area.
2. A Conditional Use Permit to allow certain uses that are subject to condition
3. A Parcel Map to subdivide the property into four parcels associated with the location of proposed building pads.

This document evaluates a range of potentially significant adverse environmental impacts that could be associated with the construction and operation of the project, and identifies project changes (mitigation measures) and alternatives that would reduce or eliminate these impacts.

The EIR will be used by the Town of Yucca Valley to assess the potential environmental impacts associated with the construction and operation of the proposed project. This EIR does not set forth policy for the Town of Yucca Valley about the proposed project's desirability; rather, this EIR is an informational document to be used by decision-makers, public agencies, and the public. During the

project review process, the Town must consider all feasible mitigation measures and alternatives developed in the EIR to substantially lessen anticipated environmental impacts of the project.

The project is also subject to additional review outside of CEQA in accordance with Town policies and procedures at various stages of project design. Design review is expected to involve planning, building & safety, engineering and public works. Other agencies that provide services to the Town are also anticipated to participate in design review on the subject of fire protection, and water delivery/fire flow. Design review may include review of various plan and technical documents expected to lead to the issuance of grading, building and occupancy permits. Inspections may also be involved in permit issuance.

Responsible Agencies

Other agencies with limited, special purpose discretionary authority over some aspect of the project are defined in CEQA as responsible agencies (Public Resources Code Section 15381). Such agencies may also use this EIR in their consideration of the project.

California Department of Transportation (Caltrans)

Roadway improvements to SR-62 are required as part of the proposed project. Caltrans has authority over roadway improvements within the right of way for SR-62, and the project applicant will need to obtain an encroachment permit from Caltrans and work with the agency to determine the specific design of improvements within the Caltrans right of way.

Other Agencies

The proposed project may include components that are within the purview of other agencies that may take an interest in the project.

Morongo Valley Transit Authority

The Transit Authority provides bus service to the project and vicinity, and includes existing bus routes along SR-62. The project applicant is working with the Transit Authority to determine whether bus stop facilities can be sited along the project frontage, and can be incorporated with development of proposed improvements. Also see Section 3.11 on Traffic and Circulation.

State and Federal Wildlife Agencies

The proposed project has the potential to support sensitive species under the purview of the U.S. Fish and Wildlife Service and California Department of Fish and Game. Based on the analysis in this EIR (see Section 3.3), the proposed project would not have a significant impact on biological resources, nor is the project anticipated to need a permit or authorization from either agency. Nonetheless, the agencies could take an interest in the project.

1.1.4 - Summary of the Proposed Project

The proposed project involves the development of a Home Depot home improvement store and garden center as well as smaller retail stores and food services on approximately 18.20 acres. The project includes off-site roadway and infrastructure improvements in support of the proposed retail uses. The project site (18.20 acres) will be divided into four parcels. The Home Depot store and garden center will be approximately 137,283 square feet (SF) on 13.09 acres. The rest of the project site will be divided as follows: three retail buildings totaling 34,610 SF will utilize 4.21 acres of the project site, and a 3,000 SF restaurant will utilize 0.90 acre. Section 2, Project Description, more fully describes the proposed project including the project location, objectives, required discretionary approvals, infrastructure improvements, project design features, and the construction program.

1.1.5 - Scope of the EIR

On May 5, 2005, the Town of Yucca Valley circulated a Notice of Preparation (NOP) of a Draft EIR (State Clearinghouse No. 2005051047) for the proposed project (Appendix A). The NOP served to elicit comments from governmental agencies and interested parties regarding the scope and content of environmental issues germane to the EIR. Copies of responses to the NOP are provided in Appendix A.

On June 1, 2005, the Town held a scoping meeting to elicit comments from governmental agencies and interested parties regarding the scope and content of environmental issues germane to the EIR.

Public and agency comments were raised regarding the below identified following topics:

- Nighttime sky and lighting
- Biological resources, including adoption of native plants on the project site
- Bus turnouts
- Paving of Palisade Drive
- Water resources, erosion of unpaved improvements

The comments are not addressed directly, but have been considered in the determining the scope of the review addressed in this EIR.

1.1.6 - Organization of the EIR

This EIR is organized into sections, as follows:

Section 1.0 provides an Introduction and Executive Summary for the EIR.

Section 2.0 provides a detailed Project Description and identifies project objectives.

Section 3.0 is comprised of an Environmental Analysis for topical issues, such as air quality, noise, etc. Each of these topics describes the environmental setting for the subject issue, identifies

significance thresholds, describes potential impacts, identifies mitigation to reduce impacts and ultimately determines whether impacts would be significant.

Section 4.0 provides the evaluation of the potential Cumulative Impacts of the proposed project.

Section 5.0 describes Growth Inducing, Unavoidable Adverse, and Irreversible Impacts resulting from the proposed project.

Section 6.0 describes and evaluates Alternatives to the proposed project.

Section 7.0 lists the Report Preparation Resources used in preparation of this EIR; it includes persons consulted, EIR contributors, and a bibliography.

Appendices include supporting technical data for this EIR.

1.1.7 - Project Sponsors and Contact Persons

The Town of Yucca Valley is the lead agency under CEQA. Home Depot U.S.A. is the project applicant or sponsor. Michael Brandman Associates (MBA) is the environmental consultant to the Town for the project. Key contact persons are as follows:

Local Lead Agency

Town of Yucca Valley
Shane Stueckle, Deputy Town Manager
58928 Business Center Drive
Yucca Valley, CA 92284
760.369.1265

Project Applicant

Home Depot U.S.A.
George Ray, Real Estate Manager
3800 West Chapman Avenue, 5th Floor
Orange, CA 92868
714.940.3604

Environmental Consultant

Michael Brandman Associates
Christine Jacobs-Donoghue, Project Manager
621 E. Carnegie Drive, Suite 100
San Bernardino, CA 92408
909.884.2255

1.1.8 - Review of the Draft EIR

This draft EIR has been distributed to federal, state and local responsible and trustee governmental agencies, groups and persons who responded to the NOP, and additional persons and agencies who

have requested the document. The document will be available for review and comment for a 45-day period. Throughout this review period, the EIR and all technical appendices are available for review at the following locations:

Town of Yucca Valley
Community Development Department
58928 Business Center Drive
Yucca Valley, CA 92284

San Bernardino County Library,
Yucca Valley Branch
57098 29 Palms Hwy
Yucca Valley, CA 92284

Agencies, organizations, and individuals are invited to submit written comments concerning the adequacy of the environmental analysis presented in the Draft EIR. Written comments should be addressed to Shane Stueckle, Deputy Town Manager, with the Town of Yucca Valley, at the address shown above.

Upon completion of the 45-day public review period responses to all substantive comments concerning the adequacy of the Draft EIR will be prepared and incorporated into a Final EIR. No sooner than 10 days following submission of the responses to comments to public agencies, the Town Council will hold a public hearing to consider certification of the Final EIR and the various decisions concerning project approval.

1.2 - Executive Summary Matrix

Table 1-1 below summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed project. The table is intended to provide an overview; narrative discussion for the issue areas are included in the corresponding section of this EIR. Table 1-1 is included in the EIR as required by CEQA Guidelines Section 15123(b)(1).

Table 1-1: Summary of Project Impacts and Mitigation Measures

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3.1 – Aesthetics		
<p>The project would produce short-term visual impacts during construction.</p> <p>Project development will convert vacant land and open space to a retail center along a scenic highway.</p> <p>The project would introduce new sources of light and glare to an undeveloped area.</p>	<p>A-1. Prior to installation, the project owner/applicant shall consult with the Town on the appropriate lighting fixtures to be used. Light fixtures shall be selected to provide downward lighting with minimal horizontal travel at minimum levels to provide sufficient safety at night. In particular, lighting information shall be provided to the Town including a graphic of the specific fixture, shielding information, and proposed light levels. For parking lot lighting, the applicants shall submit an illumination map to identify lighting levels on and adjacent to the project site. Light from the project should no illuminate areas outside of the project site.</p>	<p>Less than significant.</p>
Section 3.2 - Air Quality		
<p>Construction of the proposed project will result in emissions that exceed Mohave Desert Air Quality Management District (MDAQMD) thresholds for ROG, NO_x, and PM₁₀.</p> <p>Long-term operational of the project will result in emissions from vehicle trips, as well as emissions from stationary sources.</p>	<p>The following measures shall be implemented to reduce impacts of construction on air quality:</p> <p>AQ-1. During construction of the proposed improvements, the applicant will provide site meals to construction workers by arranging a lunch wagon to visit the construction site during work breaks, particularly during the lunch hour.</p> <p>AQ-2. During construction of the proposed improvements, the applicant will provide on-site electrical hook ups for electric hand tools such as saws, drills, and compressors, to eliminate the need for diesel powered electric generators.</p>	<p>Significant (short-term construction).</p> <p>Less than significant, without mitigation (long-term operation).</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>AQ-3. During construction of the proposed improvements, only low volatility paints and coatings as defined in MDAQMD Rule 1113 shall be used. All paints shall be applied using either high volume low pressure (HVLP) spray equipment or by hand application.</p> <p>AQ-4. Prior to construction of the proposed improvements, the project proponent will provide a traffic control plan that will describe in detail safe detours around the project construction site and provide temporary traffic control (i.e., flag person) during concrete transport and other construction related truck hauling activities.</p> <p>AQ-5. During construction of the proposed improvements, construction equipment will be properly maintained with all maintenance repairs completed at an offsite location and include proper tuning and timing of engines.</p> <p>AQ-6. During construction of the proposed improvements, all contractors will be advised not to idle construction equipment for more than 10 minutes.</p> <p>AQ-7. Prior to construction of the proposed improvements, the applicant will provide the Town and the MDAQMD with a project specific dust control plan for their review and approval. The dust control plan will be consistent with MDAQMD Rule 403 and will include Best Available Control Measures (BACM) that include application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved access roadways, cessation of construction activity when instantaneous wind speeds exceed 25 mph average wind speeds exceed 15 mph (15 minute average) and establishing a permanent, stabilizing ground cover on finished areas. Implementation of the project specific dust control plan and BACMs will take place during construction of the proposed improvements.</p> <p>AQ-8. The project proponent shall develop a ride-share incentive program for construction workers. The program shall be submitted to the Town for review and approval.</p>	

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3-3 - Biological Resources		
<p>The proposed project will result in the relocation of up to 235 Joshua trees, which are protected by Town Ordinance No. 140.</p> <p>The proposed project site does not include desert tortoise, however, a known population is within close proximity. The proposed project has a potential to impact this sensitive wildlife species.</p> <p>Nesting birds are protected by the Migratory Bird Treaty Act (MBTA) and the California Department of Fish and Game (CDFG). The proposed property contains potential nesting habitat throughout. The proposed project has a potential to impact nesting birds.</p>	<p>B-1. Prior to issuance of a grading permit, a native plant removal permit must be obtained from the Community Development Director. Prior to the issuance of a native plant removal permit, a plot plan indicating exactly which trees are authorized to be removed or relocated and a Joshua tree salvage plan shall be approved by the Community Development Department. Upon approval, all guidelines and recommendations shall be incorporated into the proposed project.</p> <p>B-2. To the extent feasible, salvaged trees shall be incorporated into the project's landscape plan. Any remaining trees will be made available for adoption for 30 days prior to grading activity according to the Town's adoption program.</p> <p>B-3. All grading and clearing limits must be staked and confined to the smallest practical area.</p> <p>B-4. In compliance with the USFWS 1992 Field Survey Protocol for desert tortoise, a pre-construction clearance survey is required in addition to the focused protocol survey. A pre-construction clearance survey shall be conducted within 30 days prior to any ground disturbing activities. If the clearance survey is positive, incidental take permits will be required from the USFWS and the CDFG prior to any ground disturbing activities. The permits would stipulate required actions such as relocation of the tortoises, installation of a tortoise proof fence, etc.</p> <p>B-5. Pursuant to the USFWS 1992 Field Survey Protocol, focused presence/absence surveys, which must be conducted during the activity period of the tortoise between March 25 and May 31, are valid for one year. Therefore, if construction is not initiated prior to March 25, 2006, another focused protocol survey will be required between March 25 and May 31 to determine presence/absence of desert tortoise within the project site impact area. If the focused protocol survey is positive, incidental take permits will be required from the USFWS and the CDFG.</p> <p>B-6. In order to minimize impacts due to increased numbers of common ravens on desert tortoise, all trash containers shall be securely covered. In</p>	<p>Less than significant.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>addition, to reduce littering, signage should be posted throughout the project site stating fines for trash dumping in open areas.</p> <p>B-7. Prior to the initiation of grading activities, all construction personnel shall participate in an education program. The program will be taught by a qualified biologist and will inform personnel of the status of the tortoise under the Endangered Species Act, that desert tortoise are not to be handled or otherwise harassed, that if a desert tortoise is encountered all construction must cease until proper action is taken, and provide the contact information of a biologist qualified to handle desert tortoise in the unlikely event that a desert tortoise is encountered.</p> <p>B-8. If a desert tortoise is encountered during ground disturbing activities, the qualified biologist shall be contacted. The qualified biologist will take appropriate actions to avoid take of the tortoise. All actions will be coordinated with the USFWS and CDFG.</p> <p>B-9. The removal of vegetation or other potential nesting habitat shall be conducted outside of the avian nesting season (February through August). If construction occurs during the avian nesting season, a pre-construction nesting bird survey shall be conducted seven days prior to any ground disturbing activities. If birds are found to be nesting inside, or within 250 feet (500 feet for raptors) of the impact area, construction will need to be postponed until it is determined by a qualified biologist that the nest is no longer active.</p>	
Section 3-4 - Cultural Resources		
<p>There is a moderate potential for cultural resources to be located within the project site.</p> <p>Paleontological resources are likely to be found within the project boundaries.</p>	<p>CR-1. An archaeological mitigation-monitoring plan shall be developed before grading begins. Archaeological monitoring of development-related excavation within the project footprint is required during construction-related earthmoving in the project footprint. Based upon the results of the cultural report, the upper 10 feet of topsoil should be monitored. Monitoring can be discontinued on the advice of the Project Archaeologist if, after 100 percent of virgin soils to 5 feet below original grade has been monitored, no cultural resources have been identified. Soils that have been turned previously or imported fill need not be monitored for cultural deposits.</p>	<p>Less than significant.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>CR-2. A paleontological mitigation-monitoring plan shall be developed before grading begins. Specific recommendations developed by Eric Scott (Appendix C of the Cultural Resources Survey) should be followed.</p> <p>Once excavations associated with this development begin, monitoring of excavations in areas identified as likely to contain paleontological resources by a qualified paleontological monitor shall take place. Based upon the results the cultural resources report, areas of concern include all previously undisturbed sediments of Pleistocene older alluvium present within the boundaries of the project footprint.</p> <p>Paleontological monitors should be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if the potentially fossiliferous units described in the Cultural Resources Survey are not present, or if present, are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.</p>	
Section 3-5 - Earth Resources		
<p>The project site has the potential to be traversed by the Pinto Mountain Fault.</p> <p>The project site is subject to substantial ground shaking which requires special design and operational considerations to safeguard the public.</p>	<p>ER-1. Southwest Geotech, Inc.'s <i>Report of Geotechnical Engineering Study</i> (SWG 2005, Appendix E of the Draft EIR) includes recommendations for the design, grading, and construction of project facilities, which, if implemented, make the project feasible from a geologic engineering standpoint. Issues addressed include site preparation and grading, cut and fill slopes, erosion control, foundation design, sign pylon foundation, concrete slab and pavement sections, cement type and concrete strength, asphalt pavement sections, and subsequent plan reviews. All recommendations outlined in their investigation shall be implemented, to the extent they are not modified by more recent and refined investigations, in which case the measures shall be implemented as modified.</p>	<p>Less than significant.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>ER-2. Septic system leach fields or pits shall be located away from structures to reduce liquefaction potential.</p> <p>ER-3. Design detention basin with consideration of seismic potential in order to withstand a potential seiche.</p> <p>ER-4. Prior to the issuance of occupancy permits, the owner/operator for the home improvement center shall submit an Internal Seismic Safety Plan (ISSP) for review by the Building and Safety Department which addresses internal design and stocking practices to be implemented to minimize injuries to employees and the public in the event of an earthquake. The ISSP shall address the bracing of shelving, define the appropriate stack heights and weights for materials, the strapping/containment of stocked materials, and other measures that would further achieve public safety.</p> <p>ER-5. In support of the Town’s Seismic Safety Element, the home improvement center, at the request of Town staff, shall participate in the dissemination of prepared information on earthquake preparedness. Such materials could be disseminated through a point of purchase display with everyday relevant sales materials, in a special display, or during a special event. This measure emphasizes access to the store as a public outreach tool, and does not obligate the home improvement center to expend staff or revenues in this endeavor.</p>	
Section 3-6 - Hazards and Hazardous Materials		
No significant impacts related to hazards and hazardous materials have been identified.	No mitigation is required.	Less than significant, without mitigation.
Section 3-7 - Land Use and Planning		
No significant impacts related to land use and planning have been identified.	No mitigation is required.	Less than significant, without mitigation.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3-8 - Noise		
<p>Construction activities, will create short-term noise increases near the project site and may impact nearby noise-sensitive receptors within the existing rural residential uses.</p> <p>Project operation will result in increased noise from area roadways associated with increased vehicle trips. Noise levels will also increase due to on-site activities associated with truck deliveries, vehicle and pedestrian traffic, operation of fans/air conditioning equipment, and other activities.</p>	<p>N-1. Construction activities will be limited to the hours from 5:00 am to 10:00 pm consistent with the Town Municipal Code addressing nuisance noise (Town Municipal Code §6.04.030).</p> <p>N-2. Prior to the issuance of grading or building permits, the developer shall demonstrate that all construction equipment, fixed or mobile, will use properly operating mufflers, and no combustion equipment, such as pumps or generators. Stationary equipment shall be placed in such a manner as to emit noise away from sensitive receptors. Additionally, vehicle and equipment staging areas shall be located as far as practical from sensitive noise receptors.</p>	<p>Less than significant.</p>
Section 3-9 - Public Services		
<p>The project will contribute to an incremental increase in the demand for fire and police services. The project will contribute to the existing deficiencies in service levels for the County Fire Department</p>	<p>PS-1. The project operator/owner shall provide a fair share contribution to a City-wide public services assessment to address its contribution to police and fire services. The cost shall be based on estimated department expenditures on an area-wide basis at the time of application for the occupancy permit, to the satisfaction of the Fire Chief</p> <p>PS-2. The project site design shall include the construction of a redundant (looped) water service to provide 4,850 to 5,250 gallons per minute of fire flow. The project applicant shall make all system improvements required to ensure the needed fire flow can be achieved. The final project design shall include any other measures identified during design review to provide adequate fire protection for the uses proposed.</p>	<p>Less than significant.</p>
Section 3-10 - Socioeconomics		
<p>No significant impacts related to socioeconomics been identified.</p>	<p>No mitigation is required.</p>	<p>Less than significant, without mitigation.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3-11 - Traffic and Circulation		
<p>The proposed project will contribute additional traffic to 5 intersections that are anticipated to be at unacceptable LOS in the Opening Year 2007; and contribute to cumulative traffic conditions.</p>	<p>TR-1. The project proponent shall make project fair share contribution (\$164,010) toward the roadway and intersection improvements identified in Table 9 of the Traffic Impact Analysis (AGA 2005) prepared for the project. Fair share fees shall be paid to the Town of Yucca Valley prior to the issuance of building permits for the project.</p>	<p>Less than significant.</p>
Section 3-12 - Utilities		
<p>The project site is currently undeveloped and the project will require the extension and connection of utility transmission/delivery infrastructure to support proposed uses on the project site. The project will also create an incremental increase in the demand for utility services. The project will initial involve the development of a septic system and will need to convert to sewer system when available. The project will result in an incremental increase in solid waste produced.</p>	<p>Water Supply U-1. The applicant shall coordinate with the Hi-Desert Water District to arrange for water service and pay any applicable fees required for connection and service to the District’s water supply system.</p> <p>Waste Water U-2. The project applicant/operator shall coordinate with the Hi-Desert Water District in order to connect to the sanitary sewer system. The project applicant shall install dry sewers and connect the sewers once service becomes available. The applicant/ operator shall pay the relevant fees required for this connection and treatment.</p> <p>Solid Waste U-3. The applicant shall implement cardboard recycling. The annual volume of material recycled shall be reported to the Town so that they may include it in their source reduction reporting.</p>	<p>Less than significant.</p>
Section 3-13 - Water Resources		
<p>Construction activities involved with the proposed project have a potential to impact stormwater. Operation of the proposed project will introduce urban pollutants to storm water runoff.</p>	<p>WR-1. Each owner/operator shall be required to obtain coverage under the statewide NPDES permit for construction activities and develop and implement a SWPPP to protect water quality during construction activities. The SWPPP shall at a minimum address the following items:</p> <p>Erosion Control. Measures shall be employed to prevent the movement of soil by wind or water during construction and may include watering, and physical barriers to the movement of soil particles.</p>	<p>Less than significant.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>Tracking of Soil. Measures shall be employed to effectively minimize the tracking of soil by vehicles and may include gravel driveways, wheel washes and street sweeping.</p> <p>Wastes and Cleanup. The SWPPP shall address washout, cleanup and disposal related to debris, trash, concrete, asphalt, paint, coatings, solvents and other materials applicable to preparation and construction at the project site.</p> <p>Other Reasonable BMPs. The SWPPP shall implement other BMPS as needed to maintain pollutants away from stormwater. The SWPPP shall also identify additional applicable measure during the storm season and when storms are anticipated.</p> <p>WR-2. In order to minimize the potential for pollutants to enter receiving waters in stormwater runoff upon operation of the Home Depot Retail Center, BMPs shall be implemented. The Community Development director shall have the authority to authorize the substitution of a particular measure that would achieve the same result. Such substitution shall be documented by letter or memo for the project file. The emphasis of these requirements is to separate storm water from potential pollutants. The owner/operator for each given parcel shall be responsible for implementing these requirements.</p> <ul style="list-style-type: none"> • Parking Lot and Roadway Cleaning. Parking lots and internal roadways shall be cleaned a minimum of once a week so that they are maintained free of trash and debris. Cleaning should include vacuuming or sweeping of all parking lots, and internal roadways. Most soaps are considered a pollutant and should not be used for parking lot cleaning. • Parking Lot Runoff. Parking lot drainage points shall be equipped with oil/water separators which shall be maintained according to the manufacturer’s requirements for maintenance. • Sidewalks and Refuse Storage Areas. All project sidewalks and refuse storage areas shall be maintained clean on a minimum daily basis. Refuse containers shall be sealed so that pollutants do not seep out of them. 	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<ul style="list-style-type: none"> • Material Storage Area. Any materials stored outdoors shall be covered so that material cannot come into contact with materials. • Detention Basin. The project detention basin shall be maintained with vegetation that will facilitate the absorption of pollutants. • Other Reasonable BMPs. The owner/operator shall implement other good housekeeping and storage measures as needed to maintain pollutants away from stormwater. • Education/Outreach. This measure is applicable to the home improvement center in particular. As requested by a relevant agency, or community group, participate in any storm water pollution education program by allowing the distribution of education materials or outreach effort in the facility focusing on materials applicable to home improvement (paint, pesticides, fertilizer, construction materials, etc.). This measure emphasizes access as opposed to commitment of materials or resources. <p>WR-3. The design and maintenance of the project detention basin shall comply with any applicable guidelines developed as part of Program 2.B identified in the Town’s Water Resources Element.</p>	

SECTION 2: PROJECT DESCRIPTION

2.1 - Project Applicant and Land Owner

Project Applicant: Home Depot U.S.A. 3800 West Chapman Avenue Orange, CA 92868	Land Owners: KWI II, LP 16308 E. Murphy Road La Mirada, CA 90638 Jason Jeon	 Hoosang Karimi 1254 Holmby Avenue Los Angeles, CA 90024
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2.2 - Project Location

The proposed project is located at 58705 Twentynine Palms Highway within the Town of Yucca Valley and in the County of San Bernardino. The project site is located along the north side of SR-62 (Twentynine Palms Highway), and west of Avalon Avenue (see Exhibits 2-1 and 2-2).

2.3 - Environmental Setting

This section provides a brief overview of the environmental setting of the project site. More specific existing site conditions are described for the issues further evaluated in this EIR, under the Existing Conditions section for each respective issue (see Sections 3.1 through 3.13).

2.3.1 - Existing Land Use

The proposed project site is gently sloping to the northeast. Currently the project site is undeveloped, with native vegetation, including Joshua Trees.

The area adjacent to the project site on the east, south, and west is vacant land, but is proposed for a retail commercial center (the Yucca Valley Retail Center or YVRC) between Avalon Avenue and the project site. To the north is SR-62, and beyond there are residences at a density of up to five dwelling units per acre (see Exhibit 2-3). SR-62 has been identified as a scenic highway in the Town General Plan.

2.3.2 - Planning Designations

The Town zoning designations are the same as the general plan land use designations. The proposed project site is designated as C-G, General Commercial, and is within a Specific Plan overlay in the Town General Plan (TYV 2004), as is shown in Exhibit 2-4. According to the General Plan, land uses with this designation include a wide variety of smaller commercial centers, specialty retail shops, a broad range of clothing and apparel, jewelry stores and a variety of personal service businesses. Development may also range from free-standing retail buildings and restaurants, to planned commercial centers.

The area immediately adjacent to the project site boundaries on the west, south, and east is also designated for general commercial (C-G), and is within the specific plan overlay (SP). North of the project site is designated for residential use (R-S-5, Residential, 0-5 dwelling units per acre).

The following zoning is also identified for the project vicinity:

- R-S-5, Residential;
- C-RR, Resort Recreation Commercial;
- P/QP-S, Public/Quasi Public School;
- I, Industrial;
- R-M-8, Residential Multi-family; and
- C-G, General Commercial (see Exhibit 2-4).

2.3.3 - Site History

ENVIRON International, Inc completed a phase 1 environmental site assessment in February 2005, and included a historical review of the project site (ENV 2005). According to this historical review, the proposed project site has been undeveloped up to the present time.

2.3.4 - Other Site Conditions and Environmental Sensitivities

There is evidence of a filled in trench running north-south in the eastern portion of the project site. This north-south linear disturbed area is from a geologic fault investigation conducted in 2005 that included trenching. Ground water in the vicinity has been measured at depths of approximately 378 to 384 feet below the surface.

The project site contains Joshua Trees, a sensitive plant subject to protection under Town Ordinance No. 140. The project will comply with the ordinance, incorporate Joshua Trees into the site landscaping, and make salvageable trees available for adoption. See Section 3.3, Biological Resources, for more information.

The project site contains habitat which potentially supports the Desert tortoise, a sensitive species. A focused tortoise survey was conducted and revealed that the site is not occupied by the Desert tortoise. See Section 3.3, Biological Resources, for more information.

The proposed project would be developed along SR-62, which is a designated scenic highway (TYV 1995). The project site is elevated more than 3 feet above the level of the road, and the Home Depot structure is toward the back of the project site, approximately 750 feet from the highway. The project design would place the other commercial and restaurant buildings on the northern portion of the site and would also feature landscaping along the SR-62 frontage. Potential impacts to a scenic highway are further discussed in Section 3.1, Aesthetics.

2.4 - Project Objectives

The proposed project is intended to achieve the following objectives:

- To provide a conveniently located, attractively designed retail commercial center that will offer a range of products and services that satisfy the demand for home improvement merchandise and other retail and dining opportunities for the community of Yucca Valley.
- To provide commercial development within the specific plan overlay district that incorporates high quality and consistent design standards that are compatible with the desert community.
- To develop and land use consistent with the property's General Plan designation and the land use designation for adjacent properties.
- To provide the applicant/owner a fair return in the subject property.
- To provide commercial tax revenues to the Town.

2.5 - Project Characteristics

2.5.1 - Project Summary

The Home Depot Retail Center involves the development of retail shopping center (proposed project) including a home improvement center (Home Depot), restaurant or bank, and other retail uses, on-site and off-site roadway and infrastructure improvements. The proposed entitlements include a Specific Plan, a Site Plan Review, a Conditional Use Permit and a Parcel Map.

The balance of Section 2.5 further describes the project characteristics including the proposed uses, associated improvements, and proposed entitlements.

2.5.2 - Land Use

The proposed project involves the development of retail shopping center (proposed project) including a home improvement center (Home Depot), restaurant or bank, and other retail uses, as outlined in Table 2-1. Also, see Exhibit 2-5, Conceptual Site Plan.

Table 2-1: Proposed Retail/Commercial Uses

Acreage	Proposed Use	Parking Spaces
13.09 acres	Home improvement retailer: 137,283 square feet (SF) retail building/house plant enclosure/outdoor garden center	588
4.21 acres	3 retail buildings totaling 34,610 SF	212
0.90 acre	3,000 SF restaurant or bank	32
Total		
18.20 acres	174,893 SF of commercial/retail	832
Source: Carter Burgess, 2005.		

According to the Town of Yucca Valley zoning map (TYV 2004) the site is designated for commercial use, C-G (General Commercial) and is also within an SP-specific plan overlay (see Exhibit 2-4). The proposed land use is consistent with this zoning. See Section 3.7 on Land Use for further discussion.

2.5.3 - Project Entitlements

The following entitlements are required from the Town of Yucca Valley, as lead agency, in order to proceed with project development:

1. **Specific Plan.** The project site is located with a specific plan overlay. The specific plan will establish the site planning concept, design and development guidelines, in addition to the administrative procedures needed to achieve an orderly and compatible development of the plan area.
2. **Conditional Use Permit.** Under the Specific Plan certain uses are allowed in the commercial designation, but are subject to condition under a conditional use permit (CUP). The following uses may be subject to a CUP as more fully identified in the Specific Plan:
 - Arcade
 - Automobile rental
 - Communication facilities
 - Convenience store
 - Department store
 - Entertainment, live (excluding adult entertainment)
 - Fitness centers
 - Maintenance & repair services: major
 - Restaurant with a drive-thru, take out or delivery
3. **Parcel Map.** A parcel map is proposed to subdivide the property into four parcels associated with the location of proposed building pads as outlined in Table 2-1. See Exhibit 2-6, Parcel Map, for the arrangement of each parcel.

2.5.4 - On-Site Design Features

The proposed Home Depot building would to be approximately 550 feet across the front of the store, and approximately 265 feet from the front to the rear of the store. There is loading area behind the garden center near the southwest corner of the building. The building is rectangular in shape (see Exhibit 2-5). The building will range in height from 20 feet high at the outdoor garden center, to 37 feet at the highest point above the entrance, and a maximum height of 28 feet along the back wall.

The four outparcel buildings are identified on the site plan as S1, M2, P1, and S2 (see Exhibit 2-5). The dimensions of each of these buildings are described below:

- S1 is located in the northeastern corner of the site, and is approximately 130 feet wide and 55 deep. This building is approximately 22 feet high.
- Building M2 is directly behind and adjacent to S1, and is approximately 65 wide, and 151 feet deep. Building M2 varies in height from 25 feet to 28 feet high.
- Building P1 is located at the northwest corner of the project site and is approximately 40 feet wide and 75 feet deep. The site plan does not specify the heights for this building, but is expected to be similar in height to the other retail outparcels.
- Building S2 is located south of P1 and is approximately 64 feet wide and 117 feet deep. The site plan does not specify the heights for this building, but is expected to be similar in height to the other retail outparcels.

In addition, the Specific Plan provides design guidelines for each of the following components briefly described below including grading, architecture, landscaping, walls and fencing, signs and lighting.

Grading Design

The grading plan will provide level building pads for the proposed buildings as well as manage the conveyance of stormwater runoff during construction (see Exhibit 2-7). According to the project applicant, the cut and fill will be balanced so that no offsite export or import of material will be needed. The grading plan accounts for the preservation of Joshua trees to be incorporated into the landscape plan.

Architectural Concept

Architectural elevations for project buildings are depicted on Exhibits 3.1-2 and 3.1-3.

The exterior of the Home Depot will be comprised of conventional construction materials: concrete tilt-up panels; plaster finish and accent tiles, concrete bases and foam cornices; and windows/glazing at the entry/exit vestibule. The front exterior customer doors will be clear glass. The emergency access doors will be painted with the same color as the exterior walls of the building. There will be

three metal “roll up” overhead doors (painted Home Depot Orange) at the loading dock at the southwest corner and on metal roll-up door at the rear.

The exterior tilt-up panels of the building will have a painted, smooth finish. The exterior textured walls will have a textured finish. All exterior walls on the Home Depot will be painted with a range of earth tone colors.

The Garden Center exterior will include security mesh and chain link fence, galvanized chain link fence, fabric canopy, and metal canopy elements.

The outparcels will have a design theme which is consistent with the building design set forth by the Home Depot and will be constructed of similar construction materials as the Home Depot, with the same colors (except Home Depot Orange). The exterior elements may include split-face masonry units, textured exterior plaster of varying shades, foam cornices, and colored fabric awnings.

Landscape Concept

The landscape plan features a drought tolerant plant palette applied to 15-foot landscaped areas along the SR-62 frontage, throughout approximately 5% of the parking area, and on a combined parkway/slope at the rear of the project site south of the planned detention basin (see Exhibit 2-8). The plant palette will include a variety of native and non-native plants compatible with the high desert environs and Yucca Valley climatic zones. The proposed project will incorporate approximately 166 Joshua trees into the landscape plan. These Joshua trees are currently located on the project site and are protected by the Town of Yucca Valley Native Plant Protection and Management Ordinance (Ordinance No. 140). A Joshua Tree Salvage Plan (Appendix C) has been prepared to determine the most suitable areas for transplanting these trees. See Section 3.3 on Biological Resources for more information on Joshua trees on site.

Walls and Fences

Walls and fences are permitted along the north, east, and south boundaries of the project site. Any walls or fences that are installed would be constructed of block masonry, stone, brick, or wood. They would be designed to provide security, while allowing for views of the surrounding desert landscape and distant hills. Any walls adjacent to a public right of way will be landscaped and are subject to design review, approval and permits issued by the Town of Yucca Valley and/or Caltrans.

A retaining wall is planned for the length of the loading dock driveway, extending approximately 75 feet. A retaining wall will be located along the southerly edge of the loading dock approximately six inches above the finished grade. This wall will be constructed of poured concrete. A galvanized fence, up to four feet high, will be on top of the retaining wall. Other retaining walls may be needed and will be identified on the precise grading plans.

Signage

The proposed project includes a Sign Program, intended to achieve a visually coordinated, balanced and appealing signage system throughout the Home Depot Retail Center. The signs have been designed to be compatible with the architectural styles and landscape concepts of the proposed project. Sign locations are identified in Exhibit 2-9 and described as follows:

- A pylon sign at the main project entry at SR-62. The sign would be approximately 25 feet high and 10 feet wide, and include identification of the Home Depot and tenants.
- Two monuments signs at proposed at the secondary entrance: the eastern entrance along SR-62, and one is proposed at the back entrance along Palisade Drive. The sign along SR-62 will be approximately 6 feet above the ground and 11 feet wide, and identify one major tenant and one pad tenant. A monument sign along Palisade Drive will be approximately 8 feet high, and 10 feet wide, and will identify Home Depot, and three tenants.
- Building fronts will also include signs, including a large sign above the entrance of the Home Depot, which will be “Home Depot Orange” and be illuminated. Additionally, other signs, including a “Contractor Pick-up” sign, a “Nursery” sign, and a “Tool Rental Center” sign will be located outside of the Home Depot. These signs will be limited to the dimensions identified in the Specific Plan. Other out-parcel buildings will also have illuminated signs.

2.5.5 - Infrastructure Improvements

The project site is currently undeveloped and will require infrastructure improvements for utilities, drainage and roadways. The project site is located immediately east of the site proposed by another applicant for the Yucca Valley Retail Center (YVRC) to be located on the corner of Avalon Avenue and SR-62. A number of roadway and infrastructure improvements will be shared by both the proposed project and the YVRC. Based on the schedule for the proposed project, it is likely to be operational before the YVRC is developed. In order to ensure that improvements to support the proposed project are in place prior to operation, the shared improvements will be implemented in conjunction with the proposed project and are included in the project impact analysis.

Roadway Improvements

Development of the proposed project would include the following infrastructure improvements, including off-site improvements:

SR-62 Improvements

- Construct roadway improvements on the south side of SR-62 from Avalon Avenue to 500 feet east of the project site including: 1) a third eastbound through lane along the entire segment; 2) a merge/ right turn transition lane, and 3) raised medians along the street frontages of the YVRC and the proposed project
- Install a traffic signal at SR-62 and the proposed primary project entrance

- Construct a left turn pocket from westbound SR-62 into the new signalized driveway at the project site
- Construct a shared driveway south of the new signalized intersection on SR-62
- Construct a secondary driveway from Palisade Drive near the easterly project entrance
- Construct a secondary (right-in/right-out) driveway from improved SR-62 near the easterly property line
- Modify the SR-62/Avalon intersection to provide additional turning lanes

Avalon Avenue Improvements

- Widen Avalon Avenue to allow full turn movements at the YVRC driveway
- Construct curb, gutters, sidewalk and travel lanes on the east side of the centerline, including medians between SR-62 and Palisade Drive

Palisade Drive Improvements

- Grade Palisade Drive from the easterly right-of-way line at Avalon Avenue to approximately 10 feet east of the project site for improvements described below
- Construct 35-foot wide Palisade Drive between the easterly right-of-way line at Avalon Avenue to approximately 10 feet east of the project site including: curb, gutter, sidewalk, and travel lanes on the north side of the street centerline and one lane on the south side of the street centerline

Access and Circulation

The project includes three access points, two along the SR-62 frontage and one on proposed Palisade Drive. Primary access to the proposed project would be provided by SR-62 via a common signalized entrance (full access T-intersection) and exit on SR-62 with the proposed YVRC. Parking areas for both projects will be accessed from this entry. An additional driveway (right in/right out only) is provided on SR-62 at the eastern project boundary. Primary truck access for deliveries to the Home Improvement Center would use the driveway on Palisade Drive. Internal roadways will provide adequate turning radius for emergency vehicles. Parking is provided for 807 vehicles. Specific roadway improvements are identified above. Impacts to traffic and circulation are evaluated in Section 3.11.

Drainage/Flood Control

The drainage plan (Exhibit 2-10) identifies the location of drainage facilities for the proposed project, including off-site facilities. A detention basin is proposed in the southern portion of the project site, behind the proposed Home Depot building. The detention basin will be approximately 200 feet long by 55 feet wide and up to 8 feet deep.

Roof drainage from the Home Depot building and garden center will be combined with driveway and parking lot drainage from the south, east and west sides of the building and the garden center and will be conveyed to the detention basin for storage and subsequent release. Stormwater runoff from the remainder of the Home Depot parking lot and driveways to the north of building and garden center will be conveyed through a stormdrain system to a discharge structure to be located near the northeast corner of the project site. From there, the stormwater will be returned to the natural drainage course which crosses in that area. Stormwater runoff for the remaining portion of the site (the area associated to other retail stores and the restaurant) will also be conveyed by storm drain system to the discharge structure described above.

Offsite flows which currently flow across the southern portion of the site, will be collected at inlet structures to be constructed at two existing natural drainage swales on the south side of the proposed Palisade Divide and will be conveyed to the onsite detention basin. Offsite flows which flow across the site from the west will also be intercepted by new inlet structures on the south side of the proposed Palisade Drive and conveyed to the detention basin. Also, see Section 3.13, Water Resources, for further discussion.

Utilities

The proposed project includes the construction of relevant infrastructure in order for the project site to connect to utility services, including water service, wastewater service, electricity, gas, and telephone lines.

Water Service

The project site would be serviced by the Hi Desert Water District. There is currently a 12-inch water line within the Avalon Avenue right of way, which the project would connect to by installing a water line along the right of way of the future extension of Palisade Drive to the southern boundary of the project site. Water lines will be extended from Palisade Drive into the project site along the western and eastern project boundary to serve the home improvement center, and the other retail outparcels and irrigation. Sufficient water lines will be extended in order to provide for a future connection for the future adjacent YVRC. A water line will also be dedicated to for fire flow, and designed to achieve necessary pressure for this purpose. Three fire hydrants will be installed near the southern boundary of the site. Also, see Section 3.12, Utilities, for more information.

Wastewater

An onsite septic system is proposed for the home improvement center. The Hi Desert Water District is also installing wastewater treatment facilities to the east of the project site, and the site would be eligible for connection in the first stage of connection within eight years. Once the District's planned wastewater treatment plant is constructed, the sewer lines will be extended to the project site. The home improvement center will construct closed dry sewer lines in preparation for the future connection. The main sewer line will be installed along the eastern project boundary for future

connection at SR-62. Future owners of the outparcels will be responsible for providing their own septic systems and dry sewer lines. See Section 3.12, Utilities, for more information.

Other Utilities

The project vicinity is currently served with natural gas, electricity, and telephone, which will be extended to provide service to the project site. All utility lines serving the project area are proposed to be placed underground by the developer. The electricity line, gas lines, and telephone lines will be connected from existing transmission facilities on SR-62, and extended along the western project boundary. Transmission facilities will be installed to provide future connection for the adjacent YVRC. The relevant provider for each utility is identified below:

ElectricSouthern California Edison

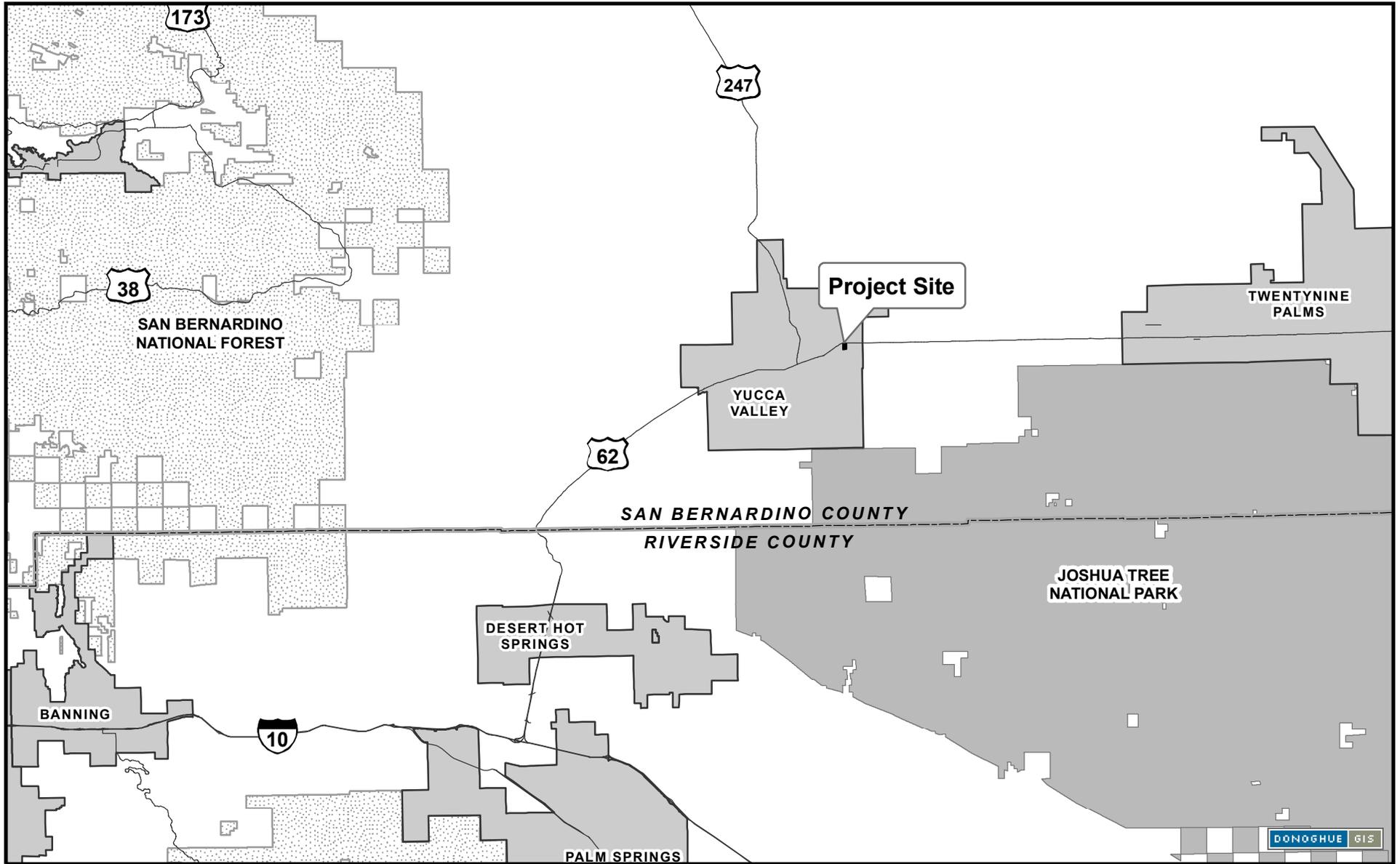
Natural GasSouthern California Gas Company

Telephone.....Verizon

2.6 - Project Phasing/Construction

The project will be completed in two major phases as shown below. The proposed opening date for Phase I will be January 2007.

- Phase I will include grading of the project site, extension of infrastructure, right-of-way improvements, construction of the home improvement center on the 13.28-acre parcel, and construction of roadway improvements. Construction includes installation of site circulation and parking for the home improvement center. The entire project site will be rough graded in one phase, over approximately 4 weeks. Final grading will take an additional two weeks. The grading for the project site will involve approximately 80,000 cubic yards of cut and 80,000 cubic yards of fill material.
- Phase II includes construction of the retail buildings and the restaurant or bank.

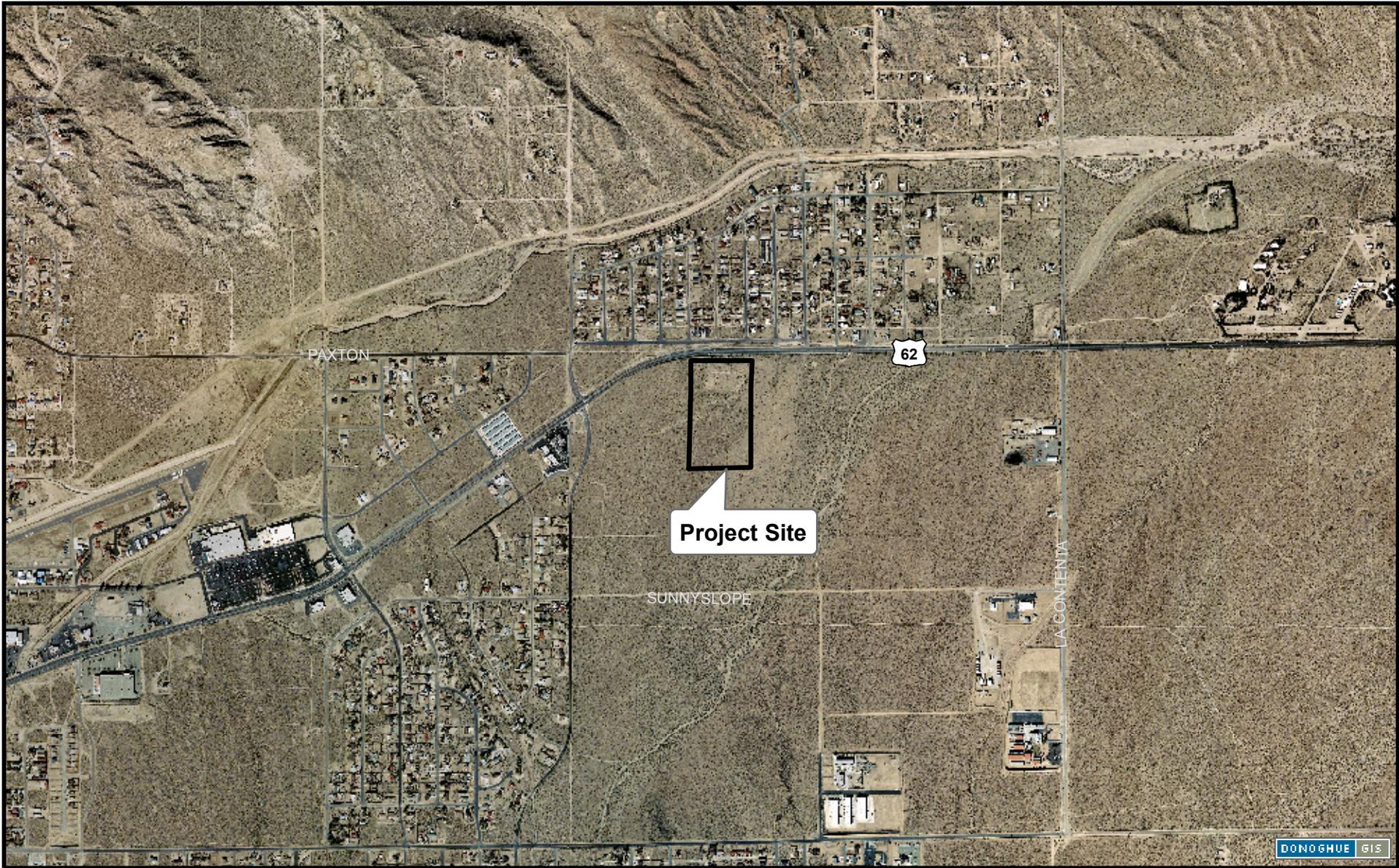


Data Sources: Riverside County, San Bernardino County, California Spatial Library, 2005



- Major Roads
- County Line
- Project Site
- City Boundaries
- Joshua Tree National Park
- San Bernardino National Forest

Exhibit 2-1 Regional Location Map



Data Sources: San Bernardino County, Town of Yucca Valley, 2005

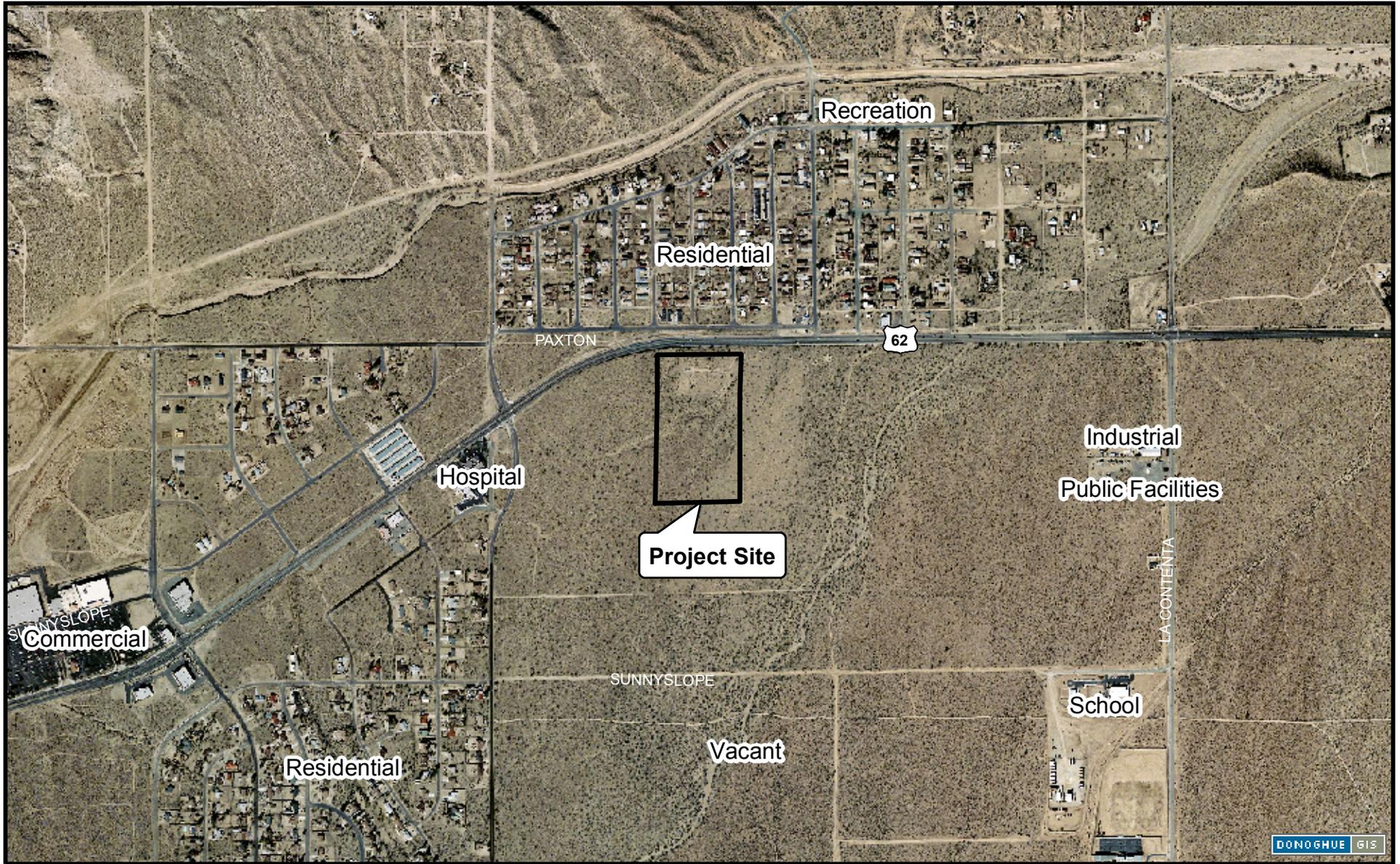


Michael Brandman Associates



 Project Site

Exhibit 2-2
Project Vicinity

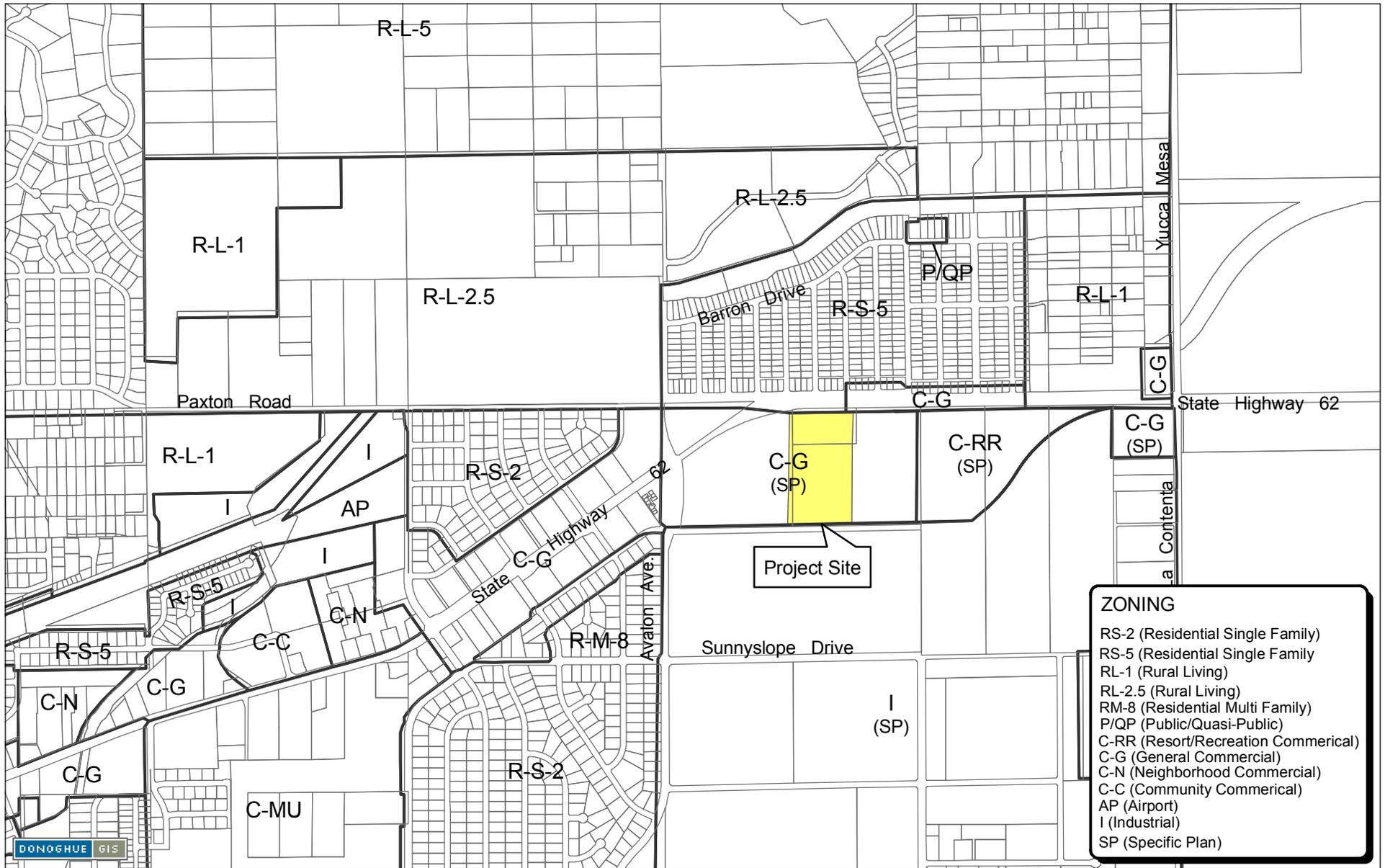


Data Sources: San Bernardino County, Town of Yucca Valley, California Spatial Information Library, 2005



Michael Brandman Associates





Source: San Bernardino County, Town of Yucca Valley, MBA, 2005



Michael Brandman Associates
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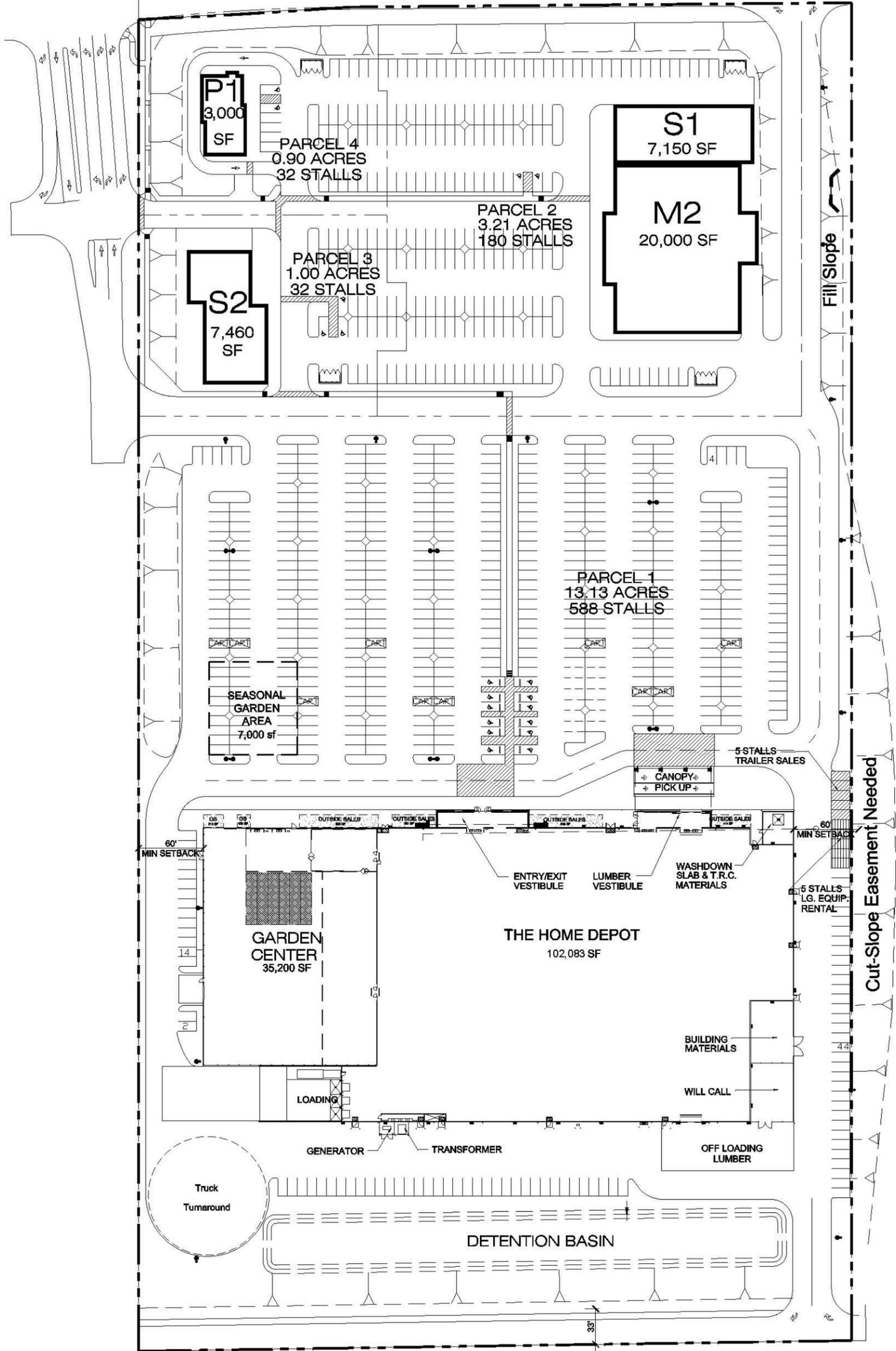


- Parcels
- Zoning
- Project Site

Exhibit 2-4 Existing Zoning

TWENTY-NINE PALMS HWY.
(STATE HWY 62)

NEW SIGNAL



FUTURE PALISADE DRIVE

Source: McIntosh and Associates, July 2005.

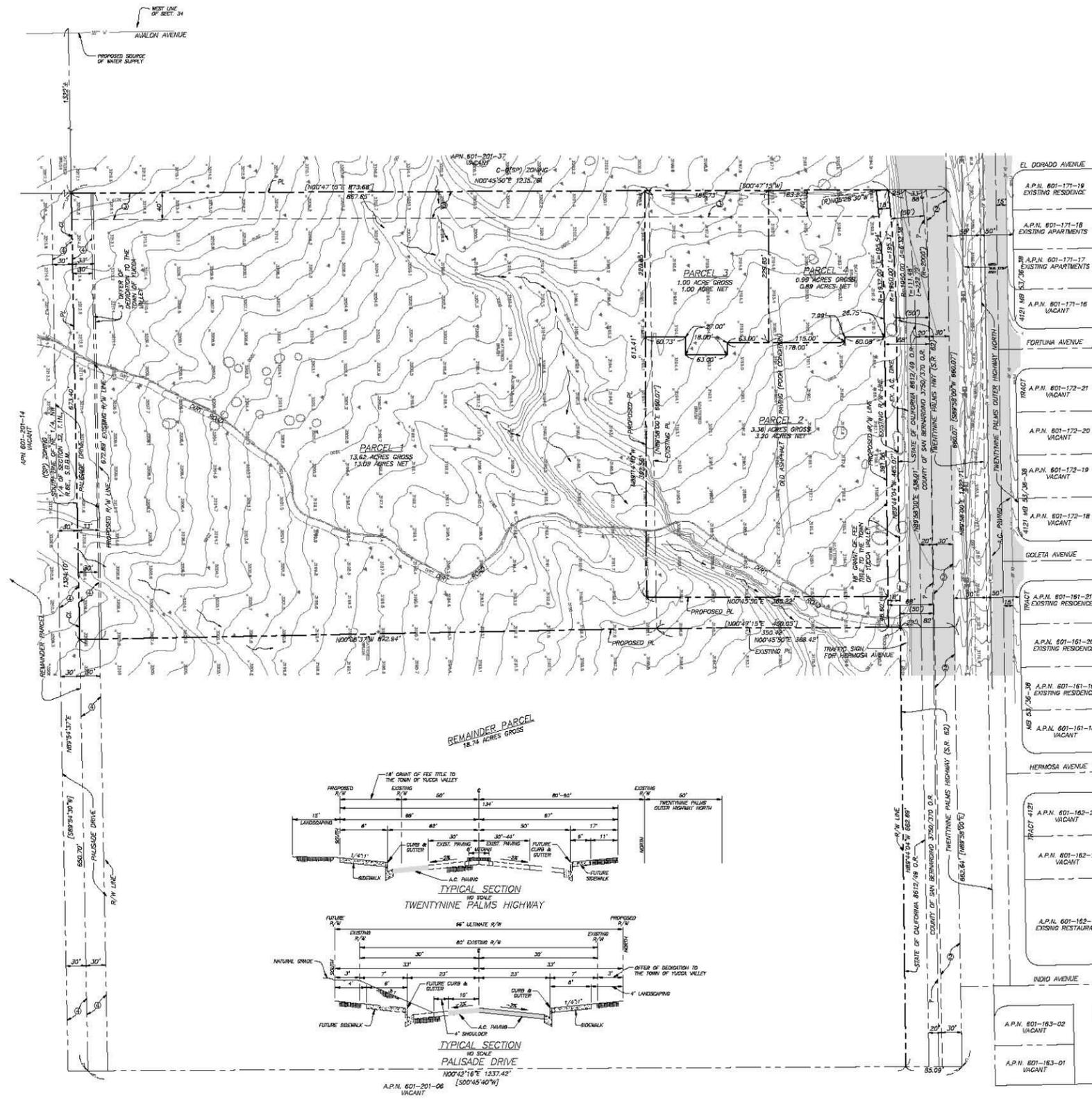


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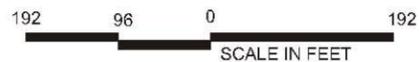
Exhibit 2-5
Conceptual Site Plan

HOME DEPOT RETAIL CENTER EIR



- LEGEND**
- INDICATES DRAINAGE FLOW ARROW
 - INDICATES BOUNDARY
 - 8" W - EXISTING 8" WATER MAIN (APPROX. LOCATION)
 - (3200) - EXISTING CONTOUR ELEVATION
 - x 3300.8 - EXISTING SPOT ELEVATION
 - 6" G - EXISTING 6" GAS LINE
 - OHE - EXISTING OVERHEAD ELECTRICAL LINES
 - PL - INDICATES PROPERTY LINE
 - 12" W - EXISTING 12" WATER MAIN
 - CL - INDICATES CENTERLINE
 - [-] - INDICATES RECORD DATA PER TITLE REPORT LEGAL DESCRIPTIONS

Source: Wamer Engineering, 2005.

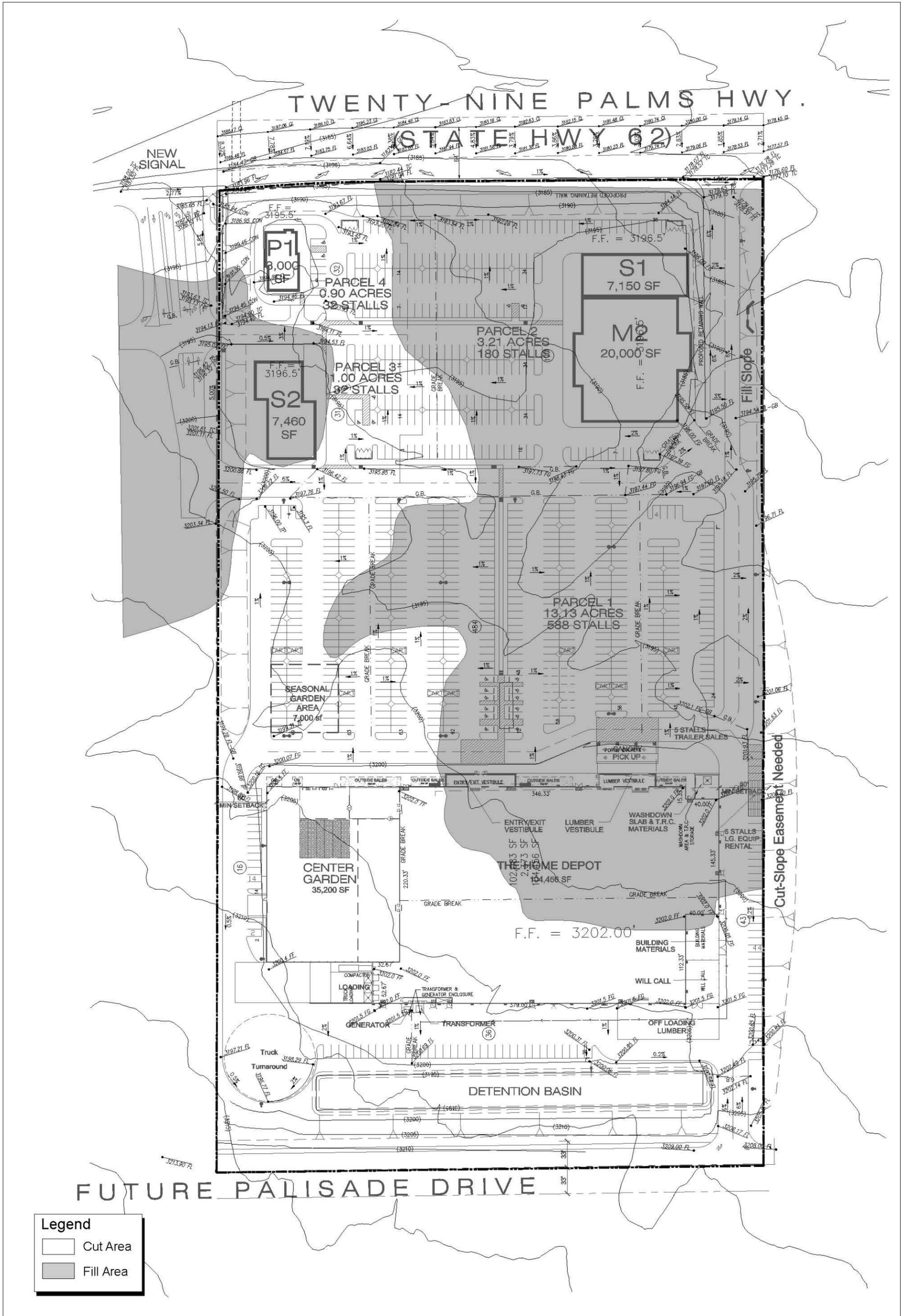


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Exhibit 2-6 Tentative Parcel Map

HOME DEPOT RETAIL CENTER EIR



Source: McIntosh and Associates, July 2005.



Michael Brandman Associates

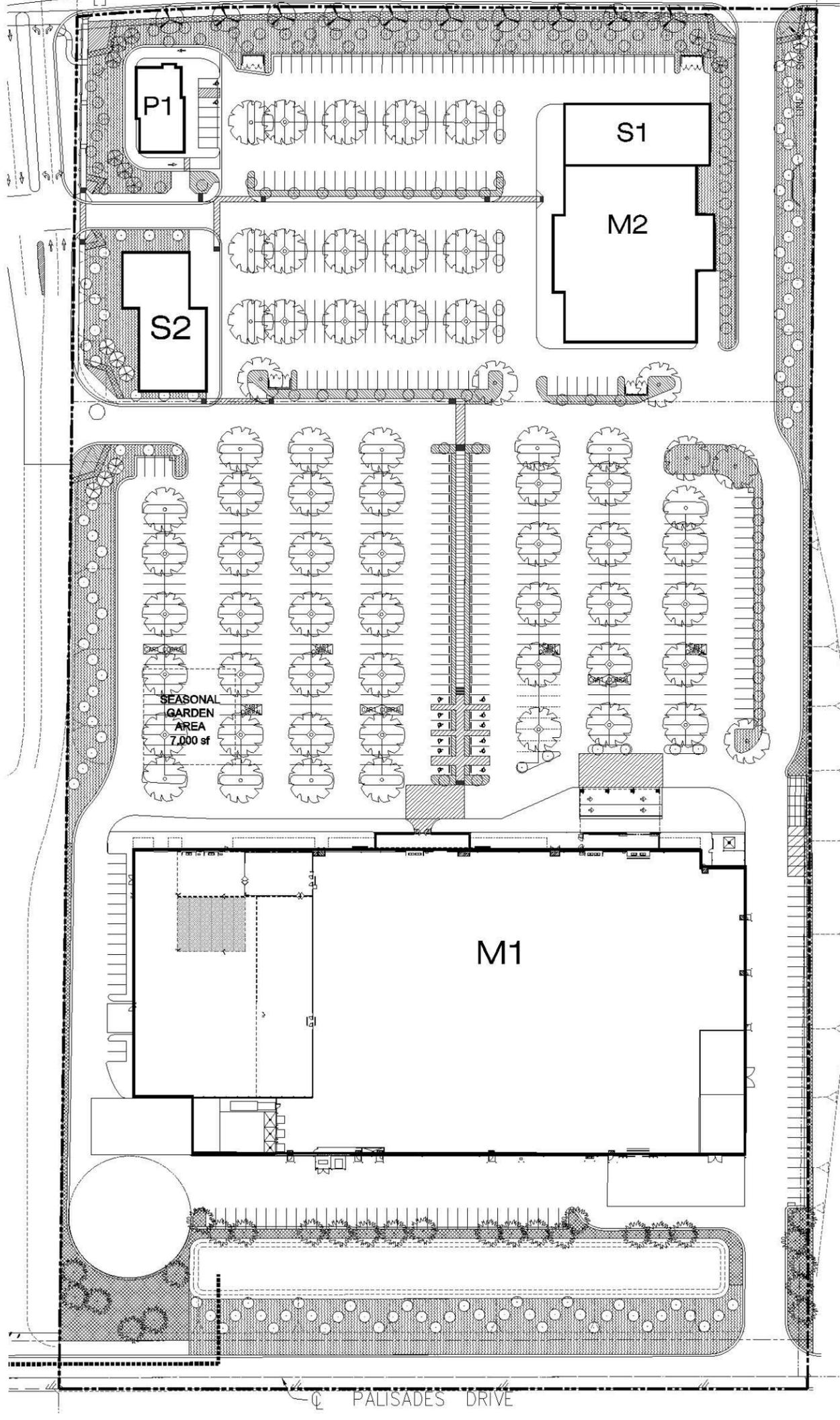
27900001 - 10/2005 | 2-7_grading_plan.cdr

Exhibit 2-7
Grading Plan

HOME DEPOT RETAIL CENTER EIR

(STATE HIGHWAY 62)

5.04% Landscape Area in Parking



GROUND COVER	BOTANICAL NAME	COMMON NAME
[Pattern]	Artemisia o. 'Powis Castle' Guzmania rigens	NCN Guzmania
[Pattern]	Cotoneaster horizontalis Leucophyllum frutescens Heteromeles arbutifolia Decomposed Granite Boulders	Rock Cotoneaster Texas Ranger Toyon
[Pattern]	Sedum x 'Red Chalk' Sedum kamtschaticum Agave parryi Yucca aloifolia Decomposed Granite Boulders	NCN NCN Perry's Agave Spanish Bayonet
[Pattern]	Salvia greggii Cerostrum tomentosum	Autumn Sage Snow in Summer

KEY	BOTANICAL NAME	COMMON NAME
TREE		
[Symbol]	Fraxinus velutina	Amson Ash
[Symbol]	Pistacia chinensis	Chinese Pistache
[Symbol]	Yucca brevifolia	Joshua Tree
[Symbol]	Calocedrus decurrens	Incense Cedar
[Symbol]	Pinus edlinza	Alghian Pine

Source: McIntosh and Associates, June 2005.

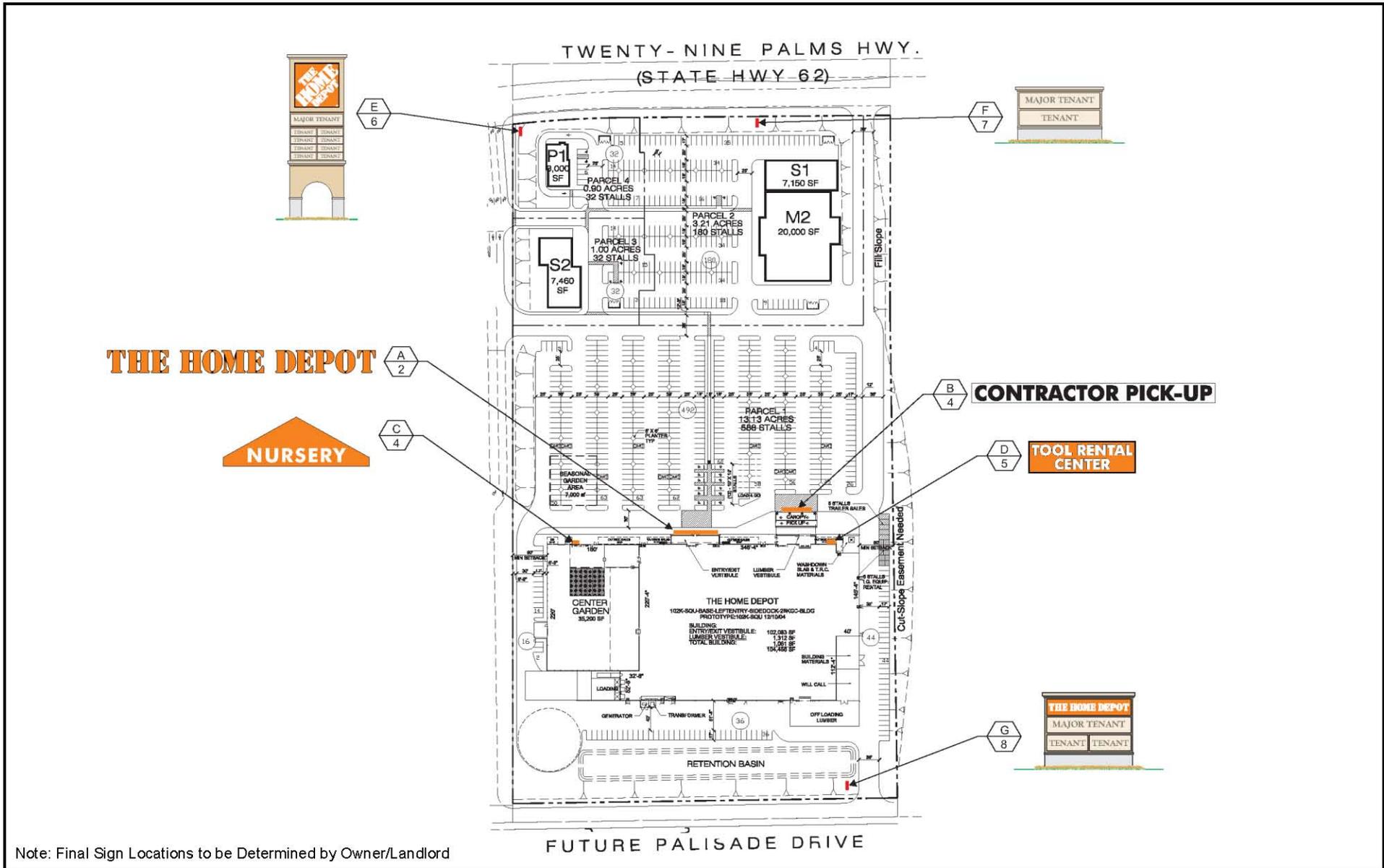


Michael Brandman Associates

27900001 • 10/2005 | 2-8_landscape_concept.cdr

Exhibit 2-8
Landscape Concept Plan

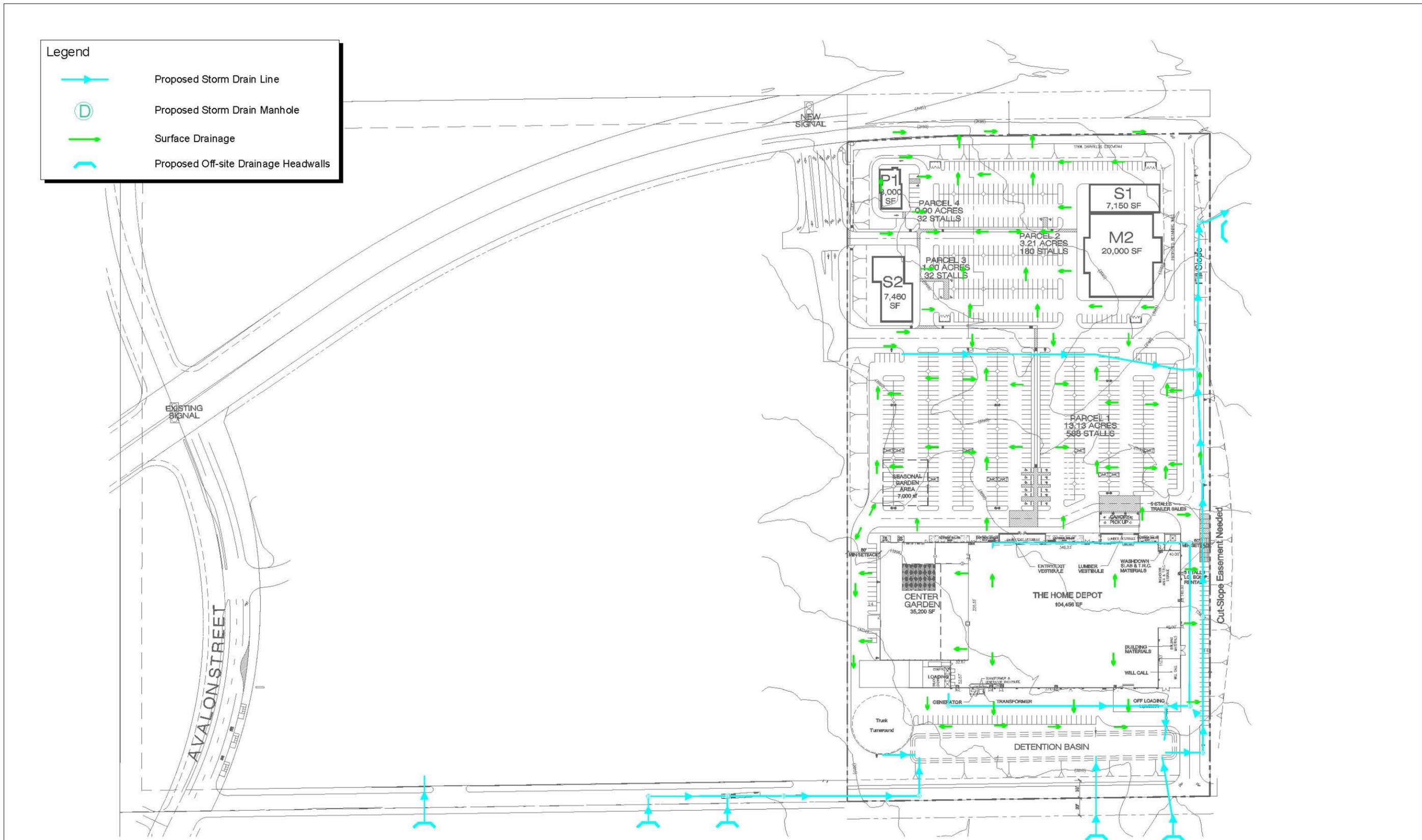
HOME DEPOT RETAIL CENTER EIR



Note: Final Sign Locations to be Determined by Owner/Landlord

Source: Carter Burgess, August 2005.





Source: McIntosh and Associates, July 2005.

SECTION 3: ENVIRONMENTAL IMPACTS ANALYSIS

Approach to Environmental Analysis

Environmental Topics

The following sections present an examination of the environmental consequences associated with implementation of the proposed project.

- 3.1 Aesthetics
- 3.2 Air Quality
- 3.3 Biological Resources
- 3.4 Cultural Resources
- 3.5 Earth Resources
- 3.6 Hazards and Hazardous Materials
- 3.7 Land Use and Planning
- 3.8 Noise
- 3.9 Public Services
- 3.10 Socioeconomics
- 3.11 Traffic and Circulation
- 3.12 Utilities
- 3.13 Water Resources

Section Discussions

Each section listed above is presented using a consistent format, using these headings followed by corresponding discussions:

- Existing Conditions;
- Thresholds of Significance;
- Project Impact Analysis;
- Standard Conditions and Uniform Codes;
- Project Design Features;
- Mitigation Measures; and
- Level of Significance After Mitigation.

Existing Conditions

The Existing Conditions or the environmental setting includes the regulatory and physical setting of the project site and vicinity that would be affected by the proposed project.

Thresholds of Significance

The Thresholds of Significance are the criteria by which the project's environmental effects will be evaluated to determine whether significant, adverse impacts could occur. These criteria are defined in the Town of Yucca Valley Local CEQA Guidelines and derived from the State CEQA Guidelines.

Project Impact Analysis

The Project Impact Analysis first examines the environmental changes that would result from project implementation, with respect to each of the thresholds of significance. Then, based on this analysis, a conclusion is presented with regard to the project's impacts. Conclusions drawn will be phrased as significant impacts, less than significant impacts, or no impacts. In some cases, the conclusion may be that the impacts could be significant, but with the mitigation measures defined later in the section, the impacts would be reduced to less than significant. Relevant policies of the Town of Yucca Valley General Plan (TYV 1995) are also presented in this part of each section and include a discussion of the project's consistency with each of the relevant General Plan policies.

Standard Conditions and Uniform Codes

Known standard design review processes, uniform codes, rules and regulations the project would need to comply with are identified.

Project Design Features

Applicable features of the project design which are relevant to the issue being evaluated will be identified.

Mitigation Measures

Mitigation Measures to avoid, lessen, or offset any significant impacts that were identified in the project impact analysis are defined.

Level of Significance After Mitigation

A determination is made as to whether the mitigation measures would reduce the potentially significant effects to less than significant levels, or if significant effects would remain, even after implementation of the mitigation measures. If no significant impacts have been identified and there are no mitigation measures, the impacts are considered less than significant, without mitigation.

3.1 - Aesthetics

This section evaluates the visual impacts of the project (i.e., views onto and from the site), as well as the potential to create new sources of light and glare.

3.1.1 - Existing Conditions

Visual Character

The proposed project area is in the Town of Yucca Valley, and is relatively flat desert land. The project site supports various native vegetation, which includes Joshua trees (see Section 3.3 Biological Resources, for more information). The site and land immediately adjacent on the east, south, and west borders are currently undeveloped and similar in visual character. The northern boundary is adjacent to SR-62, also referred to as Twentynine Palms Highway. North of SR-62 is residential development.

The general vicinity is characterized by other commercial development along both sides of SR- 62 west of the project area and low-density residential development east of the project site. The areas to the south and west of the project area are mostly residential. See Exhibit 2-3 Existing Setting, for an aerial view of existing land uses.

SR- 62 is designated as a Scenic Roadway in the Town General Plan along this portion of the highway. Views from the highway in this area include views of both the Little San Bernardino Mountains and the Sawtooth Mountains. Also, because the topography is relatively flat and there are vast stretches of vacant land, viewsheds extend for long distances. Views of the project site from the highway, however, are limited because the site is elevated relative to the roadway by at least 3 feet.

Visual Resources

Yucca Valley is located within the Morongo Basin between two mountain ranges, the Little San Bernardino Mountains and the Sawtooth Mountains. Various viewsheds are visible from the proposed project site and the surrounding area, including the local mountain ranges. Because the project area has a relatively flat topography, views from, and around the project site extend for long distances as illustrated by the site photographs in Exhibits 3.1-1a and b.

The proposed project is also less than 5 miles from Joshua Tree National Park.

Light and Glare

The project site is currently vacant; no sources of light or glare are present.

Surrounding light sources include surrounding residences, which have indoor and outdoor lighting, as well as nearby street lighting and vehicle lights on the surrounding roadways. Along SR- 62, the various commercial uses have parking lot lighting, as well security lighting associated with the buildings.

Town's Night Sky Ordinance

The Town of Yucca Valley Development Code has an outdoor lighting ordinance. According to the Town Ordinance 8.70.030(b)(2), any new lighting associated with commercial development shall be fully shielded or recessed in such a manner as to preclude adverse impacts to adjacent properties as a result of light trespass, or to any member of the public who may be traveling on adjacent roadways (TWC 2005).

3.1.2 - Thresholds of Significance

The Town has not established local significance thresholds. However, the environmental checklist form provided in the CEQA Guidelines suggests that potentially significant impacts to aesthetics may occur if a project would:

- 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 nighttime views in the area (2000 CEQA Guidelines, Appendix G).

This criteria is usually qualified by determining if the view open to the public is somehow unique or limited, and if a new source of light and glare is in some way offensive or out of character with an area.

3.1.3 - Project Impact Analysis

Visual Character

Short-term

The proposed project would produce short-term visual impacts during construction. Views of the site will include heavy construction equipment and machinery preparing the land (i.e., grading) and eventually the construction of commercial buildings. Temporary impacts to views of the site will be most pronounced from SR- 62 and existing residential development north of the site. Because this impact will be temporary, it is considered less than significant.

Long-term

Development of the proposed project will convert vacant land and open space to a retail center, substantially changing the aesthetic value of the project site. There are approximately 235 Joshua trees within the project impact area. All of the salvageable trees (approximately 166) will be translocated and utilized in the landscaping for the project. See Section 3.3 on Biological Resources for more information on Joshua trees.

The proposed Home Depot building would to be approximately 550 feet across and approximately 265 deep. The building will range in height from 20 feet high at the outdoor garden center, to 37 feet at the highest point above the entrance, and a maximum height of 28 feet along the rear wall.

The four outparcel buildings are identified on the site plan as S1, M2, P1, and S2 (see Exhibit 2-5). The dimensions of each of these buildings are described below:

- S1 is located in the northeastern corner of the site, and is approximately 130 feet wide and 55 deep. This building is approximately 22 feet high.
- Building M2 is directly behind and adjacent to S1, and is approximately 65 wide, and 151 feet deep. Building M2 varies in height from 25 feet to 28 feet high.
- Building P1 is located at the northwest corner of the project site and is approximately 40 feet wide and 75 feet deep. The site plan does not specify the heights for this building, but is expected to be similar in height to the other retail outparcels.
- Building S2 is located south of P1 and is approximately 64 feet wide and 117 feet deep. The site plan does not specify the heights for this building, but is expected to be similar in height to the other retail outparcels.

The Specific Plan provides for an integrated architectural and design concept for all project buildings, emphasizing earth-tone colors with selected color accents (red and Home Depot Orange). See Exhibits 3.1-2 and 3.1-3 for color elevations of the project buildings. The project frontage and parking areas will be complemented with desert landscaping compatible with the high desert environment and Yucca Valley climatic zones. Joshua trees salvaged on-site during project grading will be integrated into the landscape plan. The landscaping serves to better integrate the new development into the desert landscape and soften hardscape features (pavement, buildings).

The Home Depot store will be set back from SR-62 by approximately 694 feet; the smaller retail buildings and a restaurant will be located closer to the highway. Highway views of the Home Depot store will be somewhat interrupted by the outparcel buildings which flank the site frontage on the east and west, as well as project landscaping. The restaurant (or bank) is anticipated to be the most visible structure because it is nearest to the highway, and located near a curve in SR-62. Both the Home Depot and the outparcel buildings will partially block views of mountains south of SR-62 in the project vicinity. See Exhibit 3.1-5 for a photographic simulation identifying the visual scale of the project buildings with respect to the surrounding landscape from the south side of SR-62. The project also proposes a large pylon sign along SR-62, which may obstruct views from some locations. However, the sign height is consistent with the Municipal Code. The buildings closest to the highway have the greatest impact on the mountain views. The upper portions of the mountains would still be visible above the Home Depot building. However, views in the project vicinity afford nearly a 320-

degree viewscape of mountains and sky. While mountain views to the south will be temporarily interrupted by those traveling along SR-62, other mountains in the vista will still be visible, so that impacts to the scenic highway are considered less than significant.

The impacts for the homes closest to SR-62 (north side) would have similar impacts as from SR-62. In general, the proposed project would cause a change in the current land use from vacant land, to a commercial retail center. Nearby homes would have a change of view, however the retail stores and restaurant will be designed and built with consideration for architectural and design components in a desert environment, and would not create an adverse view.

The project site is zoned for C-G, General Commercial, in the Town General Plan. The proposed project is consistent with that zoning. Additionally, the proposed project is consistent with other commercial development west of the project site on SR-62, and consistent with the eastward trend of commercial development along SR-62.

Because the proposed project is consistent with the current zoning, as well as other local development, and will not substantially deteriorate or significantly block existing viewsheds, impacts related to viewsheds are considered less than significant.

Light and Glare

The proposed project would introduce new sources of light associated to the development of Home Depot and other commercial development, including parking lot lighting, signage lighting, and exterior building lights that will be designed to limit impacts to the desert night sky. The Town of Yucca Valley Development Code has an outdoor lighting ordinance. According to the Town Ordinance 8.70.030(b)(2), any new lighting associated with commercial development shall be fully shielded or recessed in such a manner as to preclude adverse impacts to adjacent properties as a result of light trespass, or to any member of the public who may be traveling on adjacent roadways (TWC 2005). Light pollution can occur if lighting is not properly shielded, or over illuminations occurs and can result in degradation of the night sky, or in light travel off the project site.

The project will also create glare from storefront windows, and automobile windows in the parking lot during the day. Glare from the storefront windows is expected to be negligible, however, vehicles in the parking lot can produce discernible glare. Though the proposed project would create glare visible to passersby on SR-62 and the homes north of SR-62, it will be minimal because landscaping along the property frontage would largely block any glare, so that impacts resulting from glare are considered less than significant.

General Plan

Program 2.B Architectural review within scenic corridors shall include review of building massing and design, heights and setbacks, and exterior colors and materials which shall remain compatible with the natural environment. The use of natural materials and

earth [tones] shall be encouraged, with materials such reflective surfaces discouraged within the zone.

Policy 4 Outdoor operations or storage associated with commercial or industrial development within critical viewsheds shall be restricted and/or made compatible with scenic values.

Program 4.A Review development proposals along or within the viewsheds of scenic highways to preclude development with outside storage and/or to assure operations are adequately screened or restricted to enclosed building to the greatest extent practical.

The building elevations will go through architectural review consistent with Program 2.B. Project outside storage shall be limited to that for the Home Depot as specified in the Specific Plan. In particular, outside storage will be along the Home Depot building frontage and/or in front of the garden center, and would not contribute to interruption of the mountain views. Views of outside storage areas would be somewhat blocked by the outparcel buildings and project landscaping, so that outdoor storage is not anticipated to conflict with Policy 4 and Program 4.A.

3.1.4 - Standard Conditions and Uniform Codes

The proposed project will be subject to design review to ensure compliance with the Town of Yucca Valley General Plan and Development Code. All parking lot lights and other outdoor lighting on electrical plans will be submitted to the Town Community Development Department for plan check and shall comply with relevant requirements of the Town's General Plan and Development Code and the Uniform Building Codes, as well as the Town's Night Sky Ordinance. The applicant will implement Town landscape and architectural design requirements consistent with Town requirements.

3.1.5 - Project Design Features

The proposed project features architectural elevations and natural stone materials with aesthetic appeal. The project will include exterior lighting of facilities, signs and parking lot lighting.

3.1.6 - Mitigation Measures

In order to protect the Town's night sky lighting levels, the following measures shall be implemented:

A-1 Prior to installation, the project owner/applicant shall consult with the Town on the appropriate lighting fixtures to be used. Light fixtures shall be selected to provide downward lighting with minimal horizontal travel at minimum levels to provide sufficient safety at night. In particular, lighting information shall be provided to the Town including a graphic of the specific fixture, shielding information, and proposed light levels. For parking lot lighting, the applicant shall submit an illumination map to identify lighting levels on and adjacent to the project site. Light from the project should not illuminate areas outside of the project site.

3.1.7 - Level of Significance After Mitigation

With implementation of mitigation measure A-1, impacts to aesthetics are less than significant.



Photograph 1: View north from project site.



Photograph 2: View west from project site.



Photograph 3: View south from project site.

Source: Michael Brandman Associates, 2005.



Michael Brandman Associates

27900001 • 08/2005 | 3.1-1a_site_photos.cdr

Exhibit 3.1-1a
Site Photographs

HOME DEPOT RETAIL CENTER EIR



Photograph 4: View north from project site near SR 62.



Photograph 5: View of site southward from across SR 62.



Photograph 6: View of site southeast from across SR62.

Source: Michael Brandman Associates, 2005.



Michael Brandman Associates

27900001 • 08/2005 | 3.1-1b_site_photos.cdr

Exhibit 3.1-1b
Site Photographs

HOME DEPOT RETAIL CENTER EIR



Source: Carter Burgess, May 3, 2005.



NO SCALE

Michael Brandman Associates

27900001 • 08/2005 | 3.1-2_elev_home_improv_ctr.cdr

Exhibit 3.1-2 Elevation for Home Improvement Center

HOME DEPOT RETAIL CENTER EIR



ELEVATION & PARTIAL SIDEWALK PLAN
SCALE: 1/8" = 1'-0"

ICI PAINTS		
A 038 BOKSEWICK ROSE	B E17 FOKAL GREY	C 001 HONEY MOON
D 212 FORTRESS STONE	E 081 MANKATAH	



Source: Carter Burgess, May 3, 2005.



NO SCALE

Michael Brandman Associates

27900001 • 08/2005 | 3.1-3_elev_comm_retail_outparcel.cdr

Exhibit 3.1-3
Elevation for Commercial Retail Outparcel

HOME DEPOT RETAIL CENTER EIR



The project has been modeled for building massing on the existing viewshed, and landscape screening. Not all project features are modeled.

Source: Bo's Arts, Donoghue and Associates, 2005.



3.2 - Air Quality

This section analyzes the potential air quality impacts that would result from construction and operation of the Home Depot Retail Center. A project specific air quality assessment has been prepared by MBA (MBA 2005b). This report can be found in Appendix B of this EIR. This analysis provides a discussion of existing climate conditions, criteria air pollutants, ambient air quality standards and air quality regulations. Air modeling was completed to address short-term air quality impacts during construction and long-term impacts associated with traffic and stationary emission sources in the project area.

3.2.1 - Existing Conditions

Atmospheric Conditions

The proposed project is located in the Town of Yucca Valley, in the County of San Bernardino. This region is within the Mojave Desert Air Basin (MDAB). MDAB covers most of Southern California's high desert and includes portions of San Bernardino County, Riverside County, Los Angeles County, and Kern County. The MDAB includes the jurisdiction of several districts. The proposed project is in the San Bernardino County portion of the MDAB, and is under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). The MDAQMD includes all of the Mojave Desert portion of San Bernardino County, and a portion of eastern Riverside County. The southern limit of the district is the Imperial County line. The eastern boundary is the California border with Nevada and Arizona. The district is generally bounded on the south and west by mountain ranges. The region is generally impacted by a semi-permanent high-pressure zone resulting in a mild relatively dry climate. Additionally, the mountains to the west cause the area to be in a rain shadow, further reducing the typically low rainfall amounts. The summers are very warm and winters are mild. The average rainfall for the region near the project site is approximately 4 inches per year. The local wind is generally light, and the dominant wind pattern is a daytime on-shore breeze and nighttime offshore breezes. The local dominant wind blows from west to east as can be seen in the wind rose (see Exhibit 3.2-1).

Air stagnation may occur during the early evening and early morning during periods of transition between day and nighttime flows. The region also experiences periods of hot, dry winds known as Santa Ana winds. The average air temperature in the project area is about 68 degrees Fahrenheit, with an average annual maximum temperature of 83.9 degrees Fahrenheit and an average minimum temperature of 51.9 degrees Fahrenheit. The coldest month of the year is typically January. Daily maximum temperatures in the summer occasionally exceed 105 degrees Fahrenheit.

The regional and local air quality is strongly affected by topography and a dominant onshore flow. In general, ozone and other pollutants are imported from the South Coast Air Basin (SCAB) into the MDAB by onshore airflow that pushes the pollutants through the mountain passes into the Mojave Desert. Pollutants within the MDAQMD are more concentrated near the passes because of this.

Additionally, mountain ranges near the project site help to block some of the pollutants from leaving the area.

Overall, air quality within the MDAQMD varies with location, season and time of the day. The wind patterns during the summer and spring allow pollutants to travel more easily to the southern portions of the air basin. In the fall and winter, weaker wind and offshore breezes decrease the ability of the pollutants to travel as far. Pollutant levels can be low on days when wind speeds are high (such as during Santa Ana winds). PM₁₀ levels can be high during these high wind events due to the erosion of bare soil.

Ambient Air Quality Standards

The proposed project is within the MDAQMD of the Mojave Air Basin which has various monitoring stations throughout the region. The monitoring stations measure the levels for various air pollutants that are used to define ambient air quality. The proposed project is nearest to the monitoring station in Joshua Tree National Park (Air Resources Board (ARB) site number 36152). The monitoring station is located on Black Rock Canyon Road, approximately 4.5 miles south of the proposed project site. Currently, only ozone is measured at this site, the following criteria pollutants are not measured at this site: PM₁₀, PM_{2.5}, carbon monoxide, nitrogen dioxide, and sulfur dioxide. In order to analyze air quality for previous years, data from two of the closest monitoring stations that measure the pollutants not measured at the Black Rock Canyon monitoring station are used. Those two monitoring stations are Twenty Nine Palms-Adobe Road #2 (ARB site number 36211), and Victorville (ARB site number 36306). The Twenty Nine Palms monitoring station is located at 6136 Adobe Road in Twentynine Palms, approximately 19 miles from the project site, and the Victorville monitoring station is located in at 14306 Park Avenue in Victorville, approximately 60 miles from the project site.

MDAQMD, California Air Resources Board (CARB), and the United States Environmental Protection Agency (USEPA) have established air quality significance levels. Both CARB and USEPA have established air quality standards which are designed to protect those that are most sensitive to air pollution. They include individuals susceptible to respiratory distress such as asthmatics, the young, the elderly, and others with pre-existing health conditions that may be affected by higher levels of pollutant concentrations. Healthy adults can tolerate occasional exposure to air pollutants concentrations above these minimum standards without adverse effects, however, unhealthful response can occur at levels that are only marginally above these standards.

The National Ambient Air Quality Standards (NAAQS) were established by the Federal Clean Air Act of 1970 and identified six “criteria” pollutants. These pollutants were identified by medical evidence that was available at the time and the NAAQS were established based on that evidence. The State of California has adopted the same six pollutants as criteria pollutants, however, has different standards. The six pollutants as well as reactive organic Gases and their descriptions are as follows:

- **Carbon Monoxide (CO):** A colorless, odorless toxic gas produced by incomplete combustion of carbon-containing fuels (e.g. gasoline or diesel fuel). CO levels tend to be highest during the winter months, when the meteorological conditions favor the accumulation of the pollutants.
- **Ozone (O₃):** A photochemical oxidant that is formed when reactive organic Gases (ROG) and oxides of nitrogen (NO_x) (both byproducts of internal combustion engines) react in the presence of ultraviolet sunlight. Ozone is a very energetic combination of three oxygen atoms that, when it comes into contact with a surface, releases its force as chemical energy. When this happens to biological systems (i.e., the respiratory tract), this energy can cause damage to sensitive tissues in the upper and lower airways. The conditions within the region are ideal for accumulating O₃.
- **Oxides of Nitrogen (NO_x):** The two important forms of nitrogen oxide in air pollution are nitric oxide (NO) and nitrogen dioxide (NO₂). NO is from as a byproduct of fuel combustion and quickly reacts with oxygen to form NO₂. NO_x is a mixture of NO and NO₂ in the atmosphere. The major concern with NO_x emissions is mainly due to their contribution to the formation of O₃ and particulate matter.
- **Reactive Organic Gases (ROGs):** Gaseous emissions that react with oxides of nitrogen to form ozone. ROGs are not listed as criteria pollutants, and therefore, there are no state or federal ambient air quality standards them. Though there is no direct standard for ROGs, they are regulated because they are involved in chemical reactions that contribute to the formation of ozone. In addition, ROGs contribute to higher PM₁₀ concentrations and lower visibility levels. Health effects can occur from exposures to high concentrations of ROGs, in particular, reduced oxygen uptake.
- **Sulfur Dioxide (SO₂):** Sulfur Dioxide is a colorless, pungent gas formed by the combustion of sulfur containing fossil fuels. SO₂ is a precursor to sulfate and PM₁₀. Exposure to sulfur dioxide, especially sensitive populations, can result in irritation of existing cardiovascular disease and respiratory illness. Symptoms include wheezing, shortness of breath and chest tightness, especially during exercise, and by people with asthma.
- **Lead (Pb):** Lead concentrations have not exceeded state or federal standards in the region since 1982. Lead can accumulate in bone, soft tissue, and blood and can damage the kidneys, liver, and nervous system, and can result in learning disabilities, seizures, and death.
- **Suspended Particulate Matter (PM₁₀):** PM₁₀ refers to particulate matter that is 10 microns or less in diameter (1 micron is one-millionth of a meter). PM_{2.5} refers to particulate matter that is 2.5 microns or less in diameter. Particulate matter arises from sources such as road dust, diesel soot, erosion of soil, combustion particles (ashes and soot), and tire and brake abrasion. Breathing particulate matter can cause or aggravate problems associated to asthma, can

increase coughing and cause breathing to be difficult or painful. Breathing particulate matter has been associated to chronic bronchitis, and decreases lung function.

Local Conditions

The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project area. Table 3.2-1 shows the most recent published data for the project area, 2002-2004. The air quality standards were determined by using the more stringent of the federal and state ambient air quality standards.

Table 3.2-1: Ambient Air Quality Near Home Depot Retail Center (2002-2004)

Air Pollutant	Most Stringent Air Quality Standards _a	Year			Meets Ambient Standards?
		2002	2003	2004	
		Maximum Concentration & (days/ % exceeding standard)	Maximum Concentration & (days/ % exceeding standard)	Maximum Concentration & (days/ % exceeding standard)	
Ozone (O₃)					
1 Hour	0.09 ppm	0.133 ppm (38 days)	0.140 ppm (41 days)	0.137 ppm (35 days)	No
8 Hours	0.08 ppm	0.114 ppm (33 days)	0.119 ppm (39 days)	0.107 ppm (31 days)	No
Carbon Monoxide (CO)					
1 Hour	20 ppm	ND	ND	ND	ND
8 Hours	9.0 ppm	1.81 ppm (0 days)	2.09 ppm (0 days)	1.70 ppm (0 days)	Yes
Nitrogen Dioxide (No₂)					
Annual Arithmetic Mean	0.053 ppm	0.022 ppm (0 days)	0.022 ppm (0 days)	0.021 ppm (0 days)	Yes
1 Hour	0.25 ppm	0.085 ppm (0 days)	0.090 ppm (0 days)	0.080 ppm (0 days)	Yes
Sulfur Dioxide (So₂)					
Annual Arithmetic Mean	0.030 ppm	0.001 ppm (0 days)	0.001 (0 days)	0.001 (0 days)	Yes
24 Hours	0.04 ppm	0.006 ppm (0 days)	0.006 ppm (0 days)	0.003 ppm (0 days)	Yes
1 Hour	ND	ND	ND	ND	ND
Suspended Particulate Matter (Pm₁₀)					
Annual Geometric Mean	30 µg/m ³	ND	16.0 µg/m ³	ND	Yes
Annual Arithmetic Mean	50 µg/m ³	24.0 µg/m ³	17.3 µg/m ³	15.1 µg/m ³	Yes
24 Hours	50 µg/m ³	ND	64.0 µg/m ³ (3)	40.0 µg/m ³ (0)	No
Fine Suspended Particulate Matter (PM_{2.5})					
Annual Arithmetic Mean	12 µg/m ³	13.9 µg/m ³	11.4 µg/m ³	10.8 µg/m ³	No
24 Hours	65 µg/m ³	38.0 µg/m ³ (0)	28.0 µg/m ³ (0)	34.0 µg/m ³ (0)	Yes
Notes:	(*) More stringent of the federal and state ambient air quality standards for the pollutant of interest; numbers in parentheses represent the annual number of days the standards were exceeded. Yes = Meets state and federal standards. No = Violates state or federal standards. ND = No data reported				
Source:	CARB 2005 http://www.arb.ca.gov/adam/cgi-bin/db2www/adamtop4b.d2w/start				

The data shows that the region has had several events in which the air quality is considered unhealthy. Even so, the air quality for the region has improved significantly over the past decade.

Ozone pollution and particulate matter smaller than 10 microns (PM₁₀ and PM_{2.5}) continues to be the most distinctive problem for the region. The sources contributing to particulate matter pollution include road dust, windblown dust, agriculture, construction, fireplaces and wood burning stoves, and vehicle exhaust.

Air basins where ambient air quality standards are exceeded are called “non-attainment” areas. If standards are met, they are designated as “attainment” areas. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered “unclassified.” Federal “non attainment” areas are considered severe, serious, or moderate as a function of deviation from standards. The current attainment designations for the project area are shown in Table 3.2-2. As shown, MDAB is currently in severe nonattainment for 1-hour ozone federal standards and serious nonattainment for federal PM₁₀ standards. The MDAB is also in moderate nonattainment for the 1-hour State ozone standard and nonattainment for State standards for both PM₁₀ and PM_{2.5}.

Table 3.2-2: Federal and State AAQS Attainment Status

Pollutant	Averaging Time	State Status	Federal Status
Ozone	1 Hour	Moderate Non Attainment	Severe Non Attainment
Ozone	8 Hour	--	Unclassified
CO	1 Hour and 8 Hour	Attainment	Attainment
NO ₂	1 Hour and Annual	Attainment	Attainment
SO ₂	1 Hour and 24 Hour	Attainment	Attainment
PM ₁₀	24 Hour and Annual	Non Attainment	Serious Non Attainment
PM _{2.5}	24 Hour and Annual	Unclassified	Unclassified
Visibility Reducing Particles	8 Hour	Unclassified	--
Lead	30 Day and Quarter Year	Attainment	Attainment
Sulfates	24 Hour	Attainment	--
Hydrogen Sulfide	1 Hour	Unclassified	--
Vinyl Chloride	24 Hour	Unclassified	--
Source: California Air Resources Board, 2005.			

Local Land Use and Emission Sources

The current surrounding land uses include adjacent vacant land, residential development north of the proposed project, and west, across Avalon Avenue, as well as commercial development along both sides of SR-62 west of the project area. Joshua Tree National Park is located approximately 4 miles south of the proposed project. The project site itself is currently vacant. Local emission sources include: stationary activities, such as space and water heating, landscape maintenance, and consumer products, as well as mobile sources, especially motor vehicles. Motor vehicles are the primary source of pollutants within the project vicinity. Areas of congested or slow moving traffic are especially likely to generate elevated levels of CO. Localized areas where ambient concentrations of CO exceed

State and/or Federal standards are called CO “hotspots.” Section 9.4 of the *CEQA Air Quality Handbook* identifies CO as a localized problem requiring additional analysis when a project is likely to subject sensitive receptors, such as residences, to CO hotspots.

Air Quality Attainment Plans

The 1977 Federal Clean Air Act Amendments stated that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that would bring the area into compliance with all national standards by December 31, 1987. The MDAB is in nonattainment for the Federal and State AAQS for PM₁₀ and ozone, and for the state AAQS for PM_{2.5}. The purpose of reaching attainment for the State and Federal air quality standards for PM₁₀ the MDAQMD prepared the Final Mojave Desert Planning Area Federal Particulate Matter (PM₁₀) Attainment Plan (MDAP 1995) for the MDAB and submitted it to the State for inclusion into the State Implementation Plan (SIP) for California. This document was adopted by the MDAQMD in 1995 in order to meet the 1990 Federal Clean Air Act requirements. The document recognizes that the principal cause for PM₁₀ emissions relates to vehicle use on the many unpaved roadways in the region. Specifically, there are over 4,000 miles of unpaved roadways in the region. Many of these roadways are used regularly. An estimated 50,800 tons of PM₁₀ (48% of the total) was emitted in 1990 from these sources. Other major sources include wind erosion from roadways and vacant lots, construction and demolition, and Bureau of Land Management (BLM) land activity. Various rules were already in place to reduce PM₁₀ emissions, however, the 1995 plan focused on changes in regulatory controls on four major source categories: (1) industrial activities, (2) construction/demolition activities, (3) disturbed areas, and (4) unpaved road travel. The attainment date was set for the year 2000, which has elapsed and the region is still not in attainment for PM₁₀.

The MDAQMD also published an attainment plan for state and federal standards for ozone. The MDAQMD 2004 Ozone Attainment Plan (State and Federal) was adopted in April 2004. The attainment plan recognizes one of the major ozone sources in the region is from the Los Angeles Basin which is not part of the MDAB. The ozone is transported into the region through the passes by prevailing winds. The plan states that without this transported pollution the region would be in attainment for ozone. The plan states that ozone levels have been reduced in the past decade, and in fact, the more isolated areas, such as the station in Twentynine Palms near the project area, are currently in attainment for the one hour NAAQS for ozone. According to the ozone attainment plan, the current MDAQMD set of rules and regulations represents all feasible control measures for MDAQMD sources. The MDAQMD has in place Reasonably Available Control Technology (RACT) requirements for all applicable sources, as well as a New Source Review program. The MDAQMD does not propose any additional control, as the MDAQMD has in place all applicable RACT rules, and is achieving the CAAQS and NAAQS by the earliest practicable date not as a result of local reductions, but as a result of reductions occurring upwind. The MDAQMD will experience

additional future emission reductions resulting from existing and proposed Federal and State control measures affecting mobile and area sources.

State law requires a five percent per year reduction in ozone precursors (NO_x and ROG) relative to 1990. That equates to an 85 percent reduction by 2007. The MDAQMD is not meeting this requirement, although significant reductions have been realized relative to 1990 levels. Meeting these reductions would require complete shutdown of all sources under the MDAQMD jurisdiction, and substantial reductions from mobile sources and other sources not under the MDAQMD's jurisdiction, which is not feasible. Modeling for future emission levels was completed by the South Coast Air Quality Management District (SCAQMD) using the USEPA and CARB approved Urban Airshed Model (UAM). The SCAQMD included the MDAQMD within its domain. Based on the modeling, it was determined that the MDAQMD would reach attainment for the one-hour ozone NAAQS (0.13 ppm) in 2007, and will achieve progress in attaining the ozone CAAQS (0.09 ppm) by 2007.

Existing Air Quality Regulations

For the purpose of reaching attainment of the State and Federal air quality standard, the MDAQMD has established rules. The MDAQMD rules that apply to this project include MDAQMD Rule 403 which governs emissions of fugitive dust. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activities when instantaneous wind speeds exceed 25 mph or when the average wind speed is greater than 15 mph (the average wind speed determination shall be on a 15 minute average at the nearest air-monitoring station or by wind instruments located at the site being checked) and establishing a permanent stabilizing cover on finished sites. Rule 403 also requires projects that disturb over 100 acres, or move over 10,000 yds³ of materials/day to submit to MDAQMD a Fugitive Dust Control Plan.

Rule 1103 governs the sale, use, and manufacturing of asphalt and limits the ROG content in asphalt used in the MDAB. This rule applies to asphalt sold at Home Depot, as well as asphalt used during the construction of the project.

Rule 1113 governs the sale, use, and manufacturing of architectural coatings and limits the ROG content in paints and paint solvents. This rule applies to architectural coatings sold at the Home Depot, as well as the paints used during construction of the buildings

3.2.2 - Thresholds of Significance

The following criteria for establishing the significance of potential impact on air quality were derived from the CEQA guidelines (Appendix G). A significant impact would occur if the proposed project would:

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

The CEQA guidelines define a significant effect on the environment as “a substantial, or potentially substantial, adverse change in the environment.” In order to determine if a proposed project would have a significant impact on the air quality, the types and levels of emissions generated by the proposed project, as well as their impacts must be evaluated. The MDAQMD has established thresholds to be used to evaluate the effects that the proposed project would have on the environment.

While the final determination of whether or not a project is significant is within the purview of the lead agency pursuant to § 15064(b) of the State CEQA Guidelines, the MDAQMD recommends that the following quantitative air pollution thresholds be used by the lead agencies in determining whether the proposed project could result in a significant impact. If the lead agency finds that the proposed project has the potential to exceed these air pollution thresholds, the project should be considered significant. These thresholds have been defined by MDAQMD for the Mojave Desert Air Basin based on scientific data the MDAQMD has obtained and factual data within the federal and state Clean Air Acts. Since the project is located within the Mojave Desert Air Basin and current air quality in the project area is typical of the air basin as a whole, these thresholds are considered valid and reasonable. Each of these threshold factors is discussed below.

Thresholds for Emissions

The following significance thresholds have been established by MDAQMD. Projects in the MDAB region with emissions exceeding any of these thresholds should be considered significant:

- 137 pounds per day or 25 tons per year of NO_x;
- 137 pounds per day or 25 tons per year of Reactive Organic Gases (ROG);
- 548 pounds per day or 100 tons per year of CO;
- 137 pounds per day or 25 tons per year of SO_x; and
- 82 pounds per day or 15 tons per year of PM₁₀.

3.2.3 - Project Impact Analysis

Development of the proposed project would result in various air emissions from a variety of stationary and mobile sources. The proposed project would produce emissions during two distinct stages: construction and daily operation. During the construction stage, emissions will be generated by onsite construction equipment, offsite vehicles used to make deliveries to the site, and construction workers commuting to and from the site. Emissions from the project site during construction are considered short-term impacts and include fugitive dust emissions from site preparation and earthmoving as well as gaseous emissions from construction equipment and on-road travel by workers. Once the project is in operation, emissions will be generated by ongoing daily activities associated with the commercial development. These long-term activities include stationary sources such as emissions from the use of natural gas within the building, gasoline driven landscape equipment, and other consumer products. Long-term mobile sources include vehicles of employees and customers of the retail center, which is the primary long-term source of air quality impacts.

Emissions from Construction Activities

Construction emissions can be caused by onsite or offsite emissions. Onsite emissions principally consist of exhaust emissions (NO_x, SO_x, CO, ROG, and PM₁₀) from heavy duty construction equipment, motor vehicle operation, and fugitive dust (PM₁₀) from disturbed soil. Offsite emissions are principally caused by motor vehicle exhaust from delivery, as well as worker traffic, but also include road dust (PM₁₀).

Major construction-related activities include the following:

- Grading/clearing
- Excavation and earth moving for infrastructure construction of the utilities, retention basin, and the foundation and footings for the proposed building
- Construction of project facilities
- Asphalt paving of parking areas and roadway improvements (Palisade Drive, SR-62, Avalon Road)
- Application of architectural coatings (e.g. paint)

Construction equipment such as scrapers, dozers, forklifts, backhoes and water trucks are expected to be used on the project site and will result in emissions consisting of CO, NO_x, ROG, SO_x, and PM₁₀. Other equipment that would be used during the finishing phase, paving operations, and application of architectural coatings and other building materials will release ROG emissions. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions.

Construction emission analysis was performed by the using the California Air Resources Board URBEMIS2002 emissions inventory model (MBA 2005b). This model separates the construction

model into three distinct phases: demolition, site preparation, and building erection/finishing and quantifies daily emissions for each phase for the various pollutants. The proposed project site is currently vacant, and requires no demolition, so that phase was turned off in the model.

Construction of the Home Depot store will occur at a different time than the rest of the proposed project; however, the entire site will be graded at the same time. Much of the construction of the Home Depot will occur simultaneously. Initially the pad for the Home Depot building will be prepared, and then the balance of the site will be rough graded while construction of the Home Depot building occurs. While both of these activities are occurring, infrastructure for utilities will also be prepared. The grading is anticipated to take approximately 6 weeks, the building and infrastructure is anticipated to take about 2 months. Finally, the driveway, construction of roadway improvements, and the parking area for the entire site will be paved (approximately 16 acres), and architectural coatings will be added to the building. Both of these phases will last about 3 weeks. Table 3.2-3 shows the expected construction activities and the equipment to be used in the initial phase of the project.

Table 3.2-3: Anticipated Construction Schedule and Equipment Inventory

Construction Phase/Activity	Construction Equipment	Start Date	Duration
Site Preparation Grading	Other Equipment (1)* Graders (1) Rubber Tired Dozers (2) Tractors/Loaders/Backhoes (2) Scrapers (2) Worker Vehicles	Jan 2007	6 weeks
Building/Finishing Infrastructure; Home Depot building; utilities, etc	Other equipment (7) Forklifts (15) Concrete/Industrial saws(4) Graders (1) Rubber Tired Dozers (2) Scrapers (2) Tractors/Loaders/Backhoes (2) Worker Vehicles	Feb 2007	2 months
Architectural Coating	Worker Vehicles	April 2007	3 weeks
Paving of Parking Areas	Graders (1) Off Highway Trucks (1) Paving Equipment (1) Pavers (1) Rollers (2) Worker Vehicles	April 2007	3 weeks
Total Construction Period		May 2007	5 months
Source: MBA 2005b			
*Note: The water truck was modeled by using "other equipment" in the URBEMIS model.			

Certain assumptions were made in order to complete the analysis for construction emissions. Some of these assumptions were based on the project description and others were derived from the URBEMIS2002 modeling program. The assumptions from the project description include the following:

- Total Site Impact Area: 29.3 acres;
- Daily Area to be Disturbed: 7.33 acres;
- MDAQMD Rule 403 Compliance; and
- Area to be paved: 16 acres.

Assumptions derived from URBEMIS2002 include compliance with MDAQMD Rule 403.

MDAQMD Rule 403 refers to fugitive dust and sets forth general and specific requirements for all construction in the region. The general requirement prevents any person from allowing emissions of fugitive dust from construction such that the presence of such dust remains visible in the atmosphere beyond the property line of the project. Other measures also include watering of disturbed soils, limiting vehicular traffic on disturbed soils, and stabilizing soils after disturbance.

Table 3.2-4 through Table 3.2-6 show the anticipated short-term daily emissions and yearly emissions associated with the construction of the proposed project. The information is broken down based on activities and sources and the emissions are compared to emission thresholds for the construction phase. The URBEMIS2002 output is provided in Appendix B of this document.

Table 3.2-4: Estimated Short-Term Emissions (Grading)

Pollution Source	ROG	NOx	CO	SOx	PM ₁₀
Fugitive Dust From Grading (lbs/day)	NG ¹	NG ¹	NG ¹	NG ¹	315.51
Off-road Construction Equipment (lbs/day)	19.73	137.94	155.97	NG ¹	5.93
On road Construction Equipment (lbs/day)	0.00	0.00	0.00	0.00	0.00
Worker Traffic (lbs/day)	0.17	0.32	3.47	0.00	0.02
Emissions Totals (lbs/day)	19.90	138.26	159.44	0.00	321.46
Emissions Totals (tons/year)	0.33	2.28	2.62	0.00	5.31
MDAQMD Thresholds	137 lbs/day 25 tons/year	137 lbs/day 25 tons/year	548 lbs/day 100 tons/year	137 lbs/day 25 tons/year	82 lbs/day 15 tons/year
Notes: ¹ Criteria pollutants that have estimated negligible values are designated NG (negligible emissions). Bold type indicates emission estimates that are above the MDAQMD significance thresholds. See Appendix B for model output report. Source: URBEMIS2002.					

Table 3.2-5: Estimated Short-Term Emissions (Construction/Remaining Site Grading)

Pollution Source	ROG	NOx	CO	SOx	PM ₁₀
Off-road Construction Equipment (lbs/day)	48.31	336.05	380.43	NG ¹	13.88
Worker Traffic (lbs/day)	0.33	0.19	4.02	0.00	0.06
Emissions Totals (lbs/day)	48.64	336.24	384.45	NG ¹	13.94
Emissions Totals (tons/year)	1.07	7.39	8.46	0.00	0.31
MDAQMD Thresholds	137 lbs/day 25 tons/year	137 lbs/day 25 tons/year	548 lbs/day 100 tons/year	137 lbs/day 25 tons/year	82 lbs/day 15 tons/year
Notes: ¹ Criteria pollutants that have estimated negligible values are designated NG (negligible emissions). Bold type indicates emission estimates that are above the MDAQMD significance thresholds. See Appendix B for model output report.					
Source: URBEMIS2002.					

Table 3.2-6: Estimated Short-Term Emissions (Architectural Coatings and Paving)

Pollution Source	ROG	NOx	CO	SOx	PM ₁₀
Architectural Coatings					
Architectural Coatings Off-Gas (lbs/day)	439.01	NG ¹	NG ¹	NG ¹	NG ¹
Worker Traffic (lbs/day)	0.30	0.15	3.79	NG ¹	0.06
Paving					
Asphalt Off-Gas (lbs/day)	2.84	NG ¹	NG ¹	NG ¹	NG ¹
Off-road Construction Equipment (lbs/day)	9.50	59.20	79.61	NG ¹	2.18
On road Construction Equipment (lbs/day)	0.60	9.30	2.20	0.02	0.26
Worker Traffic (lbs/day)	0.04	0.02	0.54	0.00	0.01
Emissions Totals (lbs/day)	452.29	68.67	86.14	0.02	2.51
Emissions Totals (tons/year)	3.33	8.41	9.74	0.00	0.35
MDAQMD Thresholds	137 lbs/day 25 tons/year	137 lbs/day 25 tons/year	548 lbs/day 100 tons/year	137 lbs/day 25 tons/year	82 lbs/day 15 tons/year
Notes: ¹ Criteria pollutants that have estimated negligible values are designated NG (negligible emissions). Bold type indicates emission estimates that are above the MDAQMD significance thresholds. See Appendix B for model output report. Note: Architectural coating and paving activities are anticipated to occur at the same time.					
Source: URBEMIS2002.					

As shown in the tables, when emissions projections are compared with the MDAQMD thresholds for significance, it is shown that emissions exceed the applicable thresholds for ROG_s, NO_x, and PM₁₀.

Emissions from Project Operation

Long-term operational emissions are also associated with the proposed project after all construction phases are complete and the Home Depot Retail Center is occupied. Emission sources consist of mobile emissions and stationary emissions. Mobile emissions estimates are derived from motor

vehicle traffic. Stationary sources include consumer products, water and area heaters, and other products that consume natural gas, as well as gasoline-powered landscaping equipment.

Mobile emissions from motor vehicles are the largest project-related air quality concern. The project is estimate to generate 5,695 daily trips.

Operational emissions for the proposed Home Depot Retail Center are shown in Table 3.2-7.

Table 3.2-7: Estimated Daily Project Operational Emissions (Pounds per Day)

Operational Activity	ROG	NO _x	CO	SO _x	Total PM ₁₀
Mobile Emissions	39.59	39.88	418.05	0.23	34.15
Area Sources					
Natural Gas	0.12	1.69	1.42	0.00	0.00
Landscaping	0.37	0.01	2.34	0.00	0.01
Consumer Products	0.00	NG ¹	NG ¹	NG ¹	NG ¹
Architectural Coatings	2.45	NG ¹	NG ¹	NG ¹	NG ¹
Total Daily Emissions (pounds)	42.54	41.58	421.81	0.23	34.16
Total Yearly Emissions (Tons)	7.83	8.62	78.04	0.04	6.23
MDAQMD Thresholds	137 lbs/day 25 tons/year	137 lbs/day 25 tons/year	548 lbs/day 100 tons/year	137 lbs/day 25 tons/year	82 lbs/day 15 tons/year
Notes:	¹ Criteria pollutants that have estimated negligible values are designated NG (negligible emissions). See Appendix B for model output report. Bold type indicates emission estimates that are above the MDAQMD significance thresholds. *Data represents summer emissions Source: URBEMIS2002				

As shown in Table 3.2-7, the operational emissions generated by the proposed project are not expected to exceed the MDAQMD thresholds for operational emission. Since these long-term emissions do not exceed the MDAQMD thresholds for significance, long-term operational impacts to air quality for the proposed project are less than significant.

Carbon monoxide (CO) is a localized problem requiring additional analysis beyond total project emissions to find if the project can cause or contribute to an exceedence of federal or state ambient air quality standard. CO is produced in greatest quantities from motor vehicle combustion and the highest concentrations are typically found near congested intersections. Areas of vehicle congestion that have potential to create “pockets” of CO are called CO “hot-spots.” In order to get a worse case scenario, the CO concentrations are generally measured from these congested locations, where the CO concentrations would be the highest.

Evaluation of intersections performing at LOS D or worse would be appropriate to determine if the proposed project would have a local impact on air quality. Based on the Traffic Impact Analysis

(TIA) by Albert Grover & Associates, which examined future project traffic impacts, the following intersection were found to be potential CO hot-spots based on the future LOS of each: Inca Trail at SR-62, SR-247 at Buena Vista Drive/Skyline Ranch Road, SR-247 at SR-62, Joshua Lane at Yucca Trail, Joshua Lane at Onaga Trail and Avalon Avenue/Palomar Avenue at Yucca Trail (AGA 2005). According to the traffic impact analysis, each of these intersections would operate at LOS D, E, or F in 2007 with the project. The traffic impact analysis recommends roadway improvements that would improve the LOS at each of these intersections to LOS C or better. This being the case, with the implementation of the proposed roadway improvements, there is no need for a CO hot-spot analysis for intersections for the year 2007.

The TIA also analyzed traffic impacts for the year 2030. With additional improvements incorporated (see the traffic study in Appendix H) into the project, the following intersections will operate at LOS D or worse in the year 2030:

- Pioneertown Road/Deer Trail at SR-62
- SR-247 at SR-62
- Balsa Avenue/Hanford Avenue at SR-62
- Avalon Avenue at Yucca Valley Retail Center (proposed)
- Avalon Avenue at Palisade Drive
- Yucca Mesa Road/La Contenta Road at SR-62
- Sunny Vista Road at Alta Loma Road

All of these intersections are anticipated to operate at LOS D even with the recommended improvements and therefore warrant a CO hotspot analysis. This information along with the traffic volumes for the AM and PM Peak hours were taken from the project specific traffic study (AGA 2005).

Using the CALINE4 model, potential CO hotspots were analyzed at the following intersections:

- Pioneertown Road/Deer Trail at SR-62;
- SR-247 at SR-62;
- Balsa Avenue/Hanford Avenue at SR-62;
- Avalon Avenue at Yucca Valley Retail Center (proposed);
- Avalon Avenue at Palisade Drive;
- Yucca Mesa Road/La Contenta Road at SR-62; and
- Sunny Vista Road at Alta Loma Road.

Table 3.2-8 shows the result of this analysis.

Table 3.2-8: Estimated CO Concentrations

Intersection	LOS	Estimated CO Concentration	State Standard	Federal Standard	Significant Impact?
Worst-case 1 Hour CO Concentrations					
Pioneertown Road/Deer Trail at SR-62	D	4.28 PPM	20 PPM	35 PPM	No
SR-247 at SR-62	D	4.48 PPM	20 PPM	35 PPM	No
Balsa Avenue/Hanford Avenue at SR-62	D	4.38 PPM	20 PPM	35 PPM	No
Avalon Avenue at Yucca Valley Retail Center (proposed)	D	3.88 PPM	20 PPM	35 PPM	No
Avalon Avenue at Palisade Drive	D	3.51 PPM	20 PPM	35 PPM	No
Yucca Mesa Road/La	D	4.58 PPM	20 PPM	35 PPM	No
Contenta Road at SR-62	D	3.51 PPM	20 PPM	35 PPM	No
Sunny Vista Road at Alta Loma Road	D	4.28 PPM	20 PPM	35 PPM	No
Worst-case 8 Hour CO Concentrations					
Pioneertown Road/Deer Trail at SR-62	D	2.57 PPM	9 PPM	9.5 PPM	No
SR-247 at SR-62	D	2.69 PPM	9 PPM	9.5 PPM	No
Balsa Avenue/Hanford Avenue at SR-62	D	2.63 PPM	9 PPM	9.5 PPM	No
Avalon Avenue at Yucca Valley Retail Center (proposed)	D	2.33 PPM	9 PPM	9.5 PPM	No
Avalon Avenue at Palisade Drive	D	2.27 PPM	9 PPM	9.5 PPM	No
Yucca Mesa Road/La	D	2.75 PPM	9 PPM	9.5 PPM	No
Contenta Road at SR-62	D	2.27 PPM	9 PPM	9.5 PPM	No
Sunny Vista Road at Alta Loma Road.	D	2.57 PPM	9 PPM	9.5 PPM	No
Source: MBA 2005b.					

Assuming worst-case conditions, the estimated 1-hour and 8-hour average CO concentrations in combination with background concentrations are below the State and Federal ambient air quality standards. No CO hot spots are anticipated as a result of traffic-generated emissions by the proposed project in combination with other anticipated development in the area.

Other Operational Effects

Operation of the proposed project will include the delivery of goods to the Home Depot, as well as to other out parcel buildings. Delivery trucks, if there are many at one time, or if they are left idling, could result in a concentration of pollutants. The Home Depot is anticipated to have approximately 30-35 daily deliveries Monday through Friday, and less than 10 trucks on Saturday and Sunday, predominantly daytime business hours, with occasional evening and early morning deliveries. The timing of vendor deliveries varies; however, they are typically spaced throughout that day. The out parcel buildings will also receive deliveries during the week; however, because these operations are much smaller, deliveries will be less frequent.

Based on deliveries at other Home Depot stores, approximately 3-4 of these deliveries would use heavy-duty diesel trucks, with the balance of deliveries provided by small to medium duty trucks.

The heavy-duty diesel trucks will be used to deliver goods from Home Depot warehouses, and other large items, such as lumber, concrete, bricks, etc. Small and medium duty trucks will primarily be used by vendors to deliver smaller quantities of merchandise. Out parcel deliveries will vary based on the specific operation, however, no more than a few deliveries per week are anticipated. On-site circulation and loading/unloading facilities are anticipated to be sufficient to minimizing on-site queuing and idling. Refrigerator trucks which idle during deliveries would be limited to those for the proposed restaurant. Based on these parameters, no significant concentration of diesel emissions are anticipated; rather diesel emissions are expected to dissipate and would not pose a threat to nearby sensitive receptors (housing).

Associated Health Effects

Unmitigated, short-term emissions of ROG, NO_x, and PM₁₀ during construction would result in significant short-term impacts to air quality. Air quality impacts as a result of these emission exceedances are the adverse health effects to people. In general, the health effects of ambient ROG concentrations in the atmosphere are coughing, sneezing, headaches, weakness, laryngitis, and bronchitis.

The EPA has concluded that the only form of NO_x that exists at a level to cause public health concerns is nitrogen dioxide (NO₂) (EPA 1997). Those that may be more susceptible to NO₂ are people with pre-existing respiratory disease and children 5 to 12 years old (EPA 1997). The health effects of greatest concern are mild changes in airway responsiveness and pulmonary function (EPA 1997).

ROG and NO_x emissions are also precursors to ozone formation. The Mojave Desert Air Basin is designated as a non-attainment area for ozone. The health effects of ozone include lung inflammation and lung tissue damage and a reduction in the amount of air inhaled into the lungs. The greatest risk is to those who are more active outdoors during smoggy periods, such as children, athletes, and outdoor workers.

In addition, the Mojave Desert Air Basin is designated as a non-attainment area for PM₁₀. Epidemiological studies show that elevated levels of PM₁₀ produce increased hospital admissions, increased respiratory symptoms and disease such as asthma, decreased lung function especially in children, alterations in lung tissue structure, respiratory tract defense mechanisms, and premature death of individuals subjected to chronic exposure of high concentrations of PM₁₀.

General Plan

The Town's General Plan includes an Air Quality Element which identifies a number of applicable policies and programs worthy of discussion.

- Program 2.B** Coordinate activities with the MDAQMD in conjunction with other local and regional agencies and take an active role in the development and application of air quality regulations.
- Policy 4** Pursue programs which reduce emissions by creating a land use pattern which can be efficiently served by a diversified transportation system and which minimizes vehicle miles traveled.
- Policy 4.B** Coordinate with developers and regulate the phasing and staging of development to assure the lowest pollutant emission levels possible. In addition, the Town shall impose mitigation measures on all new development to provide for the adequate use of water trucks and other features which will effectively limit fugitive dust emissions resulting from construction.
- Program 5.C** Participate in the development and coordination of mass transit/shuttle service linking residential, potential resort and commercial centers of the Town, and shall participate with regional associations and service providers to improve and optimize regional transportation services.
- Policy 6** All development proposals brought before the Town will be reviewed for potential adverse effects on air quality and will be required to mitigate any significant impacts.

Program 2.B encourages consultation with the local air quality agency. MDAQMD will be provided an opportunity to review the analysis and make recommendations for measures to further reduce air quality impacts through the EIR review process. Consistent with Policy 4, the location of commercial retail facilities along SR-62 provides for efficient access to these facilities, thereby minimizing vehicle miles traveled. Consistent with Policy 4.B mitigation measures to limit fugitive dust emissions will be required (see 3.2.6 Mitigation Measure below). Also see Section 3.2.6 for a discussion of construction phasing to further reduce pollutant emissions.

Program 5.C is geared towards Town support/coordination in the development of transit service in the Town. Bus transit service is provided east-west along SR-62. There is an existing bus stop on the north side of SR-62 located east of the proposed signalized driveway. Because Caltrans and the Transit Authority desire that the bus pullout be located on the far side of signalized intersections, this will be included in the design of this new intersection. The north-south crosswalk will be located on the east leg of the intersection so as not to interfere with traffic exiting the site and turning left.

The project specific air quality analysis conducted for this project (see Appendix B) and the mitigation measures identified herein satisfy the requirements for Policy 6.

3.2.4 - Standard Conditions and Uniform Codes

The MDAQMD requires the preparation of dust control management plan. As indicted in Section 3.2.1 above, the project must comply with the following MDAQMD rules:

- Rule 403 governs emissions of fugitive dust.
- Rule 1103 governs the sale, use, and manufacturing of asphalt.
- Rule 1113 governs the sale, use, and manufacturing of architectural coatings.

3.2.5 - Project Design Features

The proposed project is located along SR-62, which is the main roadway through the Town of Yucca Valley. The project's location makes it convenient for consumer access and would minimize vehicle miles traveled.

3.2.6 - Mitigation Measures

Construction Mitigation

Without mitigation, short-term air quality impacts resulting from the proposed project would create a significant impact on air quality. The following mitigation measures shall be implemented to reduce impacts of construction on air quality:

- AQ-1** During construction of the proposed improvements, the applicant will provide site meals to construction workers by arranging a lunch wagon to visit the construction site during work breaks, particularly during the lunch hour.
- AQ-2** During construction of the proposed improvements, the applicant will provide on-site electrical hook ups for electric hand tools such as saws, drills, and compressors, to eliminate the need for diesel powered electric generators.
- AQ-3** During construction of the proposed improvements, only low volatility paints and coatings as defined in MDAQMD Rule 1113 shall be used. All paints shall be applied using either high volume low pressure (HVLP) spray equipment or by hand application.
- AQ-4** Prior to construction of the proposed improvements, the project proponent will provide a traffic control plan that will describe in detail safe detours around the project construction site and provide temporary traffic control (i.e., flag person) during concrete transport and other construction related truck hauling activities.
- AQ-5** During construction of the proposed improvements, construction equipment will be properly maintained with all maintenance repairs completed at an offsite location and include proper tuning and timing of engines.

- AQ-6** During construction of the proposed improvements, all contractors will be advised not to idle construction equipment for more than ten minutes.
- AQ-7** Prior to construction of the proposed improvements, the applicant will provide the Town and the MDAQMD with a project specific dust control plan for their review and approval. The dust control plan will be consistent with MDAQMD Rule 403 and will include Best Available Control Measures (BACM) that include application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved access roadways, cessation of construction activity when instantaneous wind speeds exceed 25 mph average wind speeds exceed 15 mph (15 minute average) and establishing a permanent, stabilizing ground cover on finished areas. Implementation of the project specific dust control plan and BACMs will take place during construction of the proposed improvements.
- AQ-8** The project proponent shall encourage construction workers to ride share. Documentation of this effort shall be submitted to the Town for review and approval.

Even with the implementation of the above mitigation measures, construction emissions still exceed MDAQMD thresholds for ROG and NO_x.

The project applicant requires an aggressive construction date to support their goal for an opening date for the Home Depot store. Their construction program involves the overlap of the grading phase and building of the Home Depot structure. Implementation of an extended construction schedule would delay project completion by approximately 4 weeks. Use of aqueous diesel and specially equipped construction vehicles would be cost prohibitive given the project location, and small project size. Given these considerations, the additional mitigation for construction related ROG and NO_x is considered infeasible.

Operational Mitigation

Even without mitigation, long-term air quality impacts will be less than significant.

3.2.7 - Level of Significance After Mitigation

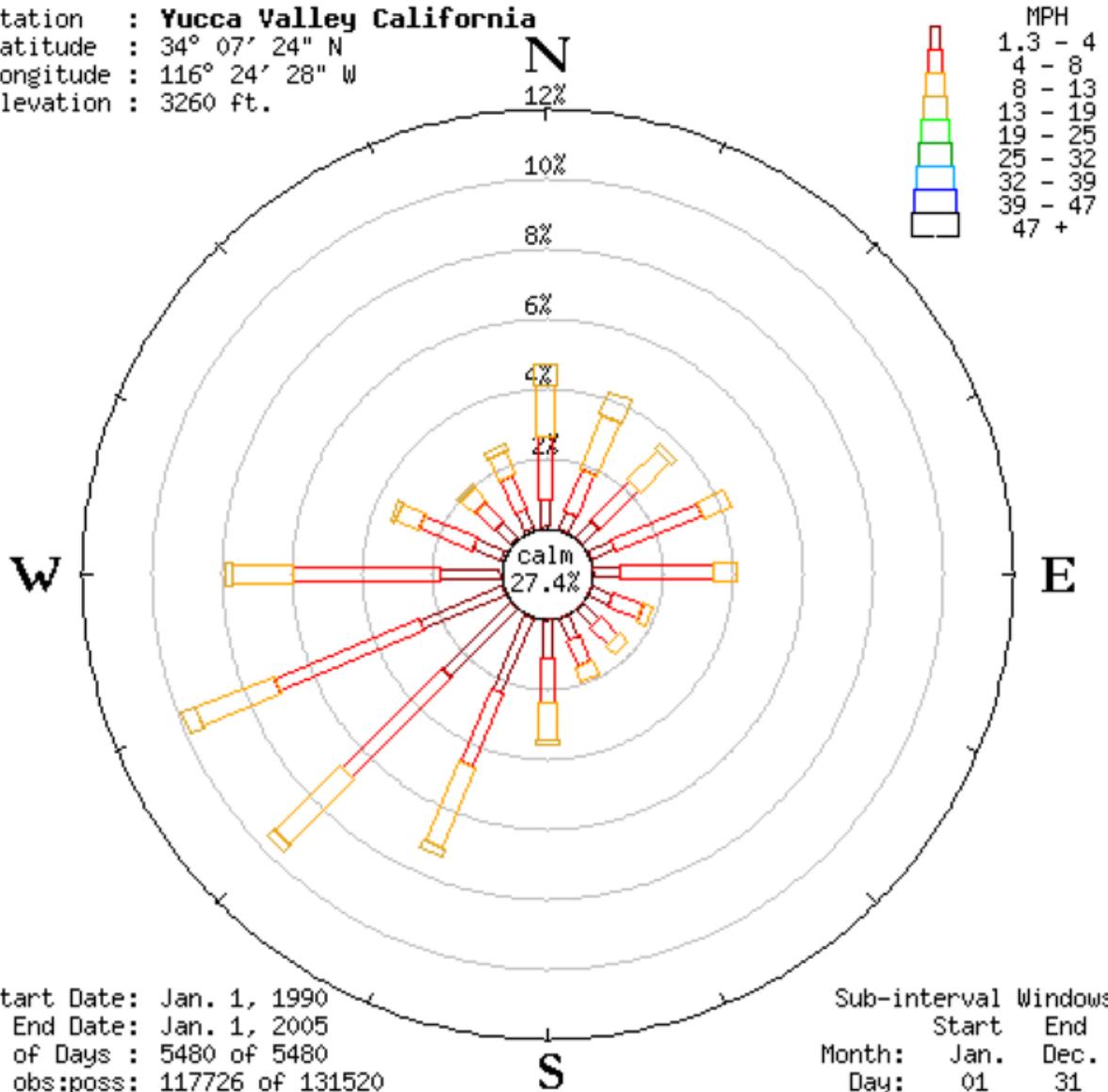
Short Term Construction

After implementation of all dust related mitigation measures, the remaining PM₁₀ dust emission will be reduced to 52.15 pounds per day, which is below the MDAQMD daily construction significance level of 82 pounds per day. Measure AQ-4 will help reduce the NO_x emissions from 336.24 pounds; however, the remaining NO_x emissions (190.48 pounds) will still exceed the MDAQMD's construction level of 137 pounds per day. Measure AQ-2 will reduce ROG emissions to 166.75 pounds per day; however, this will still exceed the significance level of 137 pounds per day. Thus, short-term emissions for ROG and NO_x would remain significant even with feasible mitigation.

Long Term Operational

Long-term emissions resulting from operation of the proposed project would be less than significant, even without mitigation.

Station : **Yucca Valley California**
 Latitude : 34° 07' 24" N
 Longitude : 116° 24' 28" W
 Elevation : 3260 ft.



Start Date: Jan. 1, 1990
 End Date: Jan. 1, 2005
 # of Days : 5480 of 5480
 # obs:poss: 117726 of 131520
 ©Western Regional Climate Center

Sub-interval Windows

	Start	End
Month:	Jan.	Dec.
Day:	01	31
Hour:	00	23

Source: Western Regional Climate Center, August 2005.



Michael Brandman Associates

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Exhibit 3.2-1 Windrose

3.3 - Biological Resources

This section evaluates impacts from the proposed project on the biological resources present on the proposed project site and vicinity. Information presented in this section was obtained from a Biological Resources Assessment from Michael Brandman Associates (MBA 2005c), which includes a Desert Tortoise Survey and a Joshua Tree Survey. A Joshua Tree Salvage Plan (MBA 2005f) was also prepared. The Biological Resources Assessment included a literature review and a field visit. These reports are provided in Appendix C of this EIR.

3.3.1 - Existing Conditions

Vegetation

The project site is at an elevation of approximately 3,200 feet above mean sea level with gently sloping topography. The survey area encompassed the project site and related impact area for offsite improvements. The site is currently undeveloped and contains one plant community, Joshua Tree/Creosote Bush-Nevada Ephedra, which covers the entire area surveyed. The project site is dominated by Joshua trees and creosote bush with desert tea (*Ephedra* sp.) as a codominant. The Joshua trees are prevalent through the project site; however, in areas creosote bush dominate whereas in other areas creosote bush is minimal. There are occasional patches where there are no Joshua trees. These changes in vegetation are on a microhabitat level and were not significant enough to map them as separate plant communities. This plant community likely represents an intergrade between Creosote Bush Scrub and Joshua Tree Woodland. The Joshua Tree/Creosote Bush- Nevada Ephedra plant community is listed as a sensitive plant community under the general category of Joshua Tree Tall Scrub and Open Woodland by the California Department of Fish and Game (CDFG).

Joshua Tree Woodland is described as open woodland with Joshua trees usually as the only arborescent species and numerous shrub species between one and four meters tall. There is little or no herbaceous understory during most of the year. The dominant species include yuccas (*Yucca* spp.), buckwheat (*Eriogonum* spp.), cottonthorn (*Tetradymia* spp.), desert thorn (*Lycium* spp.), and cactus (*Opuntia* spp.).

Mojave Creosote Bush Scrub is dominated by the creosote bush (*Larrea tridentata*) and bursage (*Ambrosia dumosa*). Many species of ephemeral herbs may flower in late March and April. Other shrubs include desert senna (*Senna armata*) and pencil cholla (*Opuntia ramosissima*). Annuals include suncups (*Caissonia* spp.), tack stem (*Calycoseris parryi*), and Wallace's wooly daisy (*Eriophyllum wallacei*). Non-native grasses also occur through the project site in varying densities, in some places becoming the dominant vegetation in the understory.

Existing Wildlife

The project site supports several wildlife species, some of which were observed during the biological surveys and field review conducted by MBA. Wildlife observations made during the survey were

dominated by avian species. Observations of wildlife presence included scat, tracks, burrows, nests, calls, and individual animals. Common mammal species observed included the desert cotton tail (*Sylvilagus audubonii*), antelope ground squirrel (*Ammospermophilus leucurus*), and black-tailed jackrabbit (*Lepus californicus*). Common bird species observed included the common raven (*Corvus corax*), black throated sparrow (*Amphispiza bilineata*), and cactus wren (*Campylorhynchus brunneispillus*). A complete list of species can be found in the species compendium of the biological reports.

Regulatory Background

Sensitive biological resources include those that have been afforded special status and/or recognition by federal and state resource agencies, as well as other organizations. Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

The biological resources assessment by MBA included a literature review which included the United States Department of Agriculture (USDA) Soil Survey for the project site, the USGS topographic quadrangle, the California Natural Diversity Database (CNDDDB), and literature detailing the habitat requirements of sensitive species occurring in the vicinity of the project site. The CNDDDB GIS database was utilized, together with ArcGIS software, to determine sensitive species located within a seven-mile radius of the project site.

The proposed project must be in conformance with the following regulations:

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) administers the federal Endangered Species Act (FESA) that provides a process for listing species as either threatened or endangered, and methods of protecting listed species. The FESA defines as “endangered” any plant or animal species that is in danger of extinction throughout all or a significant portion of its range. A “threatened” species is a species that is likely to become endangered in the foreseeable future. A “proposed” species is one that has been officially proposed by USFWS for addition to the federal threatened and endangered species list.

Section 9 of the FESA prohibits “take” of threatened or endangered species. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in “take” of the species or its habitat. Under the regulations of the FESA, the USFWS may authorize “take” when it is incidental to, but not the purpose of, an otherwise lawful act.

California Endangered Species Act

The California Department of Fish and Game (CDFG) administers the California Endangered Species Act (CESA). The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

Section 3503 and 3511 of California Fish and Game Code

The CDFG administers the California Fish and Game Code. There are particular sections of the Code that are applicable to natural resource management. For example, section 3503 of the Code states it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3511 of the Code lists fully-protected birds species, where the CDFG is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are state fully protected include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful to pursue, capture, kill, or possess or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union.

Porter Cologne Act

The RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, with any region that could affect the water of the state” (water code 13260(a)), pursuant to provisions of the State Porter-Cologne Water Quality Act. “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (water code 13050 (e)).

Town of Yucca Valley Ordinance No. 140, Plant Protection and Management

Chapter 1 of the Plant Protection and Management Ordinance, Desert Native Plant Protection, aims to preserve and protect native plants unique to Yucca Valley. Plants protected by the ordinance include all species of mesquites (*Prosopis* spp.), yuccas (*Yucca* spp.), creosote rings ten (10) feet or greater in diameter), Joshua trees (*Yucca brevifolia*), California juniper (*Juniperus californica*), desert willow (*Chilopsis linearis*), pinon pine (*Pinus monophyll*), Palo Verde (*Cercidium* spp.), and manzanita (*Arctostaphylos* spp.). The ordinance states that protected desert native plants shall not be removed except under a permit issued by the Community Development Director. Prior to the issuance of a native tree or plant removal permit, a plot plan shall be approved by the Community Development

Department indicating exactly which trees or plants are authorized to be removed or relocated. In the event that it is found to be unreasonable to maintain a Joshua tree in its original place, translocation onsite is one option, or the Town has established an adoption program to allow for members of the public to adopt Joshua trees.

The Desert Tortoise Recovery Plan

The Bureau of Land Management (BLM) adopted The Desert Tortoise Recovery Plan in 1994 designed to “achieve a 50% probability of survival for the tortoise for 500 years.” Drawing from concepts outlined in the federal Endangered Species Act, six population units, called “recovery units,” were identified in the Mojave and Sonoran deserts using published and unpublished data. The specified goal for each recovery unit is to reach a target of 50,000 breeding adult tortoises. Within the recovery units, the team recommended the establishment of 14 reserves or Desert Wildlife Management Areas (DWMAs), ranging from 415 to 3,367 km².

The West Mojave Plan

Spearheaded by the Bureau of Land Management, the West Mojave Plan (WMP) is a Multi-Species Habitat Conservation Plan (MSHCP) developed by several local, state, and federal agencies aimed at minimizing impacts to sensitive plants and animals in the region as development occurs and the population expands. The BLM describes the WMP as “an attempt at defining a regional strategy for conserving plant and animal species and their habitats and to define an efficient, equitable, and cost-effective process for complying with threatened and endangered species laws.” The BLM’s stated goal is to provide conservation solutions for all the plants and animals in a single plan, while allowing development to occur “in a responsible manner.”

According to the 1994 USFWS Desert Tortoise Recovery Plan, the WMP will implement desert tortoise recovery in the West Mojave Desert Tortoise Recovery Unit.

Sensitive Plant Communities

The entire project site consists of the Joshua Tree/Creosote Bush- Nevada Ephedra plant community, designated sensitive by the CDFG.

Sensitive Plant Species

The biological resources assessment found that three special status plant species were documented by the CNDDDB as occurring within the vicinity of the project site: Little San Bernardino Mountains linanthus (*Linanthus maculatus*), Orcutt’s linanthus (*Linanthus orcuttii*), Robison’s monardella (*Monardella robisonii*). It was determined by MBA that no suitable habitat for any of these species was present within the project site. Additionally, the field survey was completed during the blooming period of all three of these species, and none of the three special status plant species were observed during the field survey. The three special species documented by the CNDDDB as occurring in the vicinity are shown in Table 2.

The Town of Yucca Valley Plant Protection and Management Ordinance protects seven different types of plants. Of these, only Joshua trees occur within the project site. Although creosote bush is present on the project site, the ordinance only protects creosote rings 10 feet or greater, and no creosote rings are present on the project site. An inventory of Joshua trees was conducted by MBA and can be found in Appendix C of the biological resources assessment. There are approximately 235 Joshua trees within the project impact area.

Sensitive Wildlife Species

Review of the CNDDDB determined that there are seven species of wildlife occurring within the vicinity of the project site: coast (San Diego) horned lizard (*Phrynosoma coronatum [blainvillei]*), northern red-diamond rattlesnake (*Crotalus ruber ruber*), desert tortoise (*Gopherus agassizii*), Le Conte's thrasher (*Toxostoma lecontei*), yellow warbler (*Dendroica petechia brewsteri*), western yellow bat (*Lasiurus xanthius*), Nelson's bighorn sheep (*Ovis canadensis nelsoni*). Details regarding these species are shown in Table 3.3-2. The project site provides suitable habitat for two of these seven species: coast horned lizard and desert tortoise. Coast horned lizard was not observed during any of the biological surveys.

A focused survey was conducted for desert tortoise, and can be found in Appendix C of this EIR. No desert tortoise, signs of desert tortoise, or burrows suitable for desert tortoise were observed during the focused survey.

Table 3.3-1: Special Status Plant Species Identified in CNDDB

Species		Status			Life Form	Blooming Period	Preferred Habitat	Potential On Site/Suitable Habitat	
Scientific Name	Common Name	USFWS	CDFG	CNPS					
<i>Linanthus[Gilia] maculatus</i>	Little San Bernardino Mountains linanthus	—	—	1B	Annual herb	Mar - May	Sandy places, often in wash or Bajada, within desert dunes, Sonoran desert scrub, Mojave desert scrub, and Joshua tree woodland. Loose soft sandy soils on low benches along washes, generally where the substrate shows some evidence of water flow. The sand is loose and well-aerated, soft and unconsolidated.	Low potential to occur. Although the project site contains generally suitable habitat, there are no washes within the project site.	
<i>Linanthus orcuttii</i>	Orcutt's linanthus	—	—	1B	Annual herb	May - Jun	Chaparral, lower montane coniferous forest; sometimes in disturbed areas, often in gravelly clearings.	Not likely to occur. No suitable habitat present within project site.	
<i>Monardella robisonii</i>	Robison's monardella	—	—	1B	Annual herb	Feb - Oct	Rocky desert slopes, often among granitic boulders, in Pinyon-Juniper woodland and Joshua tree woodland.	Not likely to occur. No suitable habitat present within project site.	
U.S. Fish and Wildlife Service		California Department of Fish and Game			California Native Plant Society				
FE Federal Endangered		CE California Endangered			1A Plants presumed extinct in California.				
FT Federal Threatened		CT California Threatened			1B Plants rare, threatened, or endangered in California and elsewhere.				
PE Proposed Endangered		CR California Rare			2 Plants rare, threatened, or endangered in California, but more common elsewhere.				
PT Proposed Threatened						3 Plants about which we need more information.			
FC Federal Candidate						4 Plants of limited distribution.			
FSC Species of Concern*									
* No longer recognized as a federal designation.									
<p>Not Likely to Occur - There are no present or historical records of the species occurring on or in the immediate vicinity (within 2 miles) of the property area and the diagnostic habitats strongly associated with the species does not occur on or in the immediate vicinity of the property area.</p> <p>Low Potential for Occurrence - There is a historical record of the species within the vicinity of the property, but no existing suitable habitat on or in the immediate vicinity of the property area.</p> <p>Moderate Potential for Occurrence - The suitable habitat associated with the species occurs on or in the immediate vicinity of the property area, but there is not a recorded occurrence of the species within the immediate vicinity (within 2 miles) of the property.</p> <p>High Potential for Occurrence - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the property area (within 2 miles).</p> <p>Species Present - The species was observed on the property at the time of the survey.</p>									

Table 3.3-2: Species Status Wildlife Species Identified in CNDDB

Species		Status			Required Habitat	Potential On Site/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other		
Reptiles and Amphibians						
<i>Phrynosoma coronatum (blainvillei)</i>	Coast (San Diego) horned lizard	—	CSC	—	May be found in coastal sage scrub and chaparral in arid and semi-arid climate; prefers friable, rocky, or shallow sandy soils. Requires harvester ants for food.	High potential to occur. Suitable habitat within project site; nearest occurrence approximately 0.5 mile west of the project site.
<i>Crotalus ruber ruber</i>	Northern red-diamond rattlesnake	—	CSC	—	Occurs in rocky areas and dense vegetation of chaparral, woodland, grassland, & desert areas. Needs rodent burrows, cracks in rocks or surface cover objects.	Low potential to occur. Project site lacks rocky areas or dense vegetation for cover.
<i>Gopherus agassizii</i>	Desert tortoise	FT	CT	—	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Requires friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	Moderate potential to occur. Suitable habitat within project site; nearest occurrence approximately 1.5 miles east of the project site. Focused surveys determined that desert tortoise is not present within the project site.
Birds						
<i>Toxostoma lecontei</i>	Le Conte's thrasher	—	CSC	—	Sparsely vegetated desert flats, dunes, alluvial fans, or gently rolling hills having a high proportion of one or more species of saltbush (<i>Atriplex</i> spp.) and/or cylindrical cholla cactus (<i>Opuntia</i> spp.) or other desert habitats with similar structural profiles. In its typical habitat, shrubs are well scattered with contiguous or closed cover. It is rarely found in habitats consisting entirely of creosote bush (<i>Larrea</i>). Substrates are typically sandy. It requires accumulated leaf litter under most plants as diurnal cover for most arthropod prey.	Not likely to occur. Project site does not provide the preferred structural profile or habitat for prey species.

Table 3.3-2 (Cont.): Species Status Wildlife Species Identified in CNDDB

Species		Status			Required Habitat	Potential On Site/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other		
<i>Dendroica petechia brewsteri</i>	Yellow warbler	---	CSC	---	Nests in riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores, & alders for nesting & foraging. Also nests in montane shrubbery in open conifer forests.	Not likely to occur. No suitable riparian habitat within project site.
Mammals						
<i>Lasiurus xanthius</i>	Western yellow bat	---	CSC	---	Occurs in palm oases and in residential areas with untrimmed palm trees. Roosts in trees, primarily palm trees, and appears to prefer the dead fronds of palm trees. Forages over water and among trees.	Not likely to occur. No suitable roosting or foraging habitat within project site.
<i>Ovis canadensis nelsoni</i>	Nelson's bighorn sheep	---	---	---	Widely distributed from the White Mountains in Mono County to the Chocolate Mountains in Imperial County. Is found in open, rocky, steep areas with available water and herbaceous forage.	Not likely to occur. No suitable habitat within project site.
U.S. Fish and Wildlife Service		California Department of Fish and Game			Other	
FE	Federal Endangered	CE	California Endangered	CDFG: CSC	California Species of Concern	
FT	Federal Threatened	CT	California Threatened	CDFG: FP	Fully Protected Species	
PE	Proposed Endangered	CR	California Rare	CDFG: P	Protected Species	
PT	Proposed Threatened					
FC	Federal Candidate					
FSC	Species of Concern*					
* No longer recognized as a federal designation.						
<p>Not Likely to Occur - There are no present or historical records of the species occurring on or in the immediate vicinity (within 2 miles) of the property area and the diagnostic habitats strongly associated with the species does not occur on or in the immediate vicinity of the property area.</p> <p>Low Potential for Occurrence - There is a historical record of the species within the vicinity of the property, but no existing suitable habitat on or in the immediate vicinity of the property area.</p> <p>Moderate Potential for Occurrence - The suitable habitat associated with the species occurs on or in the immediate vicinity of the property area, but there is not a recorded occurrence of the species within the immediate vicinity (within 2 miles) of the property.</p> <p>High Potential for Occurrence - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the property area (within 2 miles).</p> <p>Species Present - The species was observed on the property at the time of the survey.</p>						

Regional Connectivity/Wildlife Movement

As shown in Biological Resources Values/Open Space/Conservation Areas map in the Town General Plan (TYV 1995), the proposed project site is not within a recognized wildlife corridor (TYV 1995).

Jurisdictional Water Resources

Surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potentially subject to state and federal regulatory authority as “waters” Aerial photography was reviewed prior to the general surveys and an assessment of potentially jurisdictional waters was conducted during the habitat assessment. It was determined that no jurisdictional features are within the project site.

Nesting Birds

Nesting birds are protected under the MBTA and CDFG codes. The Joshua trees and shrubs within the project site provide suitable habitat for nesting birds such as cactus wren (*Campylorhynchus brunneicapillus*) and verdin (*Auriparus flaviceps*).

3.3.2 - Thresholds of Significance

The following criteria for establishing the significance of potential impacts on biological resources were derived from the CEQA guidelines (Appendix G). A significant impact would occur if the proposed project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any 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.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.3.3 - Project Impact Analysis

Sensitive Plant Communities

Implementation of the proposed project will result in the removal of up to approximately 30 acres of Joshua Tree/Creosote Bush-Nevada Ephedra vegetation, which is considered a sensitive plant community by CDFG. However, compliance with the Plant Protection and Management Ordinance will reduce impacts to Joshua trees to less than significant levels.

Sensitive Plant Species

No sensitive plant species from the CNDDDB list were determined to be present on the project site. Joshua trees, however, are protected by the Town's Plant Protection and Management Ordinance and an inventory of Joshua trees was conducted (see Appendix C). There are approximately 235 Joshua trees within the project impact area. Of these trees, 166 were determined to be translocatable. The proposed project will cause the loss of the remaining 69 Joshua trees. As per the town ordinance, prior to the issuance of a grading permit, a native plant removal permit must be obtained from the Community Development Director. Prior to issuance of a native tree or plant removal permit, a plot plan shall be approved by the Community Development Department indicating exactly which trees are authorized to be removed or relocated. A salvage plan has been prepared by MBA (found in Appendix C of this EIR), and must be approved of by the Town for those trees authorized to be relocated. All of the salvageable trees would be incorporated into the landscaping of the proposed project. The salvage plan has been designed to salvage the maximum number of Joshua trees. With the implementation of the salvage plan, including translocating trees onsite and putting the remaining trees up for adoption, the proposed project is in compliance with the Town ordinance and will not create a significant impact on sensitive plant species.

Sensitive Wildlife Species

The CNDDDB listed seven special status wildlife species within the vicinity of the proposed project site. Of these seven species, the project site provides suitable habitat for two species, coast horned lizard (*Phrynosoma coronatum* [blainville]) and desert tortoise (*Gopherus agassizii*).

The coast horned lizard was determined to occur within ½ mile of the proposed project site and to have a high potential to occur within the project site. However, due to the lack of observance of coast horned lizard within the project site during the biological surveys, it is unlikely that the project site supports a substantial population of coast horned lizard. Additionally, three populations of coast horned lizard occur within 5 miles to the south and west of the project site. Due to the small size of the project site, the lack of a population of coast horned lizard within the project site, and the presence of three populations within the vicinity, any potential impact to individuals of the coast horned lizard as a result of the project would not result in significant impacts to the species as a whole. Therefore, the proposed project would not have a significant impact as it relates to the coast horned lizard.

The desert tortoise was determined to have a moderate potential to occur due to the proximity to the nearest known occurrence (1.5 miles) and because the project site provides suitable habitat for the species. In order to determine if the proposed project would have a significant impact on the species, focused surveys were performed. The result of these focused surveys determined that desert tortoise is not present within the project site. Even though desert tortoise was determined to not be present within the project site, the species generally covers a large range and the site's close proximity to a known population of desert tortoise means that the species could be present on site before grading occurs. If this occurs, the proposed project could have a significant impact on the species.

Additionally, the construction of the proposed project site will introduce trash containers and littering, which could attract ravens to the area. Common ravens are known to kill young or weak tortoises, and increasing the numbers of ravens could have a significant impact on the desert tortoise.

Nesting Birds

Birds and their nests are protected under the MBTA and CDFG codes. The proposed project does have suitable nesting bird habitat throughout. If the nesting birds or the nests are disturbed by construction activities, the proposed project would have a significant impact.

Regional Connectivity/Wildlife Corridor

The proposed project is not within a recognized wildlife corridor as shown in the Biological Resources Values/Open Space/Conservation Areas map in the Town General Plan (TYV 1995). Therefore, the proposed project will not have a significant impact on the regional movement of wildlife in the area.

Jurisdictional Water Resources

Aerial photography and field visits were used to determine if any jurisdictional features were present within the project area. It was determined that no jurisdictional features are present within the proposed project area, therefore; the proposed project will not have a significant impact on jurisdictional waters.

General Plan

Relevant policies from the Town's Biological Resources Element are worthy of discussion:

Policy 3 All development proposals on vacant lands shall be reviewed and evaluated to assure minimal impacts on existing habitat and wildlife.

Program 3.A Conduct a thorough assessment of impacts to habitat and/or wildlife associated with proposed development, including requiring the preparation of detailed biological resource surveys and mitigation programs in identified sensitive areas of the Town.

- Policy 5** Until such time as the Western Mojave Coordinated Management Plan is adopted, the Town shall continue to require Desert Tortoise surveys and, as appropriate, Habitat Conservation Plans and will consult, confer and cooperate with the Bureau of Land Management, USFWS and other appropriate agencies on the Western Mojave Coordinated Management Plan (West Mojave Plan).
- Policy 5.A** Until adoption and implementation of the Western Mojave Coordinated Management Plan, the Town shall continue to require Desert Tortoise surveys and, as appropriate, Habitat Conservation Plans, for new development in compliance with Federal Section 10a(1)(B) of the Endangered Species Act.
- Policy 6** To the extent practical, the Town shall require developers to salvage native Joshua trees and shrubs for incorporation into project landscaping or transplant trees to other sites.
- Policy 8** Developers and others required to submit landscape plans to the Town for approval shall be required to use native and approved, non-native, drought tolerant plant species which provide or enhance wildlife habitat and serve to extend the local desert environment into the urban design of the Town. Pro actively encourage and promote an appreciation of sensitive biological resources and the integrated local environment.

In conformance with Policy 3, Program 3.A and Policy 5, detailed biological investigations, including focused surveys for desert tortoise, were conducted to evaluate impacts to biological resources. Although surveys for desert tortoise were negative, mitigation, including preconstruction clearance surveys, will be incorporated into the project to minimize potential impacts to this species. In addition, the project site plan will undergo design review. However, aside from the relocation of approximately 166 salvageable Joshua trees into project landscape plans, the project will convert all impacted lands from natural open space to urban commercial retail. Joshua trees shall be salvaged in accordance with Policy 5. A landscape plan utilizing an approved plant palette will be submitted to the Town for review in accordance with Policy 8.

3.3.4 - Standard Conditions and Uniform Codes

Town of Yucca Valley Ordinance No. 140, Plant Protection and Management

Because the project site contains Joshua trees, the proposed project is required to be in compliance with the Town's Plant Protection and Management Ordinance. The proposed project is required to submit, and receive approval for a salvage plan and to receive a native plant removal permit prior to removing or relocating any Joshua trees.

3.3.5 - Project Design Features

The project incorporates salvaged Joshua trees into the landscape plan.

3.3.6 - Mitigation Measures

The proposed project has a potential to have an impact on a protected plant species (Joshua tree), a sensitive wildlife species (desert tortoise), and nesting birds. The following mitigation shall be required to reduce impacts to biological resources to less than significant.

Joshua Trees

The proposed project will require the removal of up to approximately 235 Joshua trees, which are protected under the Town's Plant Protection and Management Ordinance. The following mitigation measures are required to ensure that the proposed project does not have a significant impact on Joshua trees.

- B-1** Prior to issuance of a grading permit, a native plant removal permit must be obtained from the Community Development Director. Prior to the issuance of a native plant removal permit, a plot plan indicating exactly which trees are authorized to be removed or relocated and a Joshua tree salvage plan shall be approved by the Community Development Department. Upon approval, all guidelines and recommendations shall be incorporated into the proposed project.
- B-2** To the extent feasible, salvaged trees shall be incorporated into the project's landscape plan. Any remaining trees will be made available for adoption for 30 days prior to grading activity according to the Town's adoption program.

Desert Tortoise

Although desert tortoise were not observed within the project site, due to the presence of a desert tortoise population within 1.5 miles of the project site, the following mitigation shall be incorporated to minimize potential for impacts to this species.

- B-3** All grading and clearing limits must be staked and confined to the smallest practical area.
- B-4** In compliance with the USFWS 1992 Field Survey Protocol for desert tortoise, a pre-construction clearance survey is required in addition to the focused protocol survey. A pre-construction clearance survey shall be conducted within 30 days prior to any ground disturbing activities. If the clearance survey is positive, incidental take permits will be required from the USFWS and the CDFG prior to any ground disturbing activities. The permits would stipulate required actions such as relocation of the tortoises, installation of a tortoise proof fence, etc.
- B-5** Pursuant to the USFWS 1992 Field Survey Protocol, focused presence/absence surveys, which must be conducted during the activity period of the tortoise between March 25 and May 31, are valid for one year. Therefore, if construction is not initiated prior to March 25, 2006,

another focused protocol survey will be required between March 25 and May 31 to determine presence/absence of desert tortoise within the project site impact area. If the focused protocol survey is positive, incidental take permits will be required from the USFWS and the CDFG.

- B-6** In order to minimize impacts due to increased numbers of common ravens on desert tortoise, all trash containers shall be securely covered. In addition, to reduce littering, signage should be posted throughout the project site stating fines for trash dumping in open areas.
- B-7** Prior to the initiation of grading activities, all construction personnel shall participate in an education program. The program will be taught by a qualified biologist and will inform personnel of the status of the tortoise under the Endangered Species Act, that desert tortoise are not to be handled or otherwise harassed, that if a desert tortoise is encountered all construction must cease until proper action is taken, and provide the contact information of a biologist qualified to handle desert tortoise in the unlikely event that a desert tortoise is encountered.
- B-8** If a desert tortoise is encountered during ground disturbing activities, the qualified biologist shall be contacted. The qualified biologist will take appropriate actions to avoid take of the tortoise. All actions will be coordinated with the USFWS and CDFG.

Nesting Birds

Birds and their nests are protected under the MBTA and CDFG codes. In order to reduce impacts to less than significant levels, the following mitigation is required.

- B-9** The removal of vegetation or other potential nesting habitat shall be conducted outside of the avian nesting season (February through August). If construction occurs during the avian nesting season, a pre-construction nesting bird survey shall be conducted seven days prior to any ground disturbing activities. If birds are found to be nesting inside, or within 250 feet (500 feet for raptors) of the impact area, construction will need to be postponed until it is determined by a qualified biologist that the nest is no longer active.

3.3.7 - Level of Significance After Mitigation

With implementation of the above mitigation measures impacts to biological resources are considered less than significant.

3.4 - Cultural Resources

This section evaluates potential impacts to cultural resources from development of the Home Depot Retail Center. The term “cultural resources” includes archaeological, paleontological, and historic resources. Archeological resources may be either prehistoric or historic in origin. The California Environmental Quality Act (CEQA) requires evaluation of such resources on project sites prior to development. Unique resources, as defined by State law, should be protected, either by physical measures or by locating development away from the site. If human remains are recovered, State law requires immediate notification of the County coroner, and cessation of work until the situation is resolved.

3.4.1 - Existing Conditions

In order to examine potential impacts to cultural resources from the proposed project, MBA conducted a cultural resource survey (MBA 2005a, see Appendix D). Included in the survey were a cultural resource records search, a field survey and a paleontological records search for the following three Assessor’s Parcel Numbers (APNs):

- APN 0601201310000
- APN 0601201320000
- APN 0601201370000

These parcels cover approximately 61 acres, and included land between the proposed project site and Avalon Avenue. The resulting report also describes the historic and prehistoric background for this area (see Appendix D).

The cultural records search was conducted to determine whether any previously recorded cultural materials are known to be present within the boundaries of the study area, or within a one-mile radius of the study area. This records search was conducted in June 2005. The project area was surveyed on June 4 and 5, 2005 in order to determine if there is evidence of cultural resources within the project boundaries. Additionally, archived aerial photographs, topographic maps, and road maps were examined in order to reveal historic land uses of the project area. Also in June 2005, the San Bernardino County Museum performed a review of paleontological records to determine the likelihood of finding paleontological resources on the project site.

The cultural records search, which utilized archives in the Archeological Information Center (AIC) at the San Bernardino County Museum, indicated that the study area had not previously been surveyed for cultural resources. The search also indicated that no cultural resources have been recorded within the footprint of the project. According to AIC files, 15 archeological investigations have occurred near the study area. Seven known resource localities sites are known for the one-mile radius, but these lie outside the project footprint.

One historic resource, SR-62, was recorded in 2000 by SWCA, Inc (SWCA). SWCA research showed that, in 1943, the highway was known as the Parker Dam Road and linked Parker with Palm Springs. The pavement and the shoulder of the highway have been altered from the original. Table 3.4-1 shows previously recorded cultural resources within the 1-mile radius of the study area.

Table 3.4-1: Previously Recorded Cultural Resources

Resource Number	Type	Would Development Affect the Resource?
CA-SBR-4851	A lithic reduction site	No
CA-SBR-4852	A lithic scatter	No
CA-SBR-4853	A lithic scatter	No
CA-SBR-4854	A lithic reduction site	No
CA-SBR-9988H	An Historic refuse disposal site	No
CA-SBR-1052H	An historic highway, SR-62	No
CA-SBR-11658H	A structural site	No
Source: MBA 2005a.		

The cultural survey included a review of historical aerial photographs, topographic maps, and road maps. Review of these photographs and maps indicate that the project site has historically been undeveloped.

No cultural resources of potential significance were observed during the field survey. Several isolated historic artifacts and remnant building foundations were observed in parcel No. 32, and in the far northeast corner of parcel No. 31. The foundation remnants appeared to be less than 45 years old, need not be recorded as historic resources, and are not qualified for inclusion in the California or National Registers. Additionally, a few older cans and bottles were observed on the modern ground surface, but these are not considered to be significant resources, as they appear to represent isolated trash drops. An additional 60 acres south of the area of direct effect was also surveyed, and no cultural resources were found.

Additionally, a letter consultation with the Native American Heritage Commission (NAHC) has taken place as part of the study; the Town of Yucca Valley is still required to undertake additional consultation to fulfill the requirements of Senate Bill (SB) 18.

Eric Scott of the San Bernardino County Museum completed a review of the paleontology of the study area. Mr. Scott's evaluation of the potential paleontological resources within the project footprint can be found in Appendix C of the cultural survey (MBA 2005). The review found that the project area is covered with *Quaternary older alluvial* sediments, which date from the Pleistocene Era. Older Pleistocene sediments of the Mojave Desert have exhibited numerous extinct taxa, including ground sloth, saber-toothed cat, mammoth, horse, llama, and bison. The research found that there were no paleontological localities recorded from the proposed project site. The closest

recorded fossil locality, SBCM 1.95.1 is located approximately 5 miles west of the project site. The cultural survey concluded that based on the paleontological review that it is likely that fossil resources will be found in the project footprint at the modern ground surface level, and below the modern ground surface.

3.4.2 - Thresholds of Significance

The proposed project would have potentially significant impacts as it relates to cultural resources if the project would:

- Cause a substantial adverse change in the significance of a historical or archeological resource as defined in Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

3.4.3 - Project Impact Analysis

Development of the proposed project has the potential to expose or damage cultural resources on the project site, if present. In order to determine if cultural resources are present on the site, and to determine the likelihood of encountering cultural resources, a cultural resources survey was conducted (2005a, see Appendix D). This survey included a cultural records search, review of historical aerial photographs, a field survey, and paleontological records search.

The cultural records search identified no cultural resources within the project footprint, and seven within a 1-mile radius of the study area. Development of the project footprint would not affect any of these resources. Additionally, examination of historical aerial photographs and maps did not show the presence of any structures, and suggests that the site has never been developed. Because no structures, or other evidence of the site having any other land use, were recognized in the historical aerial photographs/maps, the review did not support the presence of cultural resources within the project boundaries.

Project related highway improvements could affect adjacent SR-62, which was recorded as a historical resource in 2000, but not evaluated for significance. The historical nature of this resource seems to stem from a route titled LRN218 and use of this route as a historical passage. Anticipated improvements that affect SR-62 include:

- Construct roadway improvements on the south side of SR-62 from Avalon Avenue to 500 feet east of the project site including: 1) a third eastbound through lane along the entire segment; 2) a merge/ right turn transition lane, and 3) raised medians along the street frontages of the YVRC and the proposed project
- Install a traffic signal at SR-62 and the proposed primary project entrance

- Construct a left turn pocket from westbound SR-62 into the new signalized driveway at the project site
- Construct a shared driveway south of the new signalized intersection on SR-62
- Construct a secondary driveway from Palisade Drive near the easterly project entrance
- Construct a secondary (right-in/right-out) driveway from improved SR-62 near the easterly property line
- Modify the SR-62/Avalon intersection to provide additional turning lanes

See Section 2.5.5 of the Project Description and Section 3.11 on Traffic and Circulation for additional discussion of improvements. Even with these improvements, no significant direct impacts are anticipated because the pavement and road shoulders have already been modified from the original configuration.

Several isolated historic artifacts were found, as well as a remnant building foundation in parcel 32 and in the far northeast corners of parcel 31. The foundation remnant appears to be less than 45 years old, and does not qualify for inclusion in the California or National Registers. A few older cans and bottles were observed on the ground, but these are not considered significant resources, and appear to be isolated trash drops. The field survey did not identify any significant cultural resources.

The project site is within one mile from an intermittent stream channel that could have been used by prehistoric peoples as they passed through the area on their way to the Coachella Valley and Cabazon regions to the south. The area does not appear to contain permanent springs, so villages are not likely in this area; however, temporary encampments are possible.

Based on the evidence, there is a moderate potential for impacts to buried cultural resources within the project area. Because there is a moderate potential to uncover buried cultural resources, the cultural survey includes a recommendation that monitoring by a qualified archeologist should occur during the grading process.

The evaluation of the potential for paleontological resources to occur within the project footprint showed that the project area is covered in *Quaternary older alluvial* sediments from the Pleistocene Era. Sediments from the Older Pleistocene in the Mojave Desert have commonly contained numerous extinct taxa. Because of this, it has been concluded that it is likely that fossil resources will be found in the project footprint at the modern ground surface level, and below the modern ground surface. Because there is a chance that significant paleontological resources will be impacted during development, it is recommended that monitoring by a qualified paleontologist be done during site grading.

No conditions exist that would suggest that human remains are likely to be found on the site. If human remains are found, those remains would have to be treated properly, in accordance with applicable laws. Also, see discussion in Section 3.4.4 below.

General Plan

The proposed project is consistent with the Town's policies and programs on cultural resources. In particular, the following policy and related program are relevant:

Policy 2 Exercise its responsibility to locate, identify and evaluate archeological, historical and cultural sites, and shall assure that appropriate action is taken to protect these resources.

Program 2.A Insure that development or land use proposals, which have the potential to disturb or destroy sensitive resources, shall be evaluated by a qualified professional through appropriate resource surveys, and that mitigation measures are implemented (TYV 19995).

As part of the environmental investigation conducted for this project, a cultural resources survey was conducted by a qualified professional, thereby complying with and furthering Program 2.A of the Archeological and Historical Resources Element.

3.4.4 - Standard Conditions and Uniform Codes

State of California Public Resources Health and Safety Code 7050.5-7055 describes the general provisions for human remains. Specifically Health and Safety Code 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. If human remains are found during excavation, excavation must stop in the vicinity of the find and any area that is reasonable suspected to overly adjacent remains until the County coroner has been called out, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains. If the coroner determines that the remains are those of a Native American, or has reason to believe that they may be of a Native American, the coroner must contact the NAHC to facilitate compliance with the Native American Graves and Repatriation Act.

Senate Bill 18 (SB18) was signed into law in September of 2004 and, as of March 1, 2005 requires that local governments conduct consultations with California Native American tribes that are on the NAHC's contact list, and have traditional lands within the local government's jurisdiction prior to local officials adopting or amending a general plan or specific plan. The purpose of these consultations is to preserve or mitigate impacts to Traditional Tribal Cultural Places (Native American historic, cultural, and sacred sites as well as features, and objects) located in the jurisdiction. Local governments must send their general plan and specific plan proposals to those California Native American Tribes. Because the project involves the commencement of a specific plan on previously undeveloped land, the proposed project is required comply with SB 18.

3.4.5 - Project Design Features

No project design features applicable to cultural resources have been identified.

3.4.6 - Mitigation Measures

There is a possibility that cultural and/or paleontological resources are present within the project site. Potential impacts to cultural and paleontological resources as a result of the proposed project will be mitigated by the following mitigation measures:

CR-1 An archaeological mitigation-monitoring plan shall be developed before grading begins. Archaeological monitoring of development-related excavation within the project footprint is required during construction-related earthmoving in the project footprint. Based upon the results of the cultural report, the upper 10 feet of topsoil should be monitored. Monitoring can be discontinued on the advice of the Project Archaeologist if, after 100 percent of virgin soils to 5 feet below original grade has been monitored, no cultural resources have been identified. Soils that have been turned previously or imported fill need not be monitored for cultural deposits.

CR-2 A paleontological mitigation-monitoring plan shall be developed before grading begins. Specific recommendations developed by Eric Scott (Appendix C of the Cultural Resources Survey) should be followed.

Once excavations associated with this development begin, monitoring of excavations in areas identified as likely to contain paleontological resources by a qualified paleontological monitor shall take place. Based upon the results the cultural resources report, areas of concern include all previously undisturbed sediments of *Pleistocene older alluvium* present within the boundaries of the project footprint.

Paleontological monitors should be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if the potentially fossiliferous units described in the Cultural Resources Survey are not present, or if present, are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.

3.4.7 - Level of Significance After Mitigation

Impacts to cultural and paleontological resources from the proposed project would be less than significant with implementation of mitigation measures CR-1 and CR-2.

3.5 - Earth Resources

The purpose of this section is to address the existing geology conditions, as well as to address potential impacts related to geology as a result of the proposed project. Information for this section was obtained from site observations and the geotechnical investigation conducted by Southwest Geotech, Inc. (SWG 2005), a Seismic Hazards Study completed by Stephen Jacobs (SEG 2004), a fault investigation completed by Stephen Jacobs (SEG 2005), and other supplemental information which is included in Appendix E of this EIR. This section addresses regional and local geology, seismicity, hazards, soil types, and soil erosion processes that affect the project site, as well as the potential to impact mineral resources.

3.5.1 - Existing Conditions

The project site is within the Morongo Basin, between two mountain ranges, the Little San Bernardino Mountains, and the Sawtooth Mountains. The topography of the project site is relatively flat, with a cover of native vegetation. The soils onsite are sandy alluvium with intermittent layers of fine to coarse gravel and rock fragments.

Slope

The project site has a gentle slope from the southwest corner of the site to the northeast corner. The elevation ranges from approximately 3,180 feet at the northeastern portion of the site to approximately 3,220 feet at the southwestern corner of the site. Although the site is gently sloping, the northwestern portion has a steep embankment adjacent to SR-62, that is at least 6 feet above the roadway. The project site is traversed by minor northeast trending swales which provide natural drainage across the site during major storm events. These swales feed into a blue-line stream northeast of the project site.

Soils

The soils onsite are sandy alluvium. The site is underlain by sandy alluvial soils which are typically well graded sands with some silt and intermittent layers of fine to coarse gravel and rock fragments to at least 46 feet deep. The soils do not exhibit any characteristics of expansive soils (SWG 2005). The age of the soils in vicinity are Cenozoic era and Quaternary system and series (ENV 2005). The Natural Resource Conservation Service (NRCS) has not classified the soils in this area, so no NRCS classed are identified.

Erosion

Because of the loose nature of these soils, they are considered erodible. Erosion is the process by which the land surface is transported by wind or moving water. The sandy soils onsite are considered susceptible to erosion, especially because low local precipitation amounts limit vegetation growth that would otherwise anchor soils with their root structures. Additionally, infrequent hard storms can erode soils and cause flooding. On the project site, surface runoff and erosion from water appear to

be minimal due to the gentle slopes. Blowing dust can be a temporary and infrequent hazard in the project area. This can result in a dust hazard during periods of high winds, especially in the fall during “Santa Ana” wind conditions. The majority of onsite soils are not readily subject to wind erosion due to their composition.

Landslides/Rockfalls

The project site and the surrounding area are composed of relatively little topographic variation. Given the topography of the project site, there is not a significant potential for landslides or rockfalls within the project footprint.

Seismicity and Faulting

The Town of Yucca Valley is located within a fault controlled basin that extends westward through Morongo Valley and eastward beyond Twentynine Palms. The faults in this area are part of the California Shear Zone, a broad belt of faults in the Mojave Desert, which transfers motion from the San Andreas Fault Zone to the Basin and Range Province.

The project site is located in a region that is subject to moderate to strong seismic activity from numerous regional faults. These faults could create moderate to strong horizontal accelerations and strong ground shaking. An active fault is defined as one which has had surface displacement within the Holocene (approximately the last 11,000 years). Potentially active faults are faults that have been active during the Quaternary Period (the last 1.6 million years). These definitions are used to delineate Earthquake Fault Zones as mandated by the Alquist-Priolo Earthquake Fault Zone Act, which requires fault investigation on sites located within Special Studies Zones to preclude new construction of certain habitable structures across the trace of active faults. While the project site is not within a Special Study Zone, the Study Zone for the Pinto Mountain Earthquake Fault is located approximately 0.25 kilometer (km) east of the project site. The fault is not easily located in this area, given the large volume of young sediments.

Local Faults

The Seismic Hazards Study identified local and regional faults with potential to affect the project site. Each of these faults is further described below and identified in Table 3.5-1, including the Pinto Mountain Fault which is the closest known fault to the project site.

Table 3.5-1: Local Faults

Faults	Distance from the Project Site (miles)	Direction from Project Site	Maximum Credible Magnitude	Peak Site Acceleration
San Andreas Fault Zone	9	SW	6.8 to 8.0	0.43
Johnson Valley Fault	2	N	7.4	0.60
Pinto Mountain Fault	<0.5	W	7.4	0.60
Burnt Mountain Fault	1.5	SW	6.4	0.55
Eureka Peak Fault	1	S	6.7	0.57
Source: TYC 1995; SEG 2004. Appendix E.				

San Andreas Fault Zone

Probably the most well know in California, this fault system is the boundary between the Pacific and North American Plates, moving relative to each other at the rate of a few inches per year. This fault is widely recognized as the longest, most active fault in the State. It has been mapped from Cape Mendocino in northern California to near the Mexican border. The fault is known to be active from historic earthquakes, some of which have caused surface rupture, and from abundant evidence of displacement of recent sediments. With a slip rate of 20 to 35 millimeters per year, the maximum credible magnitude estimates along the San Andreas Fault is perceived to be 6.8 to 8.0. The mean peak horizontal ground accelerations is anticipated to be about 0.43g (1g equals the acceleration of gravity) in the Town of Yucca Valley. This fault is located over nine miles southwest of the project site.

Johnson Valley Fault

On June 28, 1992, the Landers earthquake, the strongest earthquake to occur in Southern California in 40 years occurred on the Johnson Valley Fault. The earthquake was a magnitude 7.6, and occurred north of the Town limits. The fault is a northwest trending fault that extends from Pipes Canyon Wash to Soggy Lake near the Fry Mountains. The fault is capable of generating a maximum credible earthquake of magnitude 7.3 and could generate a peak horizontal ground acceleration of 0.60g (TYV 1995). This fault is approximately 2 miles northwest of the project site.

Pinto Mountain Fault

The Pinto Mountain Fault is an east-west trending fault, associated with the San Andreas Fault. The Fault experienced some ground ruptures as a result of the Landers Earthquake. The Pinto Mountain Fault is capable of producing a maximum credible earthquake of 7.4 magnitude, and could generate a peak horizontal ground acceleration of 0.60g (TYV 1995). Given the uncertainty of the specific location of the fault in the project vicinity, the seismic study indicated that the fault trace could traverse the project site and recommended a fault investigation (SEG 2004). Therefore, a fault investigation was conducted to determine whether the fault traversed the project site (SEG 2005). A north-south trench across the entire project site did not identify any evidence of faulting. The fault involved excavation of a 1,200-foot exploratory trench to examine the subsurface soils for possible

fault(s) crossing the property to a depth of approximately 5 feet. No faults or offset sedimentary units were observed in the trench. Sedimentary units are of an unknown age, but presumed young. Based on the lack of offset structures in this shallow fault, the report concluded that active strands of the Pinto Mountain Fault do not cross the project site (SEG 2005).

Burnt Mountain Fault

The Burnt Mountain Fault is a southward trending fault that was discovered as a result of the Landers quake. Analysis of this fault indicates that it is a segment of a fault linking, in the subsurface, the Johnson Valley Fault with the East Wide Canyon Fault to the south. If the Burnt Mountain Fault breaks separate from the Johnson Valley Fault, it could generate maximum credible earthquake of magnitude 6.4 and could produce a peak horizontal ground acceleration of 0.55g (TYV 1995). This fault is located approximately 1 mile southwest of the project site.

Eureka Peak Fault

The Eureka Peak Fault is a southeastward trending fault which also experienced ground rupture during the Landers earthquake. This fault is capable of producing a maximum credible earthquake of magnitude 6.7, and could generate a peak horizontal ground acceleration of 0.57g. The Eureka Peak Fault is located approximately 1 mile south of the project site.

The project site, as well as the rest of Southern California, has a moderate to high seismic risk due to numerous faults and extensive historical and ongoing seismic activity. The actual potential for damage caused by seismic effects depends on a number of factors such as the proximity to active or potentially active fault zones, and the geologic composition of the area. Seismic damage is generally less intense in consolidated materials, such as bedrock, than in unconsolidated materials, such as alluvium.

Seismic Effects

The primary effects of an earthquake include surface rupture, ground shaking, liquefaction, subsidence, differential settling, and seiches. The occurrence of any of these effects depends on many factors including earthquake intensity, distance from the epicenter, soils type, and the moisture content of the soil. Following are descriptions of primary and secondary seismic effects.

Surface Rupture

Displacement or fracturing of the ground surface in either a lateral or vertical direction typically occurring directly over the fault involved. The geotechnical report found no evidence of any active fault structures onsite thus the potential for surface rupture is considered low.

Ground Shaking

The wave energy released during an earthquake will result in ground shaking with the intensity largely dependent on soil type, surface geology, and earthquake intensity. The project site is on alluvium and sand extending to a great depth and is considered susceptible to strong ground shaking.

Liquefaction

This occurs when seismically induced groundshaking causes water-laden soils without cohesion to form a quicksand-like soil condition below the ground surface. Structural damage then occurs as building foundations lose ground support. Liquefaction most often occurs in areas of shallow groundwater underlying areas with loose, unconsolidated soils. The geotechnical report did not find groundwater, at depths of 45 feet, and suggested that groundwater depths below the project site exceed 100 feet. Groundwater has been measured at depths of approximately 378 to 384 feet below the ground surface in the vicinity (ENV 2005). Therefore, the liquefaction potential on the project site is considered low.

Subsidence and Differential Settling

Settling occurs as groundwater is withdrawn; areas of loose and soft, soil materials could experience mass settlement from surface loading. Where there is a mixture of soil types of different compressibility, differential settling can also occur. Shaking for any length of time could cause additional settling of the underlying soils, thus lowering the ground surface level. The geotechnical report found a potential of subsidence up to 2.75 inches based on groundwater, existing soils, and potential peak seismic ground acceleration.

Seiches

Ground shaking can cause standing waves or oscillations, called seiches, of water contained in ponds and reservoirs. With severe shaking, on-site or off-site reservoirs may experience seiching, which could cause tank rupture during severe events. In a major event, structures immediately downstream of a reservoir or water tank may experience localized flooding. There are no reservoirs or water tanks on the project site or in the project vicinity which are uphill of the project site.

Mineral Resources

The project site is not located within an area considered to contain local or state important mineral resources (USGS 2005). According to Town staff, no important mineral resources have been identified within the Town limits. The Town of Yucca Valley and the vicinity have relatively few mineral resources (TYV 1995). Sand and gravel are considered an important economic resource due to the high demand for these materials as a road base and for other building materials.

3.5.2 - Thresholds of Significance

The proposed project would potentially have a significant impact as it related to earth resources if the project would:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - 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.
 - f) Result in the loss or availability of a known mineral resource that would be of value to the region and the residents of the state; or
 - g) 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.

3.5.3 - Project Impact Analysis

Faulting and Seismicity

Seismic and geologic hazards are prevalent throughout Southern California and must be acknowledged as a serious issue. The various active faults in the region require careful consideration when determining suitable land uses and structural design. The original geotechnical study for the site recommended a fault investigation to determine whether the Pinto Mountain fault traversed the project site. A fault study was conducted and the project geotechnical reports concluded that the potential for fault rupture on the site was negligible, therefore, the potential impact is considered to be less than significant.

There are various regional faults in the area including the San Andreas, Johnson Valley, Pinto Mountain, Burnt Mountain, and Eureka Fault Zones which are capable of producing major earthquakes and substantial ground shaking at the project site.

Development of the proposed project will introduce a Home Depot home improvement store as well as other retail stores and a restaurant to an area which is subject to moderate ground shaking, settling, and other seismic related hazards. These hazards are similar to those experienced throughout much of Southern California, and are not substantially elevated for the project site. Because a potential exists for large magnitude earthquakes along these faults, the site has a potentially significant seismic risk (i.e., impact). Southwest Geotech, Inc. has made recommendation with regard to grading and building designs, which must be implemented to reduce these impacts to be less than significant

levels. These recommendations are related to grading and footings, and construction of project buildings.

Most injuries or deaths sustained in earthquakes are caused by objects or materials falling onto a person. The standard stocking practices for goods in a Home Depot home improvement store warrants further evaluation of potential hazards within the store. Goods are largely stocked and stored on the consumer floor of the store on shelves up to 30 feet high. In the event of an earthquake, high ground acceleration levels and strong shaking could overturn shelves or pitch materials outward and pose a physical threat to employees and consumers. This is considered a significant impact to public safety.

Liquefaction and Seiches

Liquefaction is most commonly a problem in areas of shallow groundwater underlying areas with loose, unconsolidated soils. No groundwater was encountered within the project site, at depths up to 45 feet below the surface, and is believed to be in excess of 100 feet below the surface. Additionally, soils that are well percolated, as are those on-site, tend to have deep groundwater. Groundwater in the Town of Yucca Valley is generally around 200 feet below the surface.

The project will introduce water into the soils at the project site in two ways: 1) an elongated detention basin along the south side of the project site; and 2) a septic system for the disposal of waste water. The introduction of water in these soils can increase liquefaction potential for these locations, and must be considered in the design of these facilities. The detention basin will be largely devoid of water except during and following major storm events. In the event of an earthquake which coincides with the timing of a storm event, a seiche would be possible, though unlikely.

Landslides/Rockfalls

The project site is relatively flat with no rocky outcropping. Additionally, the Town General Plan has mapped areas within the Town that are susceptible to landslides and/or rockfalls; the project area is labeled as being an area with low susceptibility for landslides and/or rockfalls. The project area therefore, will not create a significant impact as it relates to landslides or rockfalls.

Erosion

The project will temporarily increase the potential for erosion by disturbing local soils during grading activities for parking lots, building pads, and slopes. Measures, including Best Management Practices (BMPs) will be required to reduce impacts associated to erosion to be less than significant during grading (also see Section 3.13, Water Resources).

During the operation of the project, except for landscaping and detention basin areas, the entire project site will be developed over for parking, internal roadways, and buildings. The operation of the project would not create any erosional hazards.

Soil Limitations

The soils on site are loose in the upper 10 to 15 feet and will require over-excavation and recompaction in building, slab and pavement areas (SWG 2005). Specific recommendation made in the report shall be followed to ensure the stability of the soils. As mentioned above, impacts due to liquefaction are not anticipated due to the relatively deep groundwater near the project site. The report also found that the soils are not expansive. Given the soil characteristics, as long as recommendations are followed, no significant impacts are anticipated due to soil limitations.

Mineral Resources

The project site contains sand which is a useful material for road building and other uses. Sand and gravel deposits represent an important economic resource for the State of California. Sand and gravel are in high demand and the Town General Plan recognizes that these resources should be preserved. However, the Town has not identified any important mineral resource areas in mapping programs recommended in the General Plan. Although the proposed project area contains a known mineral resources that could be of value to the region and the residents of the State, the proposed project area is close to residences and other commercial areas. The close proximity of these other uses would result in an incompatible land use if a mining operation were to be established within the project site. The project site is in a high profile area adjacent to SR-62, could create undesirable aesthetic conditions if used for mineral extraction, including vegetation removal, blight, and impaired driving conditions (dust) on SR-62. In addition, the project site has been specifically zoned by the Town for commercial development under a specific plan, clearly indicated the Town's intent for high-quality commercial development in this area (TYV 2004). Because the site is generally unsuitable for mining aggregate resources, the proposed project would not result in a loss of availability of a locally important mineral resource recovery site. Impacts to mineral resources as a result of the proposed project would be less than significant.

General Plan

Seismic Safety

Relevant goals, policies, and programs from the Seismic Safety Element are identifies as follows:

- Policy 2** In accordance with State Law, development proposal within designated . . . Earthquake Fault Zones shall be accompanied by appropriate geological analysis.
- Policy 5** Play an active role in the development and/or distribution of earthquake preparedness information and materials to Town residents and local businesses.
- Program 7.A** Development applications shall include plans indicating the location of leach fields and seepage pits to be reviewed by Town staff to identify potential for ground saturation and may require their location away from foundation and other structural supports.

As part of the project feasibility and environmental planning, geologic investigations have included an engineering report, seismic hazards study, and a fault investigation which satisfy Policy 2 of this element. The home improvement center is particularly well suited to assist the Town with the implementation of Policy 5 by disseminating information on earthquake preparedness. The project shall be required to position septic systems in accordance with Program 7.A.

Mineral Resources

The Mineral Resources Element identifies goals, policies and programs regarding the extraction of mineral resources within the Town.

Program 1.A Coordinate with the State of California . . . Division of Mines and Geology in the identification and mapping of existing mineral resources.

Program 2.A Prohibit surface and deep mining within the Town without extensive review the environmental impacts and availability of alternative resources.

Program 3.A Maintain up-to-date information on existing and newly discovered deposits of valuable and/or significant mineral resources, and shall periodically review land use patterns to assure the long-term availability of these resources.

Program 3.B Develop and implement thoughtful review processes related to all development applications which have the potential to disturb existing mineral resources.

While these programs are not necessarily directly applicable to the project at hand, they provide perspective into the values of the Town on this subject. This content emphasizes the identification and protection of important resource areas with consideration of the environmental impacts of such extractions, and potential land use conflicts. According to Town staff, no important mineral resources have been identified within the Town limits. In addition, as indicated above, use of the project site as a mineral extraction location is unsuitable because of the close proximity to local housing, the prominent location along SR-62, and the preferred zoning for this area.

3.5.4 - Standard Conditions and Uniform Codes

The project will comply with standard building requirements for public health and safety. The proposed project is in UBC Seismic Zone 4. The Uniform Building Code (UBC) provides guidance and standards for development of structures in areas susceptible to strong ground shaking, and compressive soils. Building to these standards will result in sound building construction designed for areas susceptible to these conditions.

Septic systems will comply with County of San Bernardino and Colorado Regional Water Quality Control Board requirements which are designed to protect water quality.

3.5.5 - Project Design Features

No project design features applicable to earth resources have been identified.

3.5.6 - Mitigation Measures

The following measures will provide for the development of the project structures with consideration of the soil conditions and seismic potential at the project site.

- ER-1** Southwest Geotech, Inc.'s *Report of Geotechnical Engineering Study* (SWG 2005, Appendix E of the Draft EIR) includes recommendations for the design, grading, and construction of project facilities, which, if implemented, make the project feasible from a geologic engineering standpoint. Issues addressed include site preparation and grading, cut and fill slopes, erosion control, foundation design, sign pylon foundation, concrete slab and pavement sections, cement type and concrete strength, asphalt pavement sections, and subsequent plan reviews. All recommendations outlined in their investigation shall be implemented, to the extent they are not modified by more recent and refined investigations, in which case the measures shall be implemented as modified.
- ER-2** Septic system leach fields or pits shall be located away from structures to reduce liquefaction potential.
- ER-3** Design detention basin with consideration of seismic potential in order to withstand a potential seiche.
- ER-4** Prior to the issuance of occupancy permits, the owner/operator for the home improvement center shall submit an Internal Seismic Safety Plan (ISSP) for review by the Building and Safety Department which addresses internal design and stocking practices to be implemented to minimize injuries to employees and the public in the event of an earthquake. The ISSP shall address the bracing of shelving, define the appropriate stack heights and weights for materials, the strapping/containment of stocked materials, and other measures that would further achieve public safety.
- ER-5** In support of the Town's Seismic Safety Element, the home improvement center shall participate in the dissemination of prepared information on earthquake preparedness. Such materials could be disseminated through a point of purchase display with everyday relevant sales materials, in a special display, or during a special event. This measure emphasizes access to the store as a public outreach tool, and does not obligate the home improvement center to expend staff or revenues in this endeavor.

3.5.7 - Level of Significance After Mitigation

With implementation of mitigation measures ER-1 through ER-5, impacts to earth resources would be less than significant.

3.6 - Hazards and Hazardous Materials

A Phase I Environmental Site Assessment (ESA) was conducted to evaluate site conditions and determine whether there are any recognized environmental conditions at the site. Recognized environmental conditions refer to the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.

ENVIRON International Corporation (ENVIRON) conducted a Phase 1 ESA in February 2005 which covers the proposed project site (ENV 2005) (see Appendix G). The analysis by ENVIRON only consisted of the portion of the site to be occupied by Home Depot. Even though the analysis was not meant to analyze the entire site, the database research and historic use research are also applicable to the remainder of the project area since they encompass the project site and surrounding environs. Additionally, although the site visit consisted of an evaluation of only a portion of the proposed project site, MBA examined the balance of the site and found it to be consistent with the results in the ESA by ENVIRON. Therefore, the referenced ESA (ENV 2005) is considered reflective of the entire project site for the purpose of this evaluation.

The ESA evaluation included a site visit, an interview with the property realtor, a review of various maps, (historical topo and aerial, oil and gas fields), a review of the results from an environmental regulatory agency database of environmentally impaired sites, a review of a National Environmental Policy Act Check Report, request for agency records (for which none were available for this site). No evidence of recognized environmental conditions was identified in any of these investigations.

3.6.1 - Existing Conditions

Site History and Current Use

Historic photographs and maps indicate that the project site has never been developed.

Site Characteristics

The project site is located near the southeastern corner of SR-62 and Avalon Avenue in Yucca Valley. The project site is at an elevation of approximately 3,200 feet above Mean Sea Level, and has a gently sloping terrain. The site is currently vacant and contains native vegetation.

A small amount of debris (paper, food containers, etc.) was found on the project site. No chemical use, chemical waste storage, or solid waste (non-hazardous and hazardous) was observed onsite. There are no structures located on-site, therefore no materials considered suspect for asbestos were observed, nor were there any surfaces with lead-based paint. There are no transformers or other equipment with the potential to contain Polychlorinated Biphenyls (PCBs) on the project site. No sources of air emissions were observed, nor were any wastewater discharges. There were no obvious

indications of underground storage tanks (such as fill ports or vent pipes), and according to the database search, the site is not listed on the Underground Storage Tank (UST) or Leaking Storage Tank (LUST) databases. There were no recognized environmental conditions found on the project site, and there was no recommendation for additional investigation.

The soils on and in the vicinity of the project site are of the Cenozoic era and Quaternary systems and series. The soils are comprised of coarse sandy loam, fine sandy loam, and gravelly-fine sandy loam. Groundwater has been measured at depths of approximately 378 to 384 feet below the ground surface in the vicinity.

The surrounding area is predominantly open space, with some commercial land uses to the west, and residential land use to the north and southwest. There were no recognized environmental conditions identified in the project vicinity.

3.6.2 - Thresholds of Significance

The proposed project would potentially have a significant impact related to hazards and hazardous materials if the project would:

- a) Create a significant hazard to the public or the environment through the routine 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 wastes 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 Section 65962.5 and, as a result, would 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 2 miles of a public airport or public use airport, would the project 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 loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

3.6.3 - Project Impact Analysis

As stated previously, a Phase I ESA was conducted on the project site to provide a historical document review, a government database review, general characteristics of the project site, and identification of any recognized environmental conditions. Based on the Phase I ESA, no development on the project site was observed in aerial photographs as far back as 1953 and the project site is not on any hazardous materials site lists, and none of the adjacent properties appears on these lists. No recognized environmental conditions were identified and there was no identified need for further investigation, such as soil testing on the project site.

The project site is adjacent to SR-62 and the proposed project would not impair the implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan. The land to the east of the project site would remain undeveloped and potentially subject to wildland fire. A fire in this area would be a low fuel fire, likely to spread quickly but not be very hot, and be isolated due to the presence of surrounding roadways. This type of fire does not pose a substantial threat to people, and does not result in the need for any special fire protection. In addition, the project facilities will be designed to meet the current fire codes, including the proper design of driveways and internal circulation for access by fire suppression vehicles, and the provision of sprinklers in the home improvement center.

Short-Term Impacts

Limited hazardous materials would be used during the construction of the buildings and supporting infrastructure, including roadways. Relevant construction materials may include asphalt, tar, paints, coatings, and solvents. These would be used on a limited basis, both in terms of volume and duration, by professionals trained in their appropriate use. A Storm Water Pollution Prevention Plan (SWPPP) is required to address the accidental release of materials during construction including reporting and cleanup requirements. See Section 3.13 on Water Resources for more information on the SWPPP. On this basis, these materials are not considered a significant hazard to the public or the environment.

Long-Term Operations

A variety of hazardous liquid, solid and gas substances are typically transported to, stored in, and sold to consumers at home improvement/garden centers such as the proposed Home Depot. Some of these hazardous materials include liquid and spray paints, lubricants, sealants, glues, grease, fertilizers, pesticides, herbicides, miscellaneous chemical cleaning products, etc. Some of these substances are also used during the normal operations of Home Depot, such as operating, cleaning, and repairing machinery and other facilities. All of these hazardous materials will be stored within the fully enclosed portion of the building. Only non-hazardous plants and garden materials will be stored in

the partially covered garden center. All hazardous materials will be carefully stored in accordance with existing standard procedures, and in compliance with any Town of Yucca Valley, County of San Bernardino, State and Federal requirements. Employees will be trained to properly contain spills of hazardous materials, and to clean up and dispose of hazardous materials. Proper training will reduce the potential for significant impacts related to the on-site usage of hazardous materials to a less than significant level.

Besides the Home Depot, the project also includes other commercial tenants. These tenants will be retail and food service businesses. These other tenants are also expected to store, use, and dispose of small quantities of hazardous materials such as cleaning substances and cooking oil wastes. The operations of these businesses are not expected to involve substantial quantities of these materials that could create a significant human health hazard or a threat to the environment in the case of an accidental spill and release. Restaurants and fast-food businesses would be subject to standard regulatory requirements for collection and disposal of food wastes.

A number of federal, state, and local agencies regulate the transportation of hazardous materials. These regulations include the design and size of transport vehicles, vehicle operator training, types of materials that can be transported, documentation of materials shipments, and preparation for response procedures in the event of an accidental spill. Specialists at Caltrans, the California Highway Patrol, and the San Bernardino County Hazardous Materials Response Team are trained for emergency response procedures associated with hazardous materials spills on public roads. Other local businesses, as well as the Marine Corps Air Ground Combat Center, regularly transport hazardous materials in the area; therefore, transportation of hazardous materials in the area would not be a new risk to the area. Finally, the risks to humans and the environment of transporting hazardous materials would be adequately minimized by adherence to existing regulation and the availability of properly trained emergency response specialists.

The nearest school to the proposed project is Sky Continuation High School, located at 59273 Sunnyslope Drive, and is over 0.5 mile from the project site.

In light of the above information, impacts from the operation of the proposed project would not create a significant impact as it relates to the storage, use, sale, and transportation of hazardous materials.

Airport Land Use Compatibility

The proposed project is within one mile of the Yucca Valley Airport. The Yucca Valley Airport is a privately owned, public use airport that services aircraft with a wingspan less than 49 feet. The airport has a capacity for 200,000 operations annually; however, there are currently only approximately 12,900 operations a year.

The airport runway has a southwest-northeast trending runway. The project site is south of an imaginary extension of the runway, and therefore is not considered to be under a direct flight path for

planes visiting the airport. According to the Airport Land Use Compatibility Plan (ALUCP) for the Yucca Valley Airport (AIR 1992), the project site is located just outside of Safety Area 3, which reflects a reduced exposure to aircraft operation and aviation hazards and allows for commercial development. Therefore, the proposed project is considered consistent with the airport and the ALUCP. The proposed project will not conflict with the ALUCP, and will not create a significant impact as it relates to the site's proximity to the Yucca Valley Airport.

3.6.4 - Standard Conditions and Uniform Codes

The project will be required to comply with local, state, and federal regulations related to the storage, use, and transport of hazardous material.

Buildings will be designed according to current, applicable federal, state, and local building and safety requirements, including fire requirements which address water pressure, hydrant placement and sprinkler requirements.

3.6.5 - Project Design Features

As part of normal training, Home Depot employees will receive safety training, including training on the cleanup and disposal of hazardous materials sold in the store.

The access and parking design will provide appropriate access and turning radius for emergency vehicles.

3.6.6 - Mitigation Measures

No significant impacts to hazards and hazardous materials have been identified and no mitigation is required.

3.6.7 - Level of Significance After Mitigation

Impacts related to hazards and hazardous materials are less than significant, without mitigation.

3.7 - Land Use and Planning

This section addresses the proposed project's consistency with applicable Town of Yucca Valley General Plan land use policies, consistency with adjacent land use and conflicts with other relevant plans.

3.7.1 - Existing Conditions

The project site is located on undeveloped gently sloping terrain along SR-62 in eastern Yucca Valley. The project site is comprised of the plant community Joshua Tree/Creosote Bush-Nevada Ephedra. Some dirt roads or trails traverse the project site, which are sometimes hiked on by local residents. Land to the south, east and west is undeveloped, although the land between the project site and Avalon Drive to the west is also proposed for commercial retail development. Residential land use is located north of the project site across SR-62 and Paxton Drive, and southwest beyond intervening vacant land. Also see Exhibit 2-3, Existing Setting.

Town of Yucca Valley Land Use Designations/Zoning

The project site is governed by two land use designation of C-G General Commercial with an overlay for SP (Specific Plan Overlay). These designations are described in the General Plan (TYV 1995) as follows:

General Commercial

These lands include a wide variety of smaller commercial centers, specifically retail shops, a broad range of clothing and apparel, jewelry stores and a variety of personal service businesses. Many commercial-recreation uses including movie theaters, bowling alleys, and family recreation centers are also appropriate under this designation. Smaller, moderately priced department stores may also be appropriate under this designation. Development may range from free-standing retail buildings and restaurants, to planned commercial centers. Typical sizes range between 2 to 8 acres with gross leasable square footage varying with uses. Hotels and Motels may also be appropriate on these lands.

Specific Plan Overlay

This designation is used in conjunction with other underlying designation. It requires the preparation and approval of a Specific Plan. The Specific Plan (SP) overlay designation is applied as an overlay on the General Plan Land Use Map and can be added to any land use designation. It is also an integral part of the Mixed Use Commercial (C-MU) land use designation and is required as a means of processing community scale commercial development proposals. Specific Plans provide detailed design and analysis of large scale

and/or complex mixed use projects indicating the distribution, location, and intensity of proposed land uses. They also examine the required level of public facilities and services and their availability, and establish economic viability of proposed development. Specific Plans afford the Town's decision makers a unique opportunity to exercise a substantially greater degree of both flexibility in, and control over the type, extent, internal consistencies, design and other development parameters of a particular area so designated than would be possible using solely General Plan guidelines and a Development Code.

Surrounding land use designations include General Commercial, Industrial, Residential (various densities), and Specific Plan Overlay.

3.7.2 - Thresholds of Significance

The proposed project would potentially have a significant impact as it related to earth resources if the project would:

- 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?

3.7.3 - Project Impact Analysis

The project is located on vacant land, and is largely adjacent to vacant land which is designated for commercial uses, and would not physically divide an established community. The project site is also not located within a habitat conservation plan or natural community conservation plan, and therefore, would not conflict with any such plan.

Land Use Designation/Zoning

The proposed project involves the development of a commercial retail center on the south side of SR-62 in eastern Yucca Valley under a Specific Plan. Ultimately, the Specific Plan would provide the applicable land use and design guidance for future development.

Uses proposed in the Specific Plan are commercial retail, including a home improvement center, garden center, other commercial retail and restaurant. The specific mix of land uses proposed is

identified in Section 2.5 of the Project Description, and the specific plan provides a more detailed list of allowable uses under these categories. The applicable land use designation for the project site is General Commercial and Specific Plan Overlay. The project's consistency with these designations is discussed below.

General Commercial

The General Commercial land use designation (see 3.7.1 above) is most closely aligned with commercial retail land uses, which is the exact nature of the proposed Home Depot Retail Center. This designation favors retail facilities in the two to 8 acres size, it does allow for free-standing retail buildings and restaurants, as well as planned commercial centers. In contrast, the Community Commercial designation favors larger, community scale shopping centers and malls (TYV 1995). The proposed project falls somewhere between these two designations, in that it involves one large anchor store, but could arguably be consistent with either designation. Therefore, the proposed project is found to be generally consistent with the General Commercial land use designation.

Specific Plan Overlay

The proposed project is within a Specific Plan Overlay, and therefore a specific plan is proposed in order to develop a retail center with an integrated design in terms of architectural elements, circulation and landscape. The Specific Plan specifically addresses the following subjects:

- Land Use
- Commercial Use Regulation
- Design Guidelines
- Infrastructure, Utilities and Public Services
- Implementation and Administration

The specific plan designation generally results in a higher quality development, and the proposed project is found to be consistent with the Specific Plan Overlay designation.

General Plan

The project is consistent with the Town's land use designations. Relevant policies from the Town's Land Use Element and Economic Development Element are worthy of discussion. Additional General Plan policies are also discussed in the applicable sections of the Draft EIR.

Land Use Element

Policy 4 As an essential part of land use planning, the Town shall continuously assess business and employment opportunities for an expanding economic base.

Program 5.B Develop and adopt Specific Plans to guide and assure an effective, integrated mix of commercial, office, and residential uses in appropriate commercial uses.

Program 5.C To the greatest extent practical, utilize master planning approaches via Specific Plans to assure the phased, and cost effective extension of infrastructure and therefore buildout in new development.

The proposed project would contribute to the economic base of the community through sales tax revenues and employment, consistent with Policy 4. The project employs a Specific Plan to contribute an integrated commercial retail center with consideration of infrastructure in connection with proposed and future projects consistent with Programs 5.B and 5.C.

Economic Development Element

Goal 1 A broadly based, healthy and balanced economy that provides a full range of economic and employment opportunities.

Goal 2 Continued growth which assures the maintenance of a revenue base adequate to support present and future public services and facilities needs.

Policy 1 Maintain and strengthen the Town's role as the commercial center of the Morongo Basin and the South Mojave Desert Region.

Program 1.A Promote commercial expansion to continue to attract residents of surrounding communities, and ultimately expand Yucca Valley's revenue base.

Policy 2 Actively solicit employment and revenue generating development compatible and consistent with the Town's General Plan.

Program 5.B Residential, commercial and industrial development proponents shall be responsible for their fair share of on and off-site improvements required to support the development proposal. Improvements required may include, but are not limited to, street construction and signalization, utility extension, drainage facilities, parks and other facilities.

The proposed project would provide both full and part-time employment opportunities contributing to Goal 1, and Policy 2. The timing of the project proposal is in direct correlation with recent growth in the Town, and sufficient population and consumer spending to support a large home improvement retailer (Goal 2). The project is likely to draw consumer dollars from adjacent communities such as Joshua Tree, 29 Palms and Morongo Valley, contributing to Policy 1. Location of the proposed project in the Town will contribute to the tax based revenue of the community, contributing to Goal 1, Program 1.A and Policy 2. Project components and mitigation contribute to implementation of infrastructure including roadway and circulation improvements and utility improvements, consistent with Program 5.B (also see Sections 3.11, Transportation, and 3.12, Utilities).

3.7.4 - Standard Conditions and Uniform Codes

The Specific Plan is required to conform to state and local requirements for this planning document.

3.7.5 - Project Design Features

The Specific Plan document addresses land use, commercial use regulation, design guidelines, infrastructure, utilities, and public services which shapes the development of a quality, integrated retail commercial center.

3.7.6 - Mitigation Measures

No significant land use and planning impacts have been identified, so no mitigation is required.

3.7.7 - Level of Significance After Mitigation

Impacts to land use and planning are less than significant, without mitigation.

3.8 - Noise

This section evaluates noise impacts resulting from the construction and operation of the proposed project, including traffic related noise. Noise calculations for the project were prepared by MBA in August 2005 using the accepted Federal Highway Administration methodology. Special attention was paid to local sensitive receptors, including nearby residences. A copy of these calculations is included in Appendix F (MBA 2005g).

3.8.1 - Existing Conditions

Noise is defined as unwanted or objectionable sound. The effect of noise on people can include general annoyance, interference with spoken conversation, sleep disturbance and, in the extreme, hearing impairment. The unit of measure used to describe a noise level is the decibel (dB). The human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, the “A-weighted” noise scale (dBA), which is limited to the frequencies humans can hear, is used for measuring sound intensity. Decibels are measured on a logarithmic scale such that the doubling of the energy of sound would increase the noise level by 3 dBA and halving of the energy would result in a 3 dBA decrease. Other noise scales used in the analysis include:

Equivalent Noise Level (Leq): Since noise levels are seldom constant, varying from moment to moment and throughout the day or night, the A-weighted noise level needs to be further described to provide meaningful data. Noise measurements are often based on the average equivalent energy concept where $Leq(x)$ represents the average energy content of a fluctuating noise source over a sample period and the subscript (x) represents the period of time in which the energy is computed and measured. For example, dBA Leq 20 minutes represents the twenty-minute average of A-weighted noise measured in decibels.

Day Night Noise Level (Ldn): The Ldn scale represents a time weighted 24-hour average noise level based on the A-weighted decibel scale. Time weighted means that a noise occurring during certain sensitive time periods is penalized for occurring at these times. The Ldn scale penalizes noise occurring between the hours of 10PM to 7AM by adding an additional 10dBA to the measurement occurring between those hours.

Community Noise Equivalent Level (CNEL): Noise levels can be further refined into CNEL, where noise that occurs during certain hours of the evening and night are weighted (penalized) because they are considered subjectively more annoying during these time periods. CNEL is a 24-hour weighted average measure that adds 5dBA to the average hourly noise levels between 7PM and 10PM (evening hours) and 10 dBA to the average hourly noise levels between 10PM and 7AM (nighttime hours). This weighting accounts for the increased human sensitivity to noise in the evening and nighttime hours.

Sensitive noise receptors are areas where humans are participating in activities that may be subject to the stress of significant interference from noise. Land uses associated with sensitive noise receptors often include residential dwellings, hotels and motels, hospitals, nursing homes, education facilities, and libraries. Other receptors include office and industrial buildings, which are not considered as sensitive as residential dwellings, but are still protected by local land use compatibility standards.

Ambient Noise Levels

The most significant sources of noise in the project area are vehicular traffic along SR-62 and other area roadways. Noise from the Yucca Valley Airport is also audible, especially from two-story windows or if one is elevated above surrounding homes. However, the site is well outside of the 60 dBA CNEL contour, is not within any of the safety zones, and is not under the aircraft approach or departure paths for the airport (SBC 1992). For these reasons aircraft noise is not a significant noise source.

Existing modeled vehicular noise on area roadways is summarized in Table 3.8-1 based on existing traffic volumes documented in the traffic impact analysis prepared by Albert Grover and Associates (AGA 2005).

Table 3.8-1: Existing Noise Levels (114 Feet from Centerline)

Roadway / Segment	2005 Existing (dBA)
SR-62:	
South of Inca Trail	64.6
Inca Trail - Pioneertown Road	65.3
Pioneertown Road - Yucca Trail	66.3
Yucca Trail - SR-247	65.8
SR-247 - Balsa Avenue	65.3
Balsa Avenue - Avalon Avenue	64.7
Avalon Avenue - Project Site	64.7
Project Site - Yucca Mesa Road	64.7
Yucca Mesa Road - Park Boulevard	64.5
East of Park Boulevard	64.3
Yucca Trail/Alta Loma Drive:	
SR-62 - Joshua Lane	60.7
Joshua Lane - Avalon Avenue	61.6
Avalon Avenue - Contenta Road	60.4
Contenta Road - Sunny Vista Road	58.5
Sunny Vista Road - Park Boulevard	56.6
Buena Vista Drive:	
SR-247 - Yucca Mesa Road	57.2
Yucca Mesa Road:	
SR-62 - Buena Vista Drive	58.6

Table 3.8-1 (Cont.): Existing Noise Levels

Roadway / Segment	2005 Existing (dBA)
SR-247:	
SR-62 - Buena Vista Drive	62.7
Buena Vista Drive - Aberdeen Drive	59.3
North of Aberdeen Drive	58.6
Avalon Avenue/Palomar Avenue:	
Joshua Lane - Yucca Trail	58.5
Yucca Trail - Palisade Drive	56.2
Palisade Drive - Project Site	56.5
Project Site - SR-62	56.5
Source: MBA 2005g, Appendix F.	

The ambient noise levels in the project area are highest (currently in the 65 dBA CNEL range) along SR-62. As the area grows, noise levels along roadways will incrementally increase. Other roadway noise levels range between 57 to 63 dBA CNEL.

Noise Standards

The Town of Yucca Valley has an exterior noise standard of 67 dBA CNEL for commercial development, including the proposed project (TYV 2005). An exterior noise standard for residential uses and schools is 60 dBA CNEL with an interior noise standard of 45 dBA CNEL. CNEL based noise standards generally apply to sources preempted from local control such as motor vehicles, aircraft, trains, etc. They focus more on the land use authority of a jurisdiction related to siting a use in a given noise environment rather than control of the source itself. CNELs are the units of measurements for noise that are required for use in the Noise Element of the General Plan. Authority of the adoption of a Noise Element and implementation of noise/land use compatibility standards is derived from the California Public Resources Code. The Town of Yucca Valley Comprehensive General Plan Noise Element establishes the Town’s goals and objectives related to noise, and sets the framework for the Town’s Noise Standards.

The California Office of Noise Control has prepared a land use compatibility chart for community noise. The Town of Yucca Valley has included in the Comprehensive General Plan Noise Element the Noise/Land Use Compatibility Matrix (Exhibit 3.8-1), which is a variation of the State’s land use capability chart. The Noise/Land Use Compatibility Matrix provides a comparison of the suitability of various land uses to community noise levels. It identifies normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for various land uses. A conditionally acceptable designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise attenuation features are incorporated in the design. By comparison, a normally acceptable designation indicates that standard construction can occur with no special noise reduction requirements.

3.8.2 - Thresholds of Significance

For the purposes of assessing the significance of noise impacts, a noise impact would be considered significant if implementation of the proposed project has the potential to result in an exceedance of the Town of Yucca Valley Noise Standards. Finding noise impacts significant is predicated upon the assumption that the proposed project is causing an increase in noise. CEQA Guidelines indicate a project will have a significant effect on the environment if it will “increase substantially the ambient noise levels for adjoining areas.” A “substantial” increase in noise needs to be defined and existing exceedances in the noise standards would require a more stringent threshold based upon project generated increases in noise than areas that are currently within the adopted noise standards. The primary source of noise that would be generated by the proposed project is mobile sources including trucks deliveries. Mobile sources of noise, such as truck deliveries are exempt from local ordinances but are still subject to CEQA and would be significant if the project generates a volume of traffic which would result in a substantial increase in mobile source-generated noise. The Town of Yucca Valley Comprehensive General Plan Noise Element states that “in community noise assessments, changes in noise levels greater than 3 dBA are often identified as significant, while changes of less than 1 dBA will not be discernible to the human ear.” The Comprehensive General Plan Noise Element also states that “the level at which changes in community noise levels become discernible is likely to be some value greater than 1 dBA, and 3 dBA appears to be appropriate for most people.” (TYV 1995.) Using the Town’s noise standards and the criteria within the Town’s Comprehensive General Plan Noise Element discussed above the following thresholds of significance have been developed for evaluating the proposed project:

- Construction activities were to audibly intrude into adjacent residential areas during periods of heightened noise sensitivity.
- An increase in noise levels of 3 dBA CNEL or greater occurs from project-related activities, if the existing noise levels remain below the Town’s noise standards.
- An increase in noise levels of 1 dBA CNEL or greater occurs from project related activities, if the existing noise levels exceed the Town’s noise standards.

Project generated noise impacts would be significant if the project exceeds any of these thresholds.

3.8.3 - Project Impact Analysis

The proposed project involves the construction and operation of a commercial retail shopping center including a large home improvement center, a restaurant, and other commercial retail land use. The generation of noise would occur over the short-term for site preparation and construction activities to implement the proposed project. Long-term noise generated by the proposed project would occur during operation of the proposed project. Both short-term and long-term noise impacts generated by the proposed project are examined in this analysis.

Short-term Impacts

Construction activities (especially heavy equipment), will create short-term noise increases near the project site. Such impacts may impact nearby noise-sensitive receptors within the existing rural residential uses. Temporary construction noise impacts vary markedly because the noise intensity of construction equipment ranges widely as a function of the equipment used and its activity level. Short-term construction noise impacts tend to occur in discrete phases dominated initially by earth-moving sources, then by foundation construction, roadway and other infrastructure construction, framing and rough construction, and eventually, finish construction. Table 3.8-2 illustrates the typical noise levels by construction phase.

Table 3.8-2: Generation of Construction Noise by Phase

Construction Phase	Construction Phase Noise Level (dBA Leq) Noise Levels at 50 feet with Mufflers (dBA)
Ground Clearing	82-84
Excavation, Grading	86-89
Foundations	77-78
Structural	83-85
Finishing	86-89
Source: EPA, 1971.	

Table 3.8-3 shows the typical range of construction activity noise generation as a function of the equipment used. Heavy construction equipment can generate noise levels in excess of 100 dBA that radiate spherically from the point or origin. Noise emissions are atmospherically attenuated by a factor of 6 dBA per doubling of distance, or about 20 dB in 500 feet of propagation. The loudest earth-moving noise sources will therefore, sometimes be detectable above the local background noise levels beyond 1,000 feet from the construction area.

Noise propagation is primarily a line-of-sight phenomenon. Terrain is gently sloping northeast towards SR-62, and site is elevated at SR-62. In areas of variable terrain, such as that of the project site, where intervening hills block direct propagation, noise levels may be 20 dB lower than their theoretical maximums. Because of low baseline levels, the rumble of heavy equipment may be audible at isolated off-site development, but not at levels that would be considered significant.

Table 3.8-3: Typical Construction Equipment Noise Emissions

Equipment	Equipment Levels in dBA at 50 feet ^a
Pile Driving (peaks)	95-107
Cranes (derrick)	86-89
Paver	85-88
Pneumatic Impact Equipment	83-88
Trucks	82-95
Jackhammers	81-98
Concrete Pumps	81-85
Scraper/Grader	80-93
Tractor	77-98
Concrete Mixers	75-88
Cranes (moveable)	75-88
Compressors	75-87
Back Hoe	73-95
Front Loader	73-86
Saws	72-82
Generators	71-83
Vibrator	68-82
Pumps	68-72
^a Machinery equipped with noise control devices or other noise-reducing design features do not generate the same level of emissions as that shown in this table. Source: EPA, 1971.	

Noise impacts would be significant if they caused a violation of any adopted standards, or produce noise levels which audibly intrude into residential areas during night time and early morning hours. There are no specific numerical performance standards in the Town's Comprehensive General Plan that apply to construction. Construction noise impacts, however, will be minimized by time restrictions from 5:00 AM to 10:00 PM (Town Municipal Code §6.04.030). Because residents are more likely to be disturbed by noise at night and the early morning hours, construction noise impacts would be potentially significant, if construction occurred outside the timeframes identified.

Long-term Traffic Related Impacts

Long-term noise concerns from the increased urbanization of the project area center primarily on mobile noise generation on area roadways. Being a retail commercial development, the proposed project is subject to the limitations of an external noise level of 67 dBA CNEL. At the present time, land adjacent to the project site to the north is developed with residential uses. The majority of project generated noise increases will be due to mobile sources (i.e. vehicles) on area roadways.

Table 3.8-4 summarizes the predicted noise at project opening in the year 2007. Project generated increases of noise levels are predicted to be less than 1dBA increase along all of the study roadways.

Table 3.8-4: Traffic Generated Noise Emissions (2007)

	2007 Without Project dBA CNEL	2007 With Project dBA CNEL	Change
SR-62:			
South of Inca Trail	64.7	64.8	+0.1
Inca Trail - Pioneertown Road	65.4	65.5	+0.1
Pioneertown Road - Yucca Trail	66.5	66.6	+0.1
Yucca Trail - SR-247	65.9	66.1	+0.3
SR-247 - Balsa Avenue	65.4	65.7	+0.3
Balsa Avenue - Avalon Avenue	64.9	65.2	+0.3
Avalon Avenue - Project Site	64.9	65.3	+0.4
Project Site - Yucca Mesa Road	65.0	65.2	+0.2
Yucca Mesa Road - Park Boulevard	64.8	65.1	+0.3
East of Park Boulevard	64.6	64.8	+0.2
Yucca Trail/Alta Loma Drive:			
SR-62 - Joshua Lane	61.0	61.1	+0.1
Joshua Lane - Avalon Avenue	61.9	61.9	0.0
Avalon Avenue - Contenta Road	60.8	60.9	+0.1
Contenta Road - Sunny Vista Road	59.2	59.6	+0.4
Sunny Vista Road - Park Boulevard	57.5	57.8	+0.3
Buena Vista Drive:			
SR-247 - Yucca Mesa Road	57.6	57.8	+0.2
Yucca Mesa Road:			
SR-62 - Buena Vista Drive	59.1	59.4	+0.3
State Route 247:			
SR-62 - Buena Vista Drive	63.0	63.3	+0.3
Buena Vista Drive - Aberdeen Drive	59.9	60.2	+0.3
North of Aberdeen Drive	59.3	59.6	+0.3
Avalon Avenue/Palomar Avenue:			
Joshua Lane - Yucca Trail	59.0	59.3	+0.3
Yucca Trail - Palisade Drive	56.9	57.8	+0.9
Palisade Drive - Project Site	57.1	57.5	+0.4
Project Site - SR-62	57.1	57.5	+0.4
Source: MBA 2005g, Appendix F.			

Long-term traffic noise was also analyzed at buildout of the project area. This analysis included the proposed Yucca Valley Retail Center immediately west of the project site on the southeast corner of the intersection of SR-62 and Avalon Avenue. Table 3.8-5 summarizes the results of this analysis. Project generated increases in noise levels at buildout of the area is predicted to be approximately 0.4 dBA CNEL or less. Therefore, long-term roadway noise impacts are less than significant.

Table 3.8-5: Long-term Traffic Generated Noise Emissions at Area Buildout

	2030 Without Project dBA CNEL	2030 With Project dBA CNEL	Change
State Route 62:			
South of Inca Trail	66.0	66.1	+0.1
Inca Trail - Pioneertown Road	66.4	66.5	+0.1
Pioneertown Road - Yucca Trail	66.7	66.8	+0.1
Yucca Trail - SR-247	67.1	67.2	+0.1
SR-247 - Balsa Avenue	67.0	67.2	+0.2
Balsa Avenue - Avalon Avenue	66.5	66.7	+0.2
Avalon Avenue - Project Site	66.3	66.5	+0.2
Project Site - Yucca Mesa Road	67.0	67.1	+0.1
Yucca Mesa Road - Park Boulevard	67.5	67.5	0.0
East of Park Boulevard	67.4	67.5	+0.1
Yucca Trail/Alta Loma Drive:			
SR-62 - Joshua Lane	62.8	62.8	0.0
Joshua Lane - Avalon Avenue	64.0	64.1	+0.1
Avalon Avenue - Contenta Road	63.6	63.7	+0.1
Contenta Road - Sunny Vista Road	63.0	63.1	+0.1
Sunny Vista Road - Park Boulevard	62.0	62.2	+0.2
Buena Vista Drive:			
SR-247 - Yucca Mesa Road	60.3	60.5	+0.2
Yucca Mesa Road:			
SR-62 - Buena Vista Drive	62.1	62.3	+0.2
State Route 247:			
SR-62 - Buena Vista Drive	65.8	65.9	+0.1
Buena Vista Drive - Aberdeen Drive	63.9	64.0	+0.1
North of Aberdeen Drive	63.8	63.8	0.0
Avalon Avenue/Palomar Avenue:			
Joshua Lane - Yucca Trail	62.3	62.4	+0.1
Yucca Trail - Palisade Drive	60.8	61.2	+0.4
Palisade Drive - Project Site	61.9	62.0	+0.1
Project Site - SR-62	62.0	62.1	+0.1
MBA 2005g Appendix F.			

Other Long-term Operational Impacts

Other operational long-term impacts include noise generated onsite due to idling trucks making deliveries, fork lifts used for loading materials both at the loading docks and at the retail customer loading areas, roof mounted air conditioning/air circulation fans, and vehicle and pedestrian traffic in the parking lot. The nearest sensitive receptors are north of the project site and SR-62. At this location, reception of the delivery trucks and fork lifts at the loading docks will be shielded by the buildings. Noise generated in the parking lots and retail customer loading areas will have a direct line of site between the sensitive receptors and the noise sources and will only be attenuated by distance. Hard surfaces between the noise sources and receptors are assumed because the majority of this area will be covered in asphalt with only small segments of landscaping. Table 3.8-6 summarizes the results of onsite noise generation upon opening.

Table 3.8-6: Generation of Onsite Noise (2007)

Receptor Location	Onsite Generated Noise Levels (dBA)
Onsite noise in parking lot	62.4
Sensitive Receptors north of State Route 62	42.0
Receptors west of Avalon Avenue	39.9
Source: MBA 2005g, Appendix F.	

Project related impacts resulting from the generation of onsite noise are well within the Town’s noise standards (67 dBA CNEL in the parking lot and 60 dBA CNEL at residential land uses). Considering the intensity of roadway noise in the project area, onsite noise generation will not be perceptible at residential land uses. Therefore, long-term onsite noise generation impacts are less than significant.

General Plan

The Town’s General Plan includes a Noise Element which identifies a number of applicable policies and programs worthy of discussion.

Policy 2 Protect noise sensitive land uses, including residences, schools, hospitals, libraries, churches and convalescent homes from high noise levels from both existing and future noise sources.

Program 2.B Prepare noise studies in conjunction with individual developments in order to determine precise noise barrier heights and locations and building structure noise mitigation required in conjunction with specific development projects.

Policy 4 Land Uses that are compatible with higher noise levels shall be located adjacent to the Town’s designated arterial roads, or the Yucca Valley Airport, in order to maximize noise related land use compatibility.

Program 4.A Periodically review land use patterns and the community noise environment, and amend the Land Use map as appropriate to assure reasonable land use/noise compatibility.

Policy 5 Develop and maintain a circulation plan that is consistent with the residential character of the Town, avoids impacts to existing and planned sensitive receptors/uses, and which provides fixed routes for existing and future truck traffic.

Program 5.A Designate primary truck routes and clearly mark these routes through the Town. Construction traffic, delivery traffic, and through truck traffic shall be limited to these routes.

This analysis specifically evaluates noise impacts of the proposed project, including impacts to sensitive receptors consistent with Policy 2 and Program 2.B. The project is a land use that is compatible with higher noise levels. Consistent with Policy 4 and Program 4.A, the project was sited adjacent to SR-62 (a designated arterial). The designated route for project delivery trucks is proposed on SR-62 consistent with Program 5.AC.

3.8.4 - Standard Conditions and Uniform Codes

The proposed project is consistent with the California Office of Noise Control's land use compatibility chart for community noise and the Town's Land Use/Compatibility Matrix.

3.8.5 - Project Design Features

The proposed project is a land use that is compatible with higher noise levels and is located appropriately. Besides the project location, several other design features will reduce noise levels at the nearest sensitive receptors. These include sound abatement screening of all rooftop equipment including air conditioners and ventilation fans and providing delivery truck loading docks on the south side of the building to shield sensitive receptors north of SR-62 from noise generated by onsite delivery truck unloading operations.

3.8.6 - Mitigation Measures

Mitigation is indicated for possible temporary nuisance due to noise during construction of the project and associated improvements. The following mitigation measures will maintain noise impacts below a level of significance during project construction

N-1 Time Restrictions on Construction Activities

Construction activities will be limited to the hours from 5:00 am to 10:00 pm consistent with the Town Municipal Code addressing nuisance noise (Town Municipal Code §6.04.030).

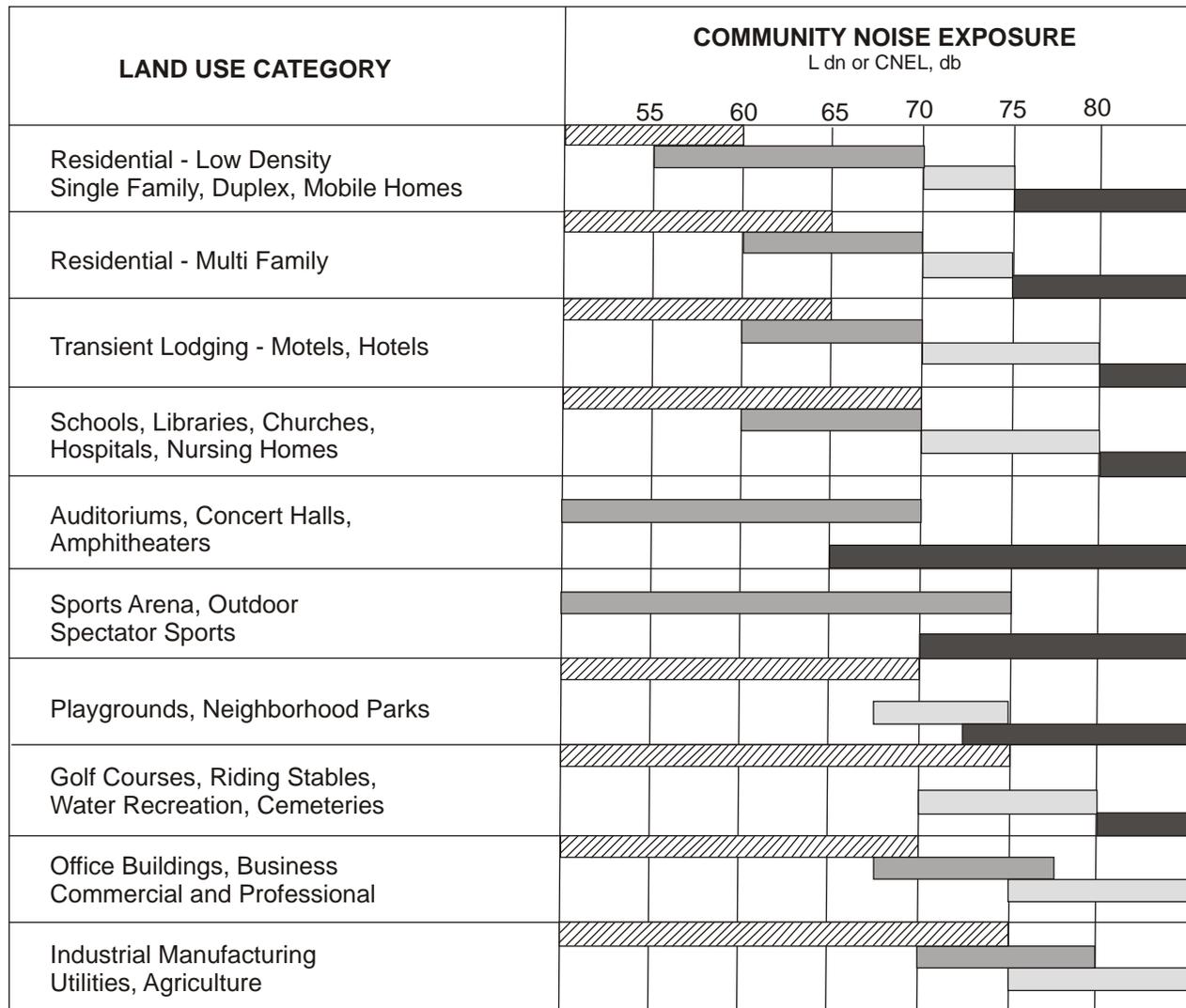
N-2 Construction Equipment Maintenance and Staging Areas

Prior to the issuance of grading or building permits, the developer shall demonstrate that all construction equipment, fixed or mobile, will use properly operating mufflers, and no combustion equipment, such as pumps or generators. Stationary equipment shall be placed in such a manner as to emit noise away from sensitive receptors. Additionally, vehicle and equipment staging areas shall be located as far as practical from sensitive noise receptors.

3.8.7 - Level of Significance After Mitigation

Implementation of the proposed mitigation measures will not produce significant impacts. Limiting construction to the time periods identified in measure N-1 will reduce noise impacts from

construction to a less than significant level. Measure N-2 will further protect sensitive receptors during construction.



INTERPRETATION

- 
NORMALLY ACCEPTABLE
 Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
- 
CONDITIONALLY ACCEPTABLE
 New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
- 
NORMALLY UNACCEPTABLE
 New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
- 
CLEARLY UNACCEPTABLE
 New construction or development should generally not be undertaken.

Source: State of California, Governor's Office of Planning and Research, General Plan Guidelines, 1990.



3.9 - Public Services

This section evaluates the potential impacts from the operation of the proposed retail center on police and fire services. Because of the nature of the proposed project (commercial retail), the project is not expected to have an impact on other public services more directly related to population growth (e.g. library, schools) and impacts to these types of public services will not be further addressed. See Section 3.10 on Socioeconomics for more information on population growth.

3.9.1 - Existing Conditions

The project site is comprised of undeveloped, vacant land. There has no need for public services related to the project site.

Fire Services

The Yucca Valley Fire District is a special district of the state and operates to provide fire protection services in the Town of Yucca Valley under the management of the San Bernardino County Fire Department. The District covers approximately 54 square miles from two fire stations. Service is also provided by a third station in the Joshua Tree area through a mutual aid agreement, as shown in Table 3.9-1 below.

The District has automatic and/or mutual aid agreements with the following agencies:

- California Department of Forestry and Fire Protection - Station 14;
- National Park Service - Black Rock Interagency Fire Center;
- Twentynine Palms Fire Department;
- Combat Center Fire Department - Marine Corps Air/Ground Combat Training Center; and
- Morongo Valley Fire Department.

Table 3.9-1: Fire Stations Serving Yucca Valley

Station Name	Address	Estimated Response Time to Project Area	Staffing	Equipment Assigned
Fire Station 121	57201 Twentynine Palms Highway	5 to 7 min.	6	1 engine, 1 brush engine, 2 ambulances
Fire Station 122	58612 Aberdeen (Yucca Mesa area)	9 to 12 min.	4	1 engine, 1 ambulance, other reserve equipment
Fire Station 36*	6715 Park Ave Joshua Tree	8 to 11 min.	2	1 engine, 1 squad
Notes: *Station 36 is outside the Yucca Valley Fire District. Source: San Bernardino County Fire Department, SBF 2005.				

The District responds to approximately 4,200 emergency incidents each year. According to the County, the current levels of service exceed capacity, and the District must rely on automatic and/or

mutual aid to provide the existing level of emergency responses. Based on growth estimates for the Yucca Valley area, the District anticipates the need for an increase in staffing at existing fire stations and an additional fire station and company (SBF 2005).

Police Services

The Town of Yucca Valley contracts with the San Bernardino County Sheriff's Department for all law enforcement services. The contract consists of two patrol officers on duty 24 hours a day and includes other resources of the County Sheriffs Department (i.e., equipment, mutual aid, supervision, organizational infrastructure). The Sheriff's station is located approximately 6 miles from the Town limits in Joshua Tree, and there is a police substation located adjacent to Town Hall (SBS 2005).

Current emergency response times average three to five minutes. Two officers are assigned to the Town 24 hours a day. During the daytime, there are two additional officers, a Juvenile Officer and a Traffic Officer assigned to the Town. These officers can respond as needed. There are four additional patrol deputies in other jurisdictions who can respond to calls in the Town if needed.

Policing staff use six patrol vehicles along with a crime prevention van and are supported by Citizen on Patrol vehicles. The use of other resources, including helicopters, K-9, or any other specialty unit, is immediately available within the County. In addition, they have mutual aid agreements and good working relationships with all the agencies in the area, including all the departments in the Town.

According to the Sheriff's Department, the current service facilities, manpower, and equipment are sufficient to service the area. Due to recent growth and population increases that have resulted in an increased need for service, the Town plans to add an additional officer in the near future (SBS 2005).

Most crimes reported in the Town are crimes against persons, theft of property and narcotics violations.

3.9.2 - Thresholds of Significance

The proposed project would have a significant impact on public services if the project would:

- 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 for any of the following public services:
 - Fire service
 - Police service

3.9.3 - Project Impact Analysis

The proposed project would involve the development of a commercial retail center which will introduce new retail services and draw people to the project site, thereby creating a potential increase

in the need for fire and police services at this location. The project would also result in an increase in vehicular trips from consumers and employees traveling to the project site, thereby creating an increase in traffic and potential increase in emergency services related to vehicle collisions. While the project will contribute to an increase in traffic volumes, impacts to traffic with mitigation are considered less than significant, as described in Section 3.11, Traffic and Circulation.

Fire Services

Table 3.9-2 summarizes potential impacts to fire services that were identified by the County Fire Department.

Table 3.9-2: Potential Impacts to Fire Services

Impact	Effect
Increase in the number and frequency of emergency responses.	Existing fire units will be unavailable for other incidents.
Increase in traffic congestion on SR-62 and adjacent routes.	Delay responses by fire units to other area emergencies, increase in the potential of hazardous materials incidents with commercial haulers.
Potential increase in number of traffic collisions.	Existing units will be unavailable for other emergencies; emergency transportation (ambulance) for other area emergencies could be delayed.
Fire flow demand.	Currently project site has inadequate fire flow for suggested hazard level.
Source: San Bernardino County Fire Department, SBF 2005.	

These impacts are representative of increased service demands expected as a result of the proposed project. The increased demand on fire services which are already operating at deficient service levels is considered a significant impact.

While the project would increase traffic volumes, the mitigated impacts to the Town’s circulation system are less than significant (see Section 3.11, Traffic and Circulation). The project would not implement any features that are expected to create unsafe road conditions. The project will implement traffic improvements that will allow future traffic to operate under safe conditions with improvements, including improvements at Avalon Avenue and SR-62 and the installation of a raised median on SR-62 from Avalon east along the project frontage (also see Section 3.11). Raised medians, in particular, are useful for improving traffic safety by limiting the location of allowed turning movements by vehicles.

Increased traffic incidents are more likely the result of regional growth than the introduction of particular projects. Therefore, this is considered a cumulative issue, which may require a greater effort by the Town to address, rather than a project specific consideration (see Section 4, Cumulative Impacts).

The project will provide up to three access points: 1) a central signalized driveway on SR-62 to be shared with the adjacent commercial project proposed immediately to the west; 2) a driveway on SR-62 on the eastern end of the project frontage; and 3) a third entry behind the project site (southernmost boundary) on new Palisade Drive to be developed in conjunction with the project. In addition, internal circulation is sufficient to provide for the maneuvering of emergency vehicles. Therefore, the project design is sufficient for emergency access.

Inadequate fire flow demands are considered a significant impact, but are remedied through the proper design of water infrastructure.

Police Services

According to the Sheriff's Department, existing and planned service levels would be sufficient to serve the proposed project. This assessment assumes that the project facilities would be equipped with adequate alarms and security equipment to minimize theft of property and not greatly increase calls for service.

Site design concerns include those that provide the safe and proper flow of traffic to and from the main roads to the project parking areas, including the proper design of turn lanes, stoplights and other factors for the safe maneuvering of traffic. The project includes roadway improvements to better facilitate circulation to and from the project site, and with mitigation, impacts to traffic are less than significant (see Section 3.11). Further design concerns can be remedied through the design review process, which will include the Town, the Sheriff's Department and Caltrans.

Therefore, impacts to police services resulting from service levels or design considerations are considered less than significant.

General Plan

The Town's General Plan includes a Fire and Police Protection Element which identifies a number of applicable policies and programs worthy of discussion.

Program 2.B Coordinate with the Hi-Desert Water District to assure adequate water supply and pressure for all existing and proposed developments to assure that fire flow standards are met for all development.

Policy 3 Coordinate with the San Bernardino County Fire Department to enforce fire standards and regulations in the course of reviewing project design and building plans, and coordinating building inspections.

Policy 6 The Police and Fire Departments, in their review of new development proposals, will be encouraged to evaluate development plans and comment on their ability to provide

proper protection. This will include, but is not limited to internal circulation systems, project directories, street names, and numbering systems.

Program 6.A The Fire District shall continue to regulate and enforce fire protection water system standards for all new construction within the Town. Standards shall include the installation of fire hydrants providing adequate fire flow, fire sprinkler systems where required, and wet and dry on-site standpipe systems.

Policy 7 Utilize crime prevention principles through the integration of project planning which results in “defensible space” or high security designs as a means of providing increased security in residential, commercial and industrial development.

These policies recognize the importance of coordination and design review in conjunction with the Hi-Desert Water District, the San Bernardino County Fire Department, the Fire District, and the San Bernardino County Sheriff’s Department in order to ensure that development projects are appropriately designed with fire and police protections in mind. These agencies have provided initial input on the project through the EIR process and will also participate in project design review to ensure that the project design meets public service needs.

3.9.4 - Standard Conditions and Uniform Codes

State, local, and uniform fire code provisions provide design requirements to minimize fire danger in building construction. The project site plan is subject to review and approval by Town Staff, the County Fire Department and the Hi-Desert Water District to ensure that design provides adequate fire protection. Roadway improvements are also subject to design review, and improvements to SR-62 will involve Caltrans.

3.9.5 - Project Design Features

The project access features including driveways, internal roadways and parking areas have been designed to provide sufficient width and turning radius for access and mobility by emergency vehicles. As indicated above, the project site provides three access points which can be used for emergency vehicles. The home improvement center will be equipped with a sprinkler system to support fire suppression.

3.9.6 - Mitigation Measures

The following mitigation measure identified by the County Fire Department will be implemented to address the project’s contribution to the existing deficiencies in service levels. In conjunction with contributions from other projects, this measure will provide a fair share contribution for the 24-hour staffing of a second ambulance.

PS-1 The project operator/owner shall provide a fair share contribution to a City-wide public services assessment to address its contribution to police and fire services. The cost shall be based on estimated department expenditures on an area-wide basis at the time of application for the occupancy permit, to the satisfaction of the Fire Chief.

The following mitigation measure will address any remaining fire concerns related to the project design.

PS-2 The project site design shall include the construction of a redundant (looped) water service to provide 4,850 to 5,250 gallons per minute of fire flow. The project applicant shall make all system improvements required to ensure the needed fire flow can be achieved. The final project design shall include any other measures identified during design review to provide adequate fire protection for the uses proposed.

3.9.7 - Level of Significance After Mitigation

With implementation of measures PS-1 and PS-2 impacts to police and fire services are considered less than significant. Impacts to police services are less than significant without mitigation.

3.10 - Socioeconomics

Socioeconomics as used herein, addresses the relationship between housing, population, and employment as they relate to the physical environment.

3.10.1 - Existing Conditions

The proposed project site is currently open space, and is surrounded by open space, residential, and commercial land uses. The Town of Yucca Valley is a rural high desert community, and is one of three gateway communities leading to the northern entrance of Joshua Tree National Monument. The Coachella Valley, which includes Palm Springs and other communities, is located approximately 30 miles west of Yucca Valley and has experienced substantial growth, which is beginning to induce growth outward. Expansion and increased usage of Twentynine Palms Marine Base (Marine Corp Air Ground Combat Center) has also contributed to area growth. As a result, Yucca Valley has begun to experience an increase in the rate of growth and development. This is reflected in additional housing development in the Town, increased development of commercial facilities along the main travel corridors, an incremental increase in traffic at area intersections, and most markedly, an increase in population.

According to the Department of Finance (DOF), the population as of January 1, 2005 is approximately 19,726 (DOF 2005). The population last year was 18,836 according to the DOF (DOF 2005), which represents an increase of 4.7 percent, the fifth fastest/highest growth in the County of San Bernardino. In comparison, the County of San Bernardino grew by 1.3 percent (DOF 2005). According to the DOF, the number of housing units in the Town is 8,813 (DOF 2005).

3.10.2 - Thresholds of Significance

The proposed project would potentially have a significant impact as it relates to socioeconomics if the project would:

- 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).
- Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

3.10.3 - Project Impact Analysis

The proposed project would result in the development of a Home Depot home improvement store, as well as smaller retail stores and food services.

The proposed project site is currently vacant, and it will not displace existing housing or people, and would not result in a need for the construction of replacement housing elsewhere. The proposed project does not include the development of residential units, so it will not directly induce any growth in the population. However, commercial development may indirectly induce growth through job creation.

The Retail Center is the result of a continuing pattern of growth and development in the Town. The Center is proposed to serve both the existing population and anticipated population increases in the future.

Each of the new businesses would produce new jobs in the area. Approximately, 100 to 120 jobs would be created by the development of the Home Depot; this includes 70 to 80 full-time positions, and 30 to 40 part-time positions. An estimated additional 30 to 50 employees would be needed for the other retail and restaurant businesses. According to Home Depot, approximately 20 of their existing employees currently reside in Yucca Valley and are expected to transfer to the new store. The unemployment for the Town of Yucca Valley is approximately 1,354 jobs (10%) (U.S. Census Bureau, 2000), indicating a need for additional employment in the Town. The continued development of housing (2,654 units currently proposed, see Section 4 on Cumulative Impacts) and related population growth in the Town is also expected to create a continued need for employment. Therefore, the majority of positions are anticipated to be filled locally, and any population growth resulting from new employment opportunities would not be substantial. The new employment opportunities are considered a project benefit.

The proposed project would also contribute to the tax base of the Town in the form of sales tax and property tax revenues. The improvement of the property comprised of the project site will result in an increase in the assessed property value. The resulting increase in property tax revenue is considered a project benefit. According to Home Depot, the current value is \$2.2 million resulting in annual property tax revenue of approximately \$22,000. The improved value is estimated to be \$10 million resulting in annual property tax revenue of \$100,000. A portion of this revenue would accrue to the Town. The Town would also receive a portion of sales tax revenue (0.75%), estimated at \$151,500 for the first year of operation.

Population can also be indirectly induced through new infrastructure where a lack of infrastructure has been an impediment to further development. Utility infrastructure is available along SR-62, Avalon Drive, and Sunnyslope Drive to the south. The proposed project is adjacent to a major highway, and residences, which already have necessary infrastructure. The project will extend some of the infrastructure along Palisade Drive (also see Section 3.12, Utilities). While, future development east and south of the project site could take advantage of the infrastructure improvements, lack of infrastructure in this area has not been considered an impediment to development. Development patterns and rate of growth are not likely to change as a result of the

project specific infrastructure improvements. Therefore, infrastructure improvements are not expected to induce population growth.

Socioeconomic impacts can also result when a project will result in blight or urban decay resulting from the abandonment of existing facilities (buildings/stores) or when a new business forces the closure of other business. While a specific fiscal impact analysis has not been general information about the retail economy of a jurisdiction can be drawn from retail sales data.

Table 3.10- 1 below identifies retail sales figures for the Town of Yucca Valley and other jurisdictions in the vicinity. Retail sales per capita are derived by dividing the retail sales information by the population for that same jurisdiction. The resulting Retail Sales Per Capita ratio provides an indicator of the health of a community’s retail economy. A high ratio is indicative of a healthy retail economy where a community is capturing of high ratio of sales in comparison to its population through either high dollar spending or by attracting non-residents to purchase in their jurisdiction (positive sales tax flow). In contrast, a low ratio is indicative of a poor retail economy due to either low dollar spending, or that residents are purchasing goods outside the jurisdiction (sales tax leakage).

Table 3.10-1: Retail Sales Per Capita

Jurisdiction	Retail Sales ¹	Population ²	Retail Sales Per Capita ³
San Bernardino County	4,682,095	1,946,202	2.41
Riverside County	4,563,288	1,877,000	2.43
Twentynine Palms	15,473	50,632	0.31
Desert Hot Springs	17,517	19,386	0.90
Palm Springs	125,385	45,731	2.74
Cathedral City	190,418	50,632	3.76
Rancho Mirage	83,653	16,416	5.10
Town of Yucca Valley	57,379	19,726	2.91

¹ 4th quarter 2004 retail store sales in thousands of dollars (BOE 2004).

² Source: DOF 2005.

³ Derived by dividing retail sales by population for given jurisdiction.

A review of Table 3.10-1 indicates that the Town of Yucca Valley has a high retail sales per capita ratio. This demonstrates a healthy economy likely to support additional retail business. In addition, Home Depot gathers sales information on their existing stores and customers and has estimated that approximately \$10 million in annual sales for the first year will be transfer sales from existing stores. This indicates that residents in the vicinity are already traveling out of the area to make purchases at Home Depot stores in other jurisdictions, further supporting evidence of sufficient consumer interest to support the home improvement market.

Based on the above analysis, the proposed project will not create a significant impact related to population, housing or urban decay, and therefore, socioeconomic impacts are less than significant.

General Plan

The following Town goals, policies, and programs are relevant to socioeconomics:

Goal 1 A broad based, healthy and balanced economy that provides a full range of economic and employment opportunities.

Policy 1 Maintain and strengthen the Town's role as the commercial center of the Morongo Basin and the South Mojave Desert Region.

Program 1.A Promote commercial expansion to continue to attract residents of surrounding communities, and ultimately expand Yucca Valley's revenue base (TYV 1995).

The proposed project is consistent with and furthers the identified goals, policies, and programs in the Town's Economic Development Element. The home improvement center is anticipated to attract residents of surrounding communities, thereby expanding the Town's sales tax based revenues, and strengthening the Town's role as the commercial center of the Morongo Basin. In addition, as discussed above, the project will provide both full time and part time employment opportunities.

3.10.4 - Standard Conditions and Uniform Codes

No standard conditions or uniform codes relevant to socioeconomic impacts have been identified.

3.10.5 - Project Design Features

The project is comprised of commercial retail land uses that will provide continued retail employment.

3.10.6 - Mitigation Measures

No significant impacts to socioeconomics have been identified and no mitigation is required.

3.10.7 - Level of Significance After Mitigation

Impacts related to socioeconomics are less than significant, without mitigation.

3.11 - Traffic and Circulation

This section evaluates potential impacts as a result of the proposed Home Depot Retail Center on traffic, circulation, and parking.

A project specific Traffic Impact Analysis (TIA) was prepared by Albert Grover and Associates for the proposed project (AGA 2005, Appendix H). The TIA report analyzed the existing traffic conditions and the traffic impacts for the anticipated opening date with full occupancy of the development, which is 2007, as well as for the current San Bernardino County Congestion Management Program (CMP) forecast year, which is 2030.

3.11.1 - Existing Conditions

Level of Service

Level of Service (LOS) is a qualitative measure describing operational conditions within a traffic stream. These conditions are generally characterized in terms of such factors as speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

For roadways with traffic control such as stop signs and traffic signals, the LOS is generally dependent on the quality of traffic flow at the intersections along a roadway. The level of service at an intersection is categorized in terms of delay of time for the various turning movements or approaches. Appropriate time for pedestrian crossings also must be considered in the signalized intersection analysis. According to the CMP, signalized intersections are considered deficient (LOS "F") if the overall critical volume to capacity (V/C) ratio equals or exceeds 1.0, even if the level of service defined by delay value is below the defined LOS standard. The V/C ratio is the critical volume divided by the intersection capacity. A V/C ratio of 1.0 means that the intersection is completely filled with the volume of traffic.

A level of service analysis must be conducted on all existing segments and intersections that may be potentially impacted by the project. Urban segments (i.e., segments on roadways that are generally signalized) do not require segment analysis.

Table 3.11-1 shows levels of service definition for the six categories of LOS ("A"- "F"), as well as the delay range in seconds.

Table 3.11-1: Levels of Service Criteria

Level of Service	Average Total Delay Per Vehicle (Seconds)	Description
A	0 to 10.00	Occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low density.
B	10.01 to 20.00	Occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS “A”, causing higher levels of average total delay.
C	20.01 to 35.00	Generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level, although many still pass through the intersection without stopping.
D	35.01 to 55.00	Generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55.01 to 80.00	Considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual Cycle failures are frequent occurrences.
F	80.01 and up	Considered to be unacceptable to most drivers. This condition often occurs with over-saturation (i.e., when arrive flow rates exceed the capacity of the intersection). It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor Progression and long cycle lengths may also be major contributing causes to such delay levels.

Source: Highway Capacity Manual, 2000.

Existing LOS Conditions

Primary access to the proposed project site will be via SR-62 and Avalon Avenue.

There is currently a bus route that services the project area along SR-62.

The project site is currently undeveloped and does not generate daily traffic. All intersections in the study area operate at an acceptable LOS (LOS D or better as established by the Town of Yucca Valley) except for the intersection of Inca Trail at SR-62, which currently operates at LOS F, and the intersection of Old Woman Springs Road (SR-247) at Buena Vista Drive/Skyline Ranch Road, which currently operates at LOS E. Table 3.11-2 shows the current intersection conditions in the study area.

Table 3.11-2: Existing (2005) Intersection Levels of Service

#	Intersection	Control	V/C	Delay	LOS
1	Inca Trail at SR-62	TWSC	-	72.7	F
2	Pioneertown Road/Deer Trail at SR-62	Signal	0.53	12.0	B
3	Sage Avenue/Yucca Trail at SR-62	Signal	0.72	16.0	B
4	SR-247 at Aberdeen Drive	TWSC	-	12.2	B
5	SR-247 at Buena Vista Drive/Skyline Ranch Road	TWSC	-	41.8	E
6	SR-247 at SR-62	Signal	0.79	34.0	C
7	Joshua Lane at Yucca Trail	AWSC	-	28.7	D
8	Joshua Lane at Onaga Trail	AWSC	-	14.3	B
9	Balsa Avenue/Hanford Avenue at SR-62	Signal	0.48	17.0	B
10	Avalon Avenue at SR-62	Signal	0.43	14.0	B
11	Avalon Avenue at Yucca Valley Retail Center (proposed)	TWSC	(Proposed)		
12	Avalon Avenue at Palisade Drive	TWSC	-	10.0	A
13	Avalon Avenue/Palomar Avenue at Yucca Trail	AWSC	-	23.1	C
14	Palomar Avenue at Joshua Lane	TWSC	-	9.5	A
15	Project Driveway (proposed) at SR-62	Signal	(Proposed)		
16	Yucca Mesa Road at Buena Vista Drive	TWSC	-	10.4	B
17	Yucca Mesa Road/ La Contenta Road at SR-62	Signal	0.49	25.0	C
18	La Contenta Road at Yucca Trail	TWSC	-	7.8	A
19	Sunny Vista Road at Alta Loma Drive	AWSC	-	8.7	A
20	Park Boulevard at SR-62	Signal	0.35	22.0	C
21	Alta Loma Road at Park Boulevard/Quail Springs Road	TWSC	-	10.9	B
22	Yucca Valley Retail Center (proposed) at SR-62	RTO	(Proposed)		
23	East Project Access (proposed) at SR-62	RTO	(Proposed)		
<p>Notes: V/C = Volume/Capacity ratio Delay = Average control delay in seconds. At unsignalized intersections, worst-case approach reported. LOS = Level of Service TWSC = Two-way stop control AWSC = All-way stop control RTO = Right turn only Bold type Exceeds LOS acceptable level. Source: AGA 2005, Appendix H.</p>					

3.11.2 - Thresholds of Significance

The following criteria for establishing the significance of potential impacts on transportation systems and traffic patterns were derived from the CEQA Guidelines (Section 15064.5). A significant impact would occur if the proposed project would:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersection);
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access;
- Result in inadequate parking capacity; or
- Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

According to the Circulation Element of the Town General Plan, peak hour intersection operations of level of service (LOS) “D” or better are generally acceptable. Therefore, any intersection operating at LOS “E” or “F” will be considered deficient.

3.11.3 - Project Impact Analysis

Roadway Improvements

The proposed project will include onsite and offsite improvements that will alter traffic and circulation in the immediate area. These improvements include the following:

SR-62 Improvements

- Construct roadway improvements on the south side of SR-62 from Avalon Avenue to 500 feet east of the project site including: 1) a third eastbound through lane along the entire segment; 2) a merge/ right turn transition lane, and 3) raised medians along the street frontages of the YVRC and the proposed project
- Install a traffic signal at SR-62 and the proposed primary project entrance
- Construct a left turn pocket from westbound SR-62 into the new signalized driveway at the project site
- Construct a shared driveway south of the new signalized intersection on SR-62
- Construct a secondary driveway from Palisade Drive near the easterly project entrance
- Construct a secondary (right-in/right-out) driveway from improved SR-62 near the easterly property line
- Modify the SR-62/Avalon intersection to provide additional turning lanes

Avalon Avenue Improvements

- Widen Avalon Avenue to allow full turn movements at the YVRC driveway
- Construct curb, gutters, sidewalk and travel lanes on the east side of the centerline, including medians between SR-62 and Palisade Drive

Palisade Drive Improvements

- Grade Palisade Drive from the easterly right-of-way line at Avalon Avenue to approximately 10 feet east of the project site for improvements described below
- Construct 35-foot wide Palisade Drive between the easterly right-of-way line at Avalon Avenue to approximately 10 feet east of the project site including: curb, gutter, sidewalk, and travel lanes on the north side of the street centerline and one lane on the south side of the street centerline

Other Improvements

- Internal roadways with adequate turning radius for emergency vehicles
- Parking for 807 vehicles

Trip Generation

The TIA used rates from Trip Generation, Institute of Transportation Engineers (ITE), 7th Edition (2003) and applied those rates to the individual land uses included as part of the project. Based on these rates, the proposed project would result in approximately 7,184 daily vehicle trips, 327 during the morning peak hour, and 540 during the evening peak hour. Table 3-11-3 identifies the trip generation for each proposed use. A percentage of these trips are “pass-by” trips, i.e., vehicles already on the roadway that will make an immediate stop at the project site and then continue on the original route. When pass-by trips are taken into account, the total number of daily trips is reduced by 1,489 trips, resulting in 5,695 daily trips. The TIA used conservative pass-by rates in consultation with Town staff, and also was conservative and did not take into account internal trips. Internal trips refer to trips to the site which involve the patrons going to more than one store, or to the fast food restaurant and one or more stores.

Table 3.11-3: Trip Generation

Proposed Use	Trip Rate	Weekday Daily Trips	AM Peak Hour	PM Peak Hour	Pass-by Rate	Total Weekday Daily Trips ¹
Home Depot	29.80 ²	4,162	137	287	17%	3,454
Specialty Retail	44.32	1,534	0	80	17%	1,273
Restaurant	496.12	1,488	102	66	35%	967
TOTAL		7,184	239	433		5,695

Notes: ¹ Determined by reducing the weekday daily trips by the pass-by rate.

² Trip rate is per 1,000 square feet.

Source: AGA 2005, Appendix H.

Trip Distribution

The resulting peak hour trips are distributed to the Town's circulation system based on existing traffic patterns at the study intersections and on the location of the project site relative to existing and proposed future land uses within the Town. Exhibit 3.11-1 shows the anticipated project trip distribution.

Level of Service Operation

Opening Year 2007 Analysis for the Proposed Project

The TIA examined future traffic for Opening Year 2007, both with and without the proposed project, to determine if, or to what degree the project would affect delay and LOS at local intersections.

Table 3.11-4 shows the impact of project traffic on existing intersections, as if the project were to be occupied all at once in 2007. As shown, all study intersections will operate at an acceptable LOS (LOS D or better) under the Opening Year without the proposed project, except for the following intersections:

- Inca Trail at SR-62;
- SR-247 at Buena Vista Drive/Skyline Ranch Road;
- Joshua Lane at Yucca Trail; and
- Avalon Avenue/Palomar Avenue at Yucca Trail.

Table 3.11-4: Opening Year (2007) Intersection Levels of Service Without the Proposed Project

#	Intersection	Control	V/C	Delay	LOS
1	Inca Trail at SR-62	TWSC	-	226.9	F
2	Pioneertown Road/Deer Trail at SR-62	Signal	0.55	12.0	B
3	Sage Avenue/Yucca Trail at SR-62	Signal	0.74	16.0	B
4	SR-247 at Aberdeen Drive	TWSC	-	13.5	B
5	SR-247 at Buena Vista Drive/Skyline Ranch Road	TWSC	-	108.3	F
6	SR-247 at SR-62	Signal	0.84	37.0	D
7	Joshua Lane at Yucca Trail	AWSC	-	37.7	E
8	Joshua Lane at Onaga Trail	AWSC	-	19.0	C
9	Balsa Avenue/Hanford Avenue at SR-62	Signal	0.52	19.0	B
10	Avalon Avenue at SR-62	Signal	0.46	24.0	C
11	Avalon Avenue at Yucca Valley Retail Center (proposed)	TWSC	(Proposed)		
12	Avalon Avenue at Palisade Drive	TWSC	-	10.4	B
13	Avalon Avenue/Palomar Avenue at Yucca Trail	AWSC	-	42.7	E
14	Palomar Avenue at Joshua Lane	TWSC	-	10.0	A
15	Project Driveway (proposed) at SR-62	Signal	(Proposed)		
16	Yucca Mesa Road at Buena Vista Drive	TWSC	-	11.0	B
17	Yucca Mesa Road/ La Contenta Road at SR-62	Signal	0.53	26.0	C

Table 3.11-4 (Cont.): Opening Year (2007) Intersection Levels of Service Without the Proposed Project

#	Intersection	Control	V/C	Delay	LOS
18	La Contenta Road at Yucca Trail	TWSC	-	7.9	A
19	Sunny Vista Road at Alta Loma Drive	AWSC	-	9.5	A
20	Park Boulevard at SR-62	Signal	0.39	25.0	C
21	Alta Loma Road at Park Boulevard/Quail Springs Road	TWSC	-	12.7	B
22	Yucca Valley Retail Center (proposed) at SR-62	RTO		(Proposed)	
23	East Project Access (proposed) at SR-62	RTO		(Proposed)	
<p>Notes: V/C = Volume/Capacity ratio Delay = Average control delay in seconds. At unsignalized intersections, worst-case approach reported. LOS = Level of Service TWSC = Two-way stop control AWCS = All-way stop control RTO = Right turn only Bold type Exceeds LOS acceptable level. Source: AGA 2005, Appendix H.</p>					

The analysis of project traffic included three additional intersections that are a part of the project. The three additional intersections are: the signalized intersection on SR-62 at the western boundary of the project site, the right in/right out intersection with SR-62 at the eastern boundary of the site and the full access Palisade Drive/ Avalon Avenue intersection (which is currently a Tee intersection). As shown in Table 3.11-5 all study intersections will operate at an acceptable LOS with the proposed project during the Opening Year 2007, except the following:

- Inca Trail at SR-62;
- SR-247 at Buena Vista Drive/Skyline Ranch Road;
- Joshua Lane at Yucca Trail; and
- Avalon Avenue/Palomar Avenue at Yucca Trail.

Table 3.11-5: Opening Year (2007) Intersection Levels of Service With the Proposed Project

#	Intersection	Control	V/C	Delay	LOS
1	Inca Trail at SR-62	TWSC	-	379.4	F
2	Pioneertown Road/Deer Trail at SR-62	Signal	0.56	12.0	B
3	Sage Avenue/Yucca Trail at SR-62	Signal	0.75	16.0	B
4	SR-247 at Aberdeen Drive	TWSC	-	13.5	B
5	SR-247 at Buena Vista Drive/Skyline Ranch Road	TWSC	-	108.3	F
6	SR-247 at SR-62	Signal	0.87	37.0	D
7	Joshua Lane at Yucca Trail	AWSC	-	37.7	E
8	Joshua Lane at Onaga Trail	AWSC	-	19.0	C
9	Balsa Avenue/Hanford Avenue at SR-62	Signal	0.55	19.0	B
10	Avalon Avenue at SR-62	Signal	0.50	24.0	C
11	Avalon Avenue at Yucca Valley Retail Center (proposed)	TWSC		*(Proposed)	

Table 3.11-5 (Cont.): Opening Year (2007) Intersection Levels of Service With the Proposed Project

#	Intersection	Control	V/C	Delay	LOS
12	Avalon Avenue at Palisade Drive	TWSC	-	10.4	B
13	Avalon Avenue/Palomar Avenue at Yucca Trail	AWSC	-	42.7	E
14	Palomar Avenue at Joshua Lane	TWSC	-	10.0	A
15	Project Driveway (proposed) at SR-62	Signal	0.42	14.0	B
16	Yucca Mesa Road at Buena Vista Drive	TWSC	-	11.0	B
17	Yucca Mesa Road/ La Contenta Road at SR-62	Signal	0.57	23.0	C
18	La Contenta Road at Yucca Trail	TWSC	-	8.0	A
19	Sunny Vista Road at Alta Loma Drive	AWSC	-	9.8	A
20	Park Boulevard at SR-62	Signal	0.40	24.0	C
21	Alta Loma Road at Park Boulevard/Quail Springs Road	TWSC	-	13.0	B
22	Yucca Valley Retail Center (proposed) at SR-62	RTO	*(Proposed)		
23	East Project Access (proposed) at SR-62	RTO	-	14.2	B
<p>Notes: V/C = Volume/Capacity ratio Delay = Average control delay in seconds. At unsignalized intersections, worst-case approach reported. LOS = Level of Service TWSC = Two-way stop control AWCS = All-way stop control RTO = Right turn only Bold type = Exceeds LOS acceptable level. *No project traffic would use these driveways under this scenario.</p> <p>Source: AGA 2005, Appendix H.</p>					

A comparison of Table 3.11-4 and Table 3.11-5 shows that the same study intersections will operate at an unacceptable LOS in 2007 both with and without the proposed project, thus the proposed project does not result in any additional intersection failures, but does contribute additional traffic to an already poor traffic condition.

Opening Year 2007 Analysis for the Proposed Project and Adjacent Commercial Center

Immediately adjacent to the western project boundary, a commercial retail center, referred to as the Yucca Valley Retail Center (YVRC) is also proposed under a similar timeframe as the proposed project. The YVRC involves a large stand-alone retail store, a restaurant, a gas station, and other small retail development. Some of the project traffic design improvements for the proposed project will be directly shared with the YVRC (central signalized driveway, SR-62 frontage, and SR-62/Avalon Road improvements, etc.). Because of the mix of uses proposed, the YVRC project has the potential to generate a large volume of traffic; however, the specific opening date for this adjacent project is somewhat speculative. As a worst-case traffic scenario, project traffic impacts are also evaluated assuming that the adjacent YVRC is operational at the same time as the proposed project.

As shown in Table 3.11-6 all intersections will operate at an acceptable LOS during the Opening Year 2007 with both the proposed Home Depot Retail Center and the proposed YVRC, except the following intersections:

- Inca Trail at SR-62;
- SR-247 at Buena Vista Drive/Skyline Ranch Road;
- Joshua Lane at Yucca Trail;
- Avalon Avenue/Palomar Avenue at Yucca Trail; and
- SR-247 at SR-62.

Four of these five intersections will operate at an unacceptable LOS in 2007 without the YVRC project and/or the Home Depot Project; however, the YVRC does cause the SR-247 at SR-62 intersection to operate at an unacceptable LOS.

Table 3.11-6: Opening Year (2007) Intersection Levels of Service With the Proposed Project and the Proposed Yucca Valley Retail Center

#	Intersection	Control	V/C	Delay	LOS
1	Inca Trail at SR-62	TWSC	-	616.1	F
2	Pioneertown Road/Deer Trail at SR-62	Signal	0.58	13.0	B
3	Sage Avenue/Yucca Trail at SR-62	Signal	0.78	17.0	B
4	SR-247 at Aberdeen Drive	TWSC	-	16.0	C
5	SR-247 at Buena Vista Drive/Skyline Ranch Road	TWSC	-	361.4	F
6	SR-247 at SR-62	Signal	1.07	70.0	E
7	Joshua Lane at Yucca Trail	AWSC	-	53.3	F
8	Joshua Lane at Onaga Trail	AWSC	-	32.0	D
9	Balsa Avenue/Hanford Avenue at SR-62	Signal	0.62	18.0	B
10	Avalon Avenue at SR-62	Signal	0.76	30.0	C
11	Avalon Avenue at Yucca Valley Retail Center (proposed)	TWSC	-	23.5	C
12	Avalon Avenue at Palisade Drive	TWSC	-	14.9	B
13	Avalon Avenue/Palomar Avenue at Yucca Trail	AWSC	-	163.3	F
14	Palomar Avenue at Joshua Lane	TWSC	-	10.6	B
15	Project Driveway (proposed) at SR-62	Signal	0.57	22.0	C
16	Yucca Mesa Road at Buena Vista Drive	TWSC	-	12.0	B
17	Yucca Mesa Road/ La Contenta Road at SR-62	Signal	0.65	26.0	C
18	La Contenta Road at Yucca Trail	TWSC	-	8.1	A
19	Sunny Vista Road at Alta Loma Drive	AWSC	-	10.5	B
20	Park Boulevard at SR-62	Signal	0.41	24.0	C
21	Alta Loma Road at Park Boulevard/Quail Springs Road	TWSC	-	14.0	B
22	Yucca Valley Retail Center (proposed) at SR-62	RTO	-	15.6	C

Table 3.11-6 (Cont.): Opening Year (2007) Intersection Levels of Service With the Proposed Project and the Proposed Yucca Valley Retail Center

#	Intersection	Control	V/C	Delay	LOS
23	East Project Access (proposed) at SR-62	RTO	-	15.1	C
Notes: V/C = Volume/Capacity ratio Delay = Average control delay in seconds. At unsignalized intersections, worst-case approach reported. LOS = Level of Service TWSC = Two-way stop control AWCS = All-way stop control RTO = Right turn only Bold type Exceeds LOS acceptable level. Source: AGA 2005, Appendix H.					

Future Year 2030

The TIA also analyzed the project impacts to traffic for the build-out year 2030. This analysis did not assume any improvements for intersections identified with poor operating conditions in 2007 (see 2007 analysis in Table 3.11-6). The analysis included the traffic conditions both with, and without the proposed project. Table 3.11-7 shows the anticipated traffic conditions for the year 2030 without the proposed project.

Table 3.11-7: Build-out Year (2030) Intersection Levels of Service Without the Proposed Project

#	Intersection	Control	V/C	Delay	LOS
1	Inca Trail at SR-62	TWSC	-	-	F
2	Pioneertown Road/Deer Trail at SR-62	Signal	1.34	195.0	F
3	Sage Avenue/Yucca Trail at SR-62	Signal	1.02	80.0	E
4	SR-247 at Aberdeen Drive	TWSC	-	384.6	F
5	SR-247 at Buena Vista Drive/Skyline Ranch Road	TWSC	-	-	F
6	SR-247 at SR-62	Signal	1.98	1057.0	F
7	Joshua Lane at Yucca Trail	AWSC	-	243.2	F
8	Joshua Lane at Onaga Trail	AWSC	-	499.6	F
9	Balsa Avenue/Hanford Avenue at SR-62	Signal	1.06	87.0	F
10	Avalon Avenue at SR-62	Signal	0.90	43.0	D
11	Avalon Avenue at Yucca Valley Retail Center (proposed)	TWSC	-	125.9	F
12	Avalon Avenue at Palisade Drive	TWSC	-	26.9	D
13	Avalon Avenue/Palomar Avenue at Yucca Trail	AWSC	-	507.6	F
14	Palomar Avenue at Joshua Lane	TWSC	-	110.2	F
15	Project Driveway (proposed) at SR-62	Signal	0.66	20.0	B
16	Yucca Mesa Road at Buena Vista Drive	TWSC	-	45.4	E
17	Yucca Mesa Road/ La Contenta Road at SR-62	Signal	1.00	53.0	D
18	La Contenta Road at Yucca Trail	TWSC	-	2522.7	F
19	Sunny Vista Road at Alta Loma Drive	AWSC	-	111.2	F
20	Park Boulevard at SR-62	Signal	0.83	40.0	D
21	Alta Loma Road at Park Boulevard/Quail Springs Road	TWSC	-	73.1	F

Table 3.11-7 (Cont.): Build-out Year (2030) Intersection Levels of Service Without the Proposed Project

#	Intersection	Control	V/C	Delay	LOS
22	Yucca Valley Retail Center (proposed) at SR-62	RTO	-	17.9	C
23	East Project Access (proposed) at SR-62	RTO			
<p>Notes:</p> <ul style="list-style-type: none"> V/C = Volume/Capacity ratio Delay = Average control delay in seconds. At unsignalized intersections, worst case approach reported. LOS = Level of Service TWSC = Two-way stop control AWCS = All-way stop control RTO = Right turn only Bold type Exceeds LOS acceptable level. <p>Source: AGA 2005, Appendix H.</p>					

As shown in Table 3.11-7 the following intersections will operate at an unacceptable LOS in 2030 without the proposed project:

- Inca Trail at SR-62
- Pioneertown Road/Deer Trail at SR-62
- Sage Avenue/Yucca Trail at SR-62
- SR-247 at Aberdeen Drive
- SR-247 at Buena Vista Drive/ Skyline Ranch Road
- SR-247 at SR-62
- Joshua Lane ay Yucca Trail
- Joshua Lane at Onaga Trail
- Balsa Avenue/Palomar Avenue at Yucca Trail
- Avalon Avenue at Yucca Valley Retail Center (proposed)
- Avalon Avenue/Palomar Avenue at Yucca Trail
- Palomar Avenue at Joshua Lane
- Yucca Mesa Road at Buena Vista Drive
- Yucca Mesa Road/La Contenta Road at SR-62
- La Contenta Road at Yucca Trail
- Sunny Vista Road at Alta Loma Drive
- Alta Loma Drive at Park Boulevard/Quail Springs Road

Traffic conditions with the proposed project are shown in Table 3.11-8. As shown, the proposed project would cause one additional intersection to operate at an unacceptable LOS:

- Avalon Avenue at Palisade Drive.

Since the project would contribute traffic to intersections with poor LOS conditions, project impacts are considered cumulatively considerable.

**Table 3.11-8: Build-out Year (2030) Intersection Levels of Service
with the Proposed Project**

#	Intersection	Control	V/C	Delay	LOS
1	Inca Trail at SR-62	TWSC	-	-	F
2	Pioneertown Road/Deer Trail at SR-62	Signal	1.34	195.0	F
3	Sage Avenue/Yucca Trail at SR-62	Signal	1.02	80.0	E
4	SR-247 at Aberdeen Drive	TWSC	-	456.5	F
5	SR-247 at Buena Vista Drive/Skyline Ranch Road	TWSC	-	-	F
6	SR-247 at SR-62	Signal	2.01	1064.0	F
7	Joshua Lane at Yucca Trail	AWSC	-	248.8	F
8	Joshua Lane at Onaga Trail	AWSC	-	516.7	F
9	Balsa Avenue/Hanford Avenue at SR-62	Signal	1.09	91.0	F
10	Avalon Avenue at SR-62	Signal	0.94	39.0	D
11	Avalon Avenue at Yucca Valley Retail Center (proposed)	TWSC	-	139.8	F
12	Avalon Avenue at Palisade Drive	TWSC	-	37.7	E
13	Avalon Avenue/Palomar Avenue at Yucca Trail	AWSC	-	525.2	F
14	Palomar Avenue at Joshua Lane	TWSC	-	131.9	F
15	Project Driveway (proposed) at SR-62	Signal	0.74	25.0	C
16	Yucca Mesa Road at Buena Vista Drive	TWSC	-	57.9	E
17	Yucca Mesa Road/ La Contenta Road at SR-62	Signal	1.02	58.0	E
18	La Contenta Road at Yucca Trail	TWSC	-	-	F
19	Sunny Vista Road at Alta Loma Drive	AWSC	-	121.1	F
20	Park Boulevard at SR-62	Signal	0.84	40.0	D
21	Alta Loma Road at Park Boulevard/Quail Springs Road	TWSC	-	80.2	F
22	Yucca Valley Retail Center (proposed) at SR-62	RTO	-	19.2	C
23	East Project Access (proposed) at SR-62	RTO	-	21.4	C

Notes:
V/C = Volume/Capacity ratio
Delay = Average control delay in seconds. At unsignalized intersections, worst case approach reported.
LOS = Level of Service
TWSC = Two-way stop control
AWCS = All-way stop control
RTO = Right turn only
Bold type Exceeds LOS acceptable level.
Source: AGA 2005, Appendix H.

Localized Operation Concerns

In addition to LOS, at the urging of Town staff, the traffic study also analyzed the following localized operation concerns:

- As shown on the Site Plan, the signalized intersection at the project driveway on SR-62 will have two left turn lanes and one right turn lanes exiting the site. Sufficient storage is available such that anticipated outbound queues will clear each cycle with three outbound lanes. The 95th percentile queue (design queue length) is forecast to be 100'; approximately 150' of queue storage is provided between the signalized driveway and the nearest intersecting drive aisle. This determination is based on an expected 100-second coordination system cycle length.

- Because Caltrans has established access restrictions on the north side of SR-62 in the vicinity, the proposed signalized driveway will be a Tee intersection only, not a full, four-legged intersection. This has been confirmed in preliminary discussions with Caltrans. As a Tee intersection, the operational efficiency is high, thereby minimizing queuing.
- One westbound-to-southbound left turn lane at the signalized project driveway on SR-62 is sufficient to handle demand for both the Home Depot Project and the YVRC Project. The 95th percentile queue is forecast to be 160' and is forecast to clear each cycle, for both Opening Day and 2030.
- Three through lanes will be provided along eastbound SR-62. The third eastbound through lane will begin at Avalon and transition back to two lanes east of the project site. The project will also provide a merge/ right turn transition lane, and raised medians along the street frontages of the YVRC and the proposed project.
- Home Depot anticipates a maximum of 25-30 delivery trucks per day accessing the site, an average of less than two per hour. Primary truck ingress will be via SR-62 to the east project driveway, which will have a $\pm 50'$ radius for inbound traffic. Truck egress will be via either the signalized driveway on SR-62 or the Avalon Avenue/Palisade Drive intersection, turning right (north) to SR-62. Site plans with truck turning paths are included in Appendix H.
- It is anticipated that, as part of the Encroachment Permit process with Caltrans for the new signal on SR-62, the installation of a traffic signal interconnect for a traffic signal and development of coordination timing plans on SR-62 from Avalon Avenue to Yucca Mesa Road will be required. The Permit Plans will also include all necessary striping and signing. Caltrans is already planning for coordination on SR-62 west of Avalon Avenue.
- The fast food with drive through restaurant located at the northwest corner of the project site has been designed with a counterclockwise circulation pattern such that queuing in the driveways and primary drive aisles will not occur. Ultimate design will be determined at site plan review for this land use.
- There is an existing bus stop on the north side of SR-62 located east of the proposed signalized driveway. The north-south crosswalk will be located on the east leg of the intersection so as not to interfere with traffic exiting the site and turning left.
- All project roadway modifications will be designed and constructed to provide for acceptable LOS for 2030 traffic conditions.

Air Traffic

The proposed project is within one mile of the Yucca Valley Airport; however, the project does not involve any uses that would interfere with air traffic, and will not impact the location of air traffic patterns. Therefore, the proposed project will not have an impact on air traffic.

Hazards

The proposed project does not include any design features that would create a substantial increase in hazards.

Emergency Access

The proposed project is expected to provide adequate access for emergency vehicles; in particular there will be three entries for emergency vehicles; 1) a central signalized driveway on SR-62 to be shared with the adjacent commercial project proposed immediately to the west; 2) a driveway on SR-62 on the eastern side of the project frontage; and 3) a third entry behind the project site (southernmost boundary) on new Palisade Drive to be developed in conjunction with the project.

Parking

The Town of Yucca Valley General Plan requires that an adequate amount of parking be provided as part of the project. The retail and garden portions of the site requires parking at a rate of one stall for every 250 square feet of retail space, the restaurant requires one stall for every 100 square feet. With 171,893 square feet of retail and garden space, and 3,000 square feet of restaurant space, it was determined that the proposed project would require 718 parking stalls. The proposed project includes 807 parking stall. Therefore, the project provides sufficient parking, and the proposed project will not have a significant impact as it relates to parking.

Policies, Plans, or Programs

The proposed project does not conflict with any adopted policies, plans, or programs supporting alternative transportation. The primary bus route relevant to the proposed project is the east-west route on SR-62. There is an existing westbound stop on the north side of SR-62 across from the project site. An eastbound site along the project frontage was also considered, but the Transit agency has indicated that locating the site just east of the SR-62/Avalon intersection will provide for better bus operation. Locating the project site along a major transit corridor will facilitate use of mass transit, and thereby reduce vehicle trips, especially for visits to the outparcel retailers.

General Plan

The Town's General Plan includes a Circulation Element which identifies a number of applicable policies and programs worthy of discussion.

Program 2.B Review new and redeveloped projects along SR-62 with the intent of limiting access and aligning major access drives in a manner which maximizes the use of existing and planned signalization intersections.

Policy 5 Encourage expansion of ridership and the mass transit systems operated by the Morongo Basin Transit Authority within the Town and greater Morongo Basin.

Program 5.B When reviewing development proposals, consult and coordinate with the Morongo Basin Transit Authority and solicit comments and suggestions on how bus stops and other public transit facilities and design concepts should be integrated into project designs.

Program 5.C When reviewing the development proposals, consult and coordinate with the Morongo Basin Transit Authority to encourage the development of rideshare and other alternative, high occupancy transit programs for employers with sufficient numbers of employees.

Policy 7 Promote the use of multi-occupant modes of transportation, and the shifting of employment related trips out of current peak traffic periods.

Consistent with Program 2.B, primary project access will be through a shared driveway for the proposed project and the adjacent Yucca Valley Retail Center. The driveway will be located at SR-62 and signalized. Consistent with Policy 5 and Program 5.B, and mitigation identified in the air quality section, the needed bus facilities will be coordinated with the transit district to provide access for ridership. These bus transit facilities could also be used by employees consistent with Program 5.C and Policy 7.

3.11.4 - Standard Conditions and Uniform Codes

The project traffic study complies with congestion management plan requirements for analysis for projects which meet a certain traffic volume threshold. Applicable roadway improvements to be implemented will conform to Town and Caltrans standards, as appropriate.

3.11.5 - Project Design Features

The project access features, including driveways, internal roadways and parking areas have been designed to provide sufficient width and turning radius for access and mobility by emergency vehicles. As indicated above, the project site provides three access points which can be used for emergency vehicles.

3.11.6 - Mitigation Measures

At study intersections where future traffic generated by the proposed project is forecast to contribute to an unacceptable LOS E/F, mitigation measures are required to achieve an acceptable LOS.

Opening Year 2007

The analysis of Year 2007 traffic conditions identified five intersections that would operate at an unacceptable LOS with the proposed project if the YVRC is also developed. Four of these intersections would be at unacceptable with or without the proposed project. The fifth intersection (SR-247 at SR-62) will be at an unacceptable LOS with the YVRC project and the proposed project.

Although the proposed project will not cause any intersection to operate at an unacceptable LOS, it does create a minor contribution to a worsening of operating conditions at all five intersections.

Build-Year 2030

Analysis of the build-out year 2030 traffic conditions identified 17 intersections that would operate at an unacceptable LOS with or without the proposed project, and one more intersection that would operate at an unacceptable LOS as a result of the project, for 18 intersections that would operate at an unacceptable LOS.

CEQA requires that there be a nexus between project impacts and project mitigation, so that the mitigation implemented is commensurate with the intensity of the project's impact. The project will contribute to circulation improvements commensurate with the project's contribution to 2007 and 2030 traffic impacts in accordance with the following mitigation measure:

TR-1 The project proponent shall make project fair share contribution (\$164,010) toward the roadway and intersection improvements identified in Table 9 of the Traffic Impact Analysis (AGA 2005) prepared for the project. Fair share fees shall be paid to the Town of Yucca Valley prior to the issuance of building permits for the project.

3.11.7 - Level of Significance After Mitigation**Opening Year 2007**

Mitigation measure TR-1 will fully mitigate the project's contribution to traffic under CEQA on a project basis. Nonetheless, the project's contributions of fair share fees are not likely to result in the improvement of all five intersections to an acceptable level of service due to existing background conditions not attributable to the proposed project. Some of these intersections are still likely to operate at a poor LOS in 2007.

Build-Year 2030

The proposed project would contribute traffic to intersections that would operate at unacceptable LOS in 2030. The project's contribution of fair-share fees identified in measure TR-1 will contribute to improvement of these intersections so that the project's contribution to traffic impacts is not cumulatively considerable. Therefore, cumulative traffic impacts are considered less than significant.



Source: AGA 2005.



Michael Brandman Associates

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Exhibit 3.11-1 Project Trip Distribution

HOME DEPOT RETAIL CENTER EIR

3.12 - Utilities

The section evaluates potential impacts related to the provision of water supply, solid waste, wastewater, and other utilities. Impacts related to water quality and hydrology are addressed in Section 3.13, Water Resources. The focus of the utilities section is the requirements for new or expanded utility infrastructure and the potential environmental impacts from construction of those improvements.

3.12.1 - Existing Conditions

The project site is currently undeveloped and does not have any utility infrastructure onsite.

Water

Water for the Town is provided by the Hi-Desert Water District (District) which manages the Warren Valley Groundwater Basin and provides water to most of the Town of Yucca Valley and a portion of unincorporated San Bernardino County in the same vicinity. The District serves a population of approximately 25,000 with 9,700 service connections (HDWD 2005). Due to an increasing overdraft problem the basin was adjudicated and in 1977, the District was appointed Watermaster and tasked with addressing the overdraft and planning for future water supply needs. Water supply service and basin management are addressed through 1) limitations on water connections, 2) natural and managed recharge of the groundwater basin; and 3) import of State Water Project water for recharge and alleviation of overdraft conditions. (TYV 1995.)

The District limits annual connections to 200, which accommodates growth of approximately 2 percent per year; however, additional annual connections may be allowed if ground water storage increases due to recharge efforts. The resulting water usage is considered the safe yield of water that can be removed from the basin and ensure future water usage of approximately 20 years. The District has been allotted 4,282 acre feet per year of State Water Project water; however, actual annual deliveries will vary and can be increased or reduced each year depending on the annual State Water Project supply available. The Morongo Basin Pipeline is the delivery system for this water and has the potential to deliver up to three times the allocation when excess water is available. (TYV 1995.)

There are existing 12-inch water lines at Palisade Drive and Avalon Road, just west of the project site.

Waste Water

The Town is not served by a sewage collection system or by a wastewater treatment facility. On-site systems are utilized by residents and commercial and industrial operations throughout the Town. The Hi-Desert Water District (District) is planning a wastewater treatment plant east of the project site within the next 8 years, and service would be implemented in phases. The project site is located

within the District's Phase I service area, which are the first areas to be eligible for connection to the new wastewater system.

Solid Waste

Collection and Disposal

Solid waste services are provided by Waste Management of the Hi-Desert which collects residential and commercial solid waste in the Town and transports the solid waste to municipal landfills.

Solid waste is taken to the Landers Landfill or the Trail's End Transfer Station in Morongo Valley. The Lander's Landfill has a total capacity of 3,080,000 cubic yards (cy), and an available capacity of 15.1 % (463, 785 cy), and is estimated to remain open through 2008. San Bernardino County has landfill capacity in compliance with State regulations for a minimum of twelve (12) years, including project growth that is based on General Plan Densities.

A local recycling company, Hi-Desert Recycling, accepts glass, plastic, aluminum, tin, newspaper and other non-ferrous scrap metal.

Diversions and Recycling Requirements

In 1989, the State adopted Assembly Bill 939 (AB 939) which requires Cities and Counties to implement programs to recycle, reduce at the source and compost in order to substantially reduce to the volume of material being sent to landfills. In 1992, the Town adopted a Source Reduction and Recycling Element to help them achieve the goals of AB 939. The Town participates in the Education and Outreach Committee of the County Waste Disposal Agreement involved in education on waste reduction and proper disposal.

Electricity

Electrical services are provided to the Town by Southern California Edison (Edison). A primary 115 kilovolt line runs along the north side of SR 62. Edison regularly expands both transmission lines and electrical generation facilities to meet continued and anticipated growth in Southern California, and service is provided on an on-demand basis.

Natural Gas

Southern California Gas (SCG) Company provides natural gas service to the Town, including the project area. Two-, four-, and six-inch transmission and distribution gas lines run throughout the community, including a six-inch transmission line along SR-62. SCG regularly expands both transmission lines and their natural gas entitlements to meet continued and anticipated growth in Southern California. While service is generally provided on an on-demand basis, SCG acknowledges that service can be affected by actions of the California Public Utilities Commission, federal regulatory agency actions and other conditions that may affect supply. Generally, these actions result in temporary interruption to existing service or delay in service for new connections.

3.12.2 - Thresholds of Significance

A potentially significant impact would occur if the proposed project would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.
- 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.
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- 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.
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Comply with applicable federal, state, and local statutes and regulations related to solid waste.

3.12.3 - Project Impact Analysis

The project site is currently undeveloped and does not have any utility infrastructure onsite. The proposed project would create an incremental increase in the demand for utilities, including water, wastewater, solid waste disposal, electricity, and natural gas. Exhibit 2-7 identifies the location of proposed utility facilities to serve the project site.

Water Supply

Supply

The proposed project would use approximately 2,300 gallons per day of water, including 500 gallons per day for landscaping. Water would be provided to the project by the Hi-Desert Water District. Water sources for the District service area and the project include the Warren Valley Groundwater Basin and State Water Project entitlements/deliveries. According to the Water District, based on a review of existing supply and future anticipated entitlements, the District has sufficient water supply to serve the project without affecting existing water service. However, the project would need to contribute funding for connection fees and water acquisition fees. With implementation of applicable fees, impacts related to groundwater supply or water supply entitlements are considered less than significant.

Transmission

Water would be provided by extending the 12-inch water line from Avalon Road and Palisade Drive, further eastward within the right-of-way of the proposed Palisade Drive roadway extension. This work would be conducted in conjunction with the improvement of Palisade Drive from Avalon Road to the eastern project frontage. Water supply lines would then be connected to project facilities in conjunction with project construction. Also, see Construction Impacts discussed below.

The Town's General Plan makes the following statement about water supply:

Water supplies must be capable of meeting maximum daily demand; storage must be capable of meeting peak hour demand, in addition to fire flow volumes and an emergency reserve; and the distribution system must be able to provide required service and fire flows and adequate pressures throughout the system. (TYV 1995.)

The water distribution system in this area is generally suitable to meet these demands; however, the on-site water lines may require specific design to meet adequate fire flow goals. For instance, water lines may need to be looped to ensure adequate pressure for fire flow.

Waste Water**Waste Water**

The project will generate approximately 1,280 gallons per day of waste water. Although not currently available, the District has been developing plans for wastewater treatment for the Town of Yucca Valley, including a waste water treatment plant just east of the proposed project site to be in operation within the next 8 years. Given the plant's proximity to the project site and the planned inclusion of the site in Phase I improvements, the project site will be required to install dry sewer lines for later connection to the planned treatment plant. Accordingly, the project designs include a sewer line, "dry" pipe for future connection to the planned sewage treatment plant. Also, see Construction Impacts below.

Septic System

Since the treatment plant will not be operational for a number of years, a septic system is also proposed for the project facilities. In order for a septic system to be viable, it must be located in natural earth (as opposed to engineered fill) that has appropriate percolation rates or percolation capacity, and not pose a threat to perched groundwater. San Bernardino County's Environmental Health Services Department and the state RWQCB, Santa Ana Region, provide regulatory oversight for the installation of septic systems. Their requirements are designed to safeguard human health and groundwater quality.

Project soils are permeable, and there is no perched groundwater, rather, groundwater is estimated to be greater than 100 feet in depth on the project site. Accordingly, septic systems are not expected to be a serious threat to groundwater. Specific location suitability should be confirmed during the

grading stage through percolation testing prior to installation of systems. Also, see Construction Impacts below.

Solid Waste

As indicated in Table 3.12-1 below, the proposed project would generate up to 439 tons per year of municipal solid waste. Commercial retailers use a large amount of cardboard in the form of shipping materials. Cardboard recycling for large retailers (grocery, drug, and large box retail) is common, and would not be reflected in generation rates. Based on information provided by Home Depot, the store is likely to produce 158 tons per year of cardboard. To assist the Town with its source reduction goals, cardboard recycling will be required.

Table 3.12-1: Solid Waste Generation by Land Use Activity

Land Use	Category	Rate tons/ employee/yr	Employees	Generation (tons)
Home Depot, home improvement retailer	Retail Trade: Building Materials & Garden	3.3	120	396
Restaurant	Retail Trade: General Merchandise Stores	3.1	10	31
Other retail uses	Retail Trade: Other ¹	0.3	40	12
Total				439
<p>Source: Generation rates-California Integrated Waste Management Board website on solid waste characterization at http://www.ciwmb.ca.gov/WasteChar/DispRate.htm, Update May 2005.</p> <p>Limitations: Generation rates reflect any recycling that is conducted at business studies during waste characterizations study; therefore, with consideration of recycling, actual generation rates may be higher.</p> <p>¹ Includes apparel, accessory stores, home furniture, furnishings, equipment stores, and miscellaneous retail.</p>				

Waste Management of the Hi-Desert would provide solid waste collection services for the project site. The Landers Landfill has solid waste capacity through 2008. Thereafter, solid waste would need to be diverted to another County disposal facility. San Bernardino County has landfill capacity in compliance with State regulations for a minimum of twelve (12) years, including project growth that is based on General Plan densities. Given the available capacity for landfills in the region, impacts to solid waste are considered less than significant.

Electricity

Supply

Electricity for the proposed project would be provided by Edison, which provides electricity on an on-demand basis to most of Southern California. Given Edison's regular implementation of plans to develop expanded generation and transmission facilities, no significant impact to electrical supply would result from the proposed project.

Transmission

Electricity would be provided by extending an electrical line in a trench under SR-62. No other offsite improvements would be required. Electrical lines would then be connected to project facilities in conjunction with project construction. Also, see Construction Impacts below.

Natural Gas**Supply**

Natural gas would be provided by Southern California Gas Company, which generally provides gas service on an on demand basis. While regulatory action and other conditions can affect the supply and delivery of natural gas, they would not affect the proposed project to any greater degree than other projects or existing connections. The project is not anticipated to have an effect on other future or existing connections. Therefore, impacts related to the supply of natural gas are considered less than significant.

Transmission

Natural gas would be provided by extending an existing 2-inch main at Avalon Road and Palisade Drive, further eastward within the right-of-way of the proposed Palisades Drive roadway extension. This work would be conducted in conjunction with the improvement of Palisades Drive from Avalon Road to the eastern project frontage. Natural gas lines would then be connected to project facilities in conjunction with project construction. No other offsite improvements would be required. Also, see Construction Impacts below.

Construction Impacts

Impacts related to construction of utilities to serve the project site are temporary and would result from the connection of the proposed project to existing utility lines along Palisades Drive, Avalon, and SR-62. All utilities occur in existing rights of way. Utility connections may involve the breakup and removal of existing road material; digging of a trench, connection and placement of pipeline or cable; covering of the trench; preparation of the road base layer; laying down new roadway; and striping of new roadway. Installation of on-site utilities and drainage infrastructure would be conducted in conjunction with development of the project site at large, and the extension of Palisades Drive from Avalon Road to the eastern project frontage. The applicant will coordinate with the respective utilities to co-locate each utility for maximum of efficiency and minimal impact on roadways.

Adverse environmental impacts resulting from utility construction would be primarily temporary in nature and would involve the generation of noise, fugitive dust and exhaust emissions from equipment and vehicles. These impacts would occur as part of the project construction and would not generate independent impacts before or after that phase. As discussed in Section 3.2, Air Quality, construction-phase air quality impacts would exceed the applicable thresholds for the criteria pollutants and would be significant. As discussed in Section 3.8, Noise, temporary construction noise

impacts would be less than significant. Temporary traffic impacts in the form of lane closures may occur along SR-62 and Avalon Road in order to extend utilities along or across these roadways. They would be substantially limited both in duration and in length. Impacts on SR-62 will require coordination with Caltrans. Traffic impacts are temporary and not considered significant. Impacts to biological resources are primarily related to impacts to Joshua Trees along the future right-of-way for Palisades Drive. Impacts to these trees were considered in the biological resources analysis presented in Section 3.3, Biological Resources, and salvageable trees will be incorporated into the project's landscape plan.

General Plan

The Town's Water Resources Element of the General Plan identified the following applicable policies and programs:

Policy 1 Require the use of low water consuming, drought resistant landscape planting as a means of reducing water demand, and shall coordinate with the Hi-Desert Water District to establish a strong education/public relations program to inform residents of a wide range of water saving techniques.

Program 1.A Continue implementation of the water conservation oriented landscape ordinance to comply with State Assembly Bill 325 (AB 325), by requiring the use of natural and drought resistant planting materials and irrigation systems.

Program 2.B Establish regulations and guidelines for the development and maintenance of project-specific on-site retention/detention basins which enhance groundwater recharge and complement regional flood control facilities.

The project's landscaping plan follows Town recommendations for a mix of drought-tolerant plants that would reduce water consumption consistent with Policy 1 and Program 1.A. The project includes a detention basin, although the purpose is to maintain pre-development hydrologic conditions, as opposed to fostering groundwater recharge, so it would not contribute to Program 2.B.

The Town's Utilities Element of the General Plan identified the following applicable policies and programs:

Program 1.A Coordinate with all utility/infrastructure service providers to assure the minimal impacts to the environment and the community, and to assure adequate service for all proposed development.

Program 4.A Confer and cooperate with the Hi-Desert Water District in assuring that if the waste water treatment plant is established, new development shall interconnect and pay the fair share of development or expansion and operating costs.

Policy 7 The development of utility facilities shall be coordinated through and comply with all development standards of the General Plan and Zoning Ordinance.

The project applicant is coordinating with all the utility providers to maximize the co-location of facilities consistent with Program 1.A. The applicant is installing dry sewer lines so that they will be able to connect with the sewer system, once developed, consistent with Program 4.A.

3.12.4 - Standard Conditions and Uniform Codes

The project will comply with San Bernardino County Environmental Health Services Department and the state RWQCB, Santa Ana Region requirements for septic systems development to safeguard human health and water quality.

The project is required to comply with any applicable components of the Town's Source Reduction and Recycling Element.

3.12.5 - Project Design Features

The project's landscape plan is comprised of drought tolerant plants which minimize landscape irrigation demands.

3.12.6 - Mitigation Measures

Water Supply

U-1 The applicant shall coordinate with the Hi-Desert Water District to pay any applicable fees required to provide water service.

Waste Water

U-2 The project applicant/operator shall coordinate with the Hi-Desert Water District in order to connect to the sanitary sewer system. The project applicant shall install dry sewers and connect the sewers once service becomes available. The applicant/ operator shall pay the relevant fees required for this connection and treatment.

Solid Waste

In order to assist the Town with the source reduction goals, the following mitigation measure shall be implemented:

U-3 The applicant shall implement cardboard recycling. The annual volume of material recycled shall be reported to the Town so that they may include it in their source reduction reporting.

3.12.7 - Level of Significance After Mitigation

With the implementation of mitigation measures U-1 to U-3 impacts to utilities are less than significant. Note that construction related air quality impacts, which include the construction of

utilities are significant, even with the imposition of feasible mitigation (see Section 3.2, Air Quality, for more information).

3.13 - Water Resources

This section evaluates the impacts to hydrology and water quality resulting from the construction and operation of the proposed project. A conceptual drainage plan was prepared for the proposed project by McIntosh and Associates (MA 2005) and is contained in Appendix I of this Draft EIR.

3.13.1 - Existing Conditions

Currently, the project site is undeveloped and comprised of native vegetation and disturbed areas. The project site is gently sloping toward the northeastern corner of the site. There are currently four natural swales that cross the site and convey stormwater flows. Two swales are located along the southeastern portion of the project site; two more swales enter the site from the west, and exit near the northeast corner of the site. There are no drainage improvements on the site. Soils on the site are sandy and generally well drained.

The project site is within a 50 acre tributary of the Covington Wash which is located approximately 1,000 feet east of the project site. The Covington Wash drainage is within the Colorado River watershed even though the Colorado River is a great distance away and rainwater in this area infiltrates before reaching the River. During larger storm events that occur periodically in the desert, storm water flows are captured by the northeastern trending swales, and drain toward SR-62 and to the Covington Wash, with a northeastern trend, where they infiltrate into the ground. The calculated peak stormwater flow on the project site is approximately 40 cubic feet per second (cfs). The Covington Wash has a peak runoff of 10,980 cfs.

The project site is outside any identified 100- or 500-year flood zones (FEMA 2005). The nearest flood zone is related to the blue line stream to the east of the project site.

The estimated depth to groundwater is more than 100 feet (SWG 2005).

3.13.2 - Thresholds of Significance

The proposed project would potentially have a significant impact as it relates to water resources if the project would:

- 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 through the alteration of the course of a stream or river, in a manner which would result in substantial erosion of or siltation on- or off-site;
- d) Substantially alter the existing drainage pattern of the site or area, including through 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 stormwater 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 hazard boundary or Flood Insurance Rate Map (FIRM) or other flood hazard delineation map;
- h) Place within a 100-year flood hazard area structures that 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; and
- j) Inundation by seiche, tsunami, or mudflow.

3.13.3 - Project Impact Analysis

Hydrology

The proposed project includes the construction of various retail stores, including a home improvement store and garden center, other commercial retail, and a restaurant. The project site is approximately 18.20 acres in size and, except for landscaping areas, would be completely covered with impervious improvements (i.e., asphalt, concrete, buildings, etc.).

The proposed improvements to the project site will alter the land from vacant, natural open space and disturbed areas, to predominantly impervious developed surfaces (buildings, paved areas, parking and roadways). Post development pervious areas will include landscaped areas and a detention basin. Altering the land from the currently pervious soils, to impervious buildings, parking lot, and driveways will increase the stormwater runoff on the project site. The post-developed runoff generated on the project site would be 73.28 cfs, an increase of 33.28 cfs over undeveloped conditions.

Project drainage will manage stormwater flows generated onsite and intercept and convey off site or through site flows as described below. Also, see the conceptual drainage plan, Exhibit 2-10.

Onsite Flows

Roof drainage from the Home Depot building and garden center will be combined with driveway and parking lot drainage from the south, east and west sides of the building and the garden center and will be conveyed to an onsite detention basin for storage and subsequent release. Stormwater runoff from the remainder of the Home Depot parking lot and driveways to the north of building and garden center will be conveyed through a stormdrain system to a discharge structure to be located near the northeast corner of the project site. From there, the stormwater will be returned to the natural drainage course which crosses in that area.

Stormwater runoff for the remaining portion of the site (the area associated to other retail stores and the restaurant) will also be conveyed by storm drain system to the discharge structure described above.

Offsite Flows

Offsite flows which currently flow across the southern portion of the site, will be collected at inlet structures to be constructed at two existing natural drainage swales on the south side of the proposed Palisades Drive and will be conveyed to the onsite detention basin. Offsite flows which flow across the site from the west will also be intercepted by new inlet structures on the south side of the proposed Palisades Drive and conveyed to the detention basin.

Detention Basin and Discharge

The combined storage within the detention basins will be discharged on a metered basis through a buried storm drain system, combined with the onsite flows, and conveyed to a point near the northeast corner of the site at a rate approaching pre-development flow rates at this location.

The proposed storm drain system would allow some of the project to drain un-detained, while detaining the upstream undeveloped runoff and a portion of the developed runoff. So long as the total runoff does not exceed the historic flow rates than this is considered an acceptable approach for management of storm water flows. Under this scenario, 27.36 cfs would be released, undetained during storm events, while 45.92 cfs would need to be retained in the detention basin and released on a metered basis.

To accommodate the peak runoff of 45.92 cfs, the proposed detention basin would be six feet deep with 2:1 side slopes and a bottom dimension of 20 feet by 155 feet. The outlet structure would restrict the water released from the basin to 7.78 cfs at six inches of depth.

With implementation of the system, the peak runoff would be 33.13 cfs, which is approximately 7 cfs less than the historic peak. Therefore, the system is adequate to reduce the peak discharge to its historic rate. In addition, no downstream impacts are anticipated since peak releases would not exceed pre-developed conditions and the project would only contribute approximately 0.3% of the

overall runoff to the Covington Wash. Therefore, the project would not create any significant impacts related to hydrology.

Water Quality

Construction Impacts

The proposed project could result in short-term adverse construction related impacts to surface water quality. Grading and construction within the site will expose ground surfaces and increase the potential for erosion and the off-site transport of sediment in stormwater runoff. Additionally, the use of heavy equipment, machinery, and other materials during construction could result in adverse water quality impacts if spills come into contact with stormwater and polluted runoff enters downstream receiving waters. Construction activities that involve more than one acre are required to obtain coverage under the State-wide National Pollutant Discharge Elimination System (NPDES) permit for construction related activities from the State Water Resources Control Board (SWRCB). The permit requires that the property owner/developer prepare and implement a project-specific stormwater pollution prevention plan (SWPPP), which includes BMPs intended to reduce erosion, sedimentation, and non-permitted discharges of materials during construction. The BMPs to be used during construction typically include gravel bags, silt fencing, and general housekeeping measures to prevent stormwater contact with construction materials. The project proponent will develop and implement a SWPPP which demonstrates compliance with the State NPDES permit, and provide protection of water quality during the construction phases; therefore, no significant impacts to water quality are expected as a result of construction activities.

Long-Term Operational Impacts

Once developed, on-site storm water flows will come into contact with developed surfaces that may contain pollutants. The primary potential source areas for pollutants include parking lots, refuse storage areas, loading docks and outside storage areas. Common pollutant sources associated with retail commercial development could include trash, food waste, automotive fluids, materials stored outside and detergents. Since the landscape palette emphasizes drought tolerant and native plants, and does not include turf, use of pesticides and fertilizers is expected to be minimal and not pose a threat to water quality. These impacts to water quality can be minimized through the use of best management practices (BMPs) which emphasize good housekeeping measures and storage practices which keep potential pollutant sources separated from stormwater. However, without the imposition of BMPs, these potential impacts to water quality are considered significant.

Flooding and Related Hazards

The proposed project is a commercial development and will not include any housing structures; therefore, the project would not result in the placement of housing with a 100-year flood zone. The project is not within a 100-year flood hazard area, and will not place structures in such a way that they would impede or redirect flood flows (FEMA 2005). Additionally, because the project site is not within a 100-year flood hazard area, and there are no major levees or dams near the project site, the

project will not expose people or structures to significant risk of loss as the as a result of flooding from these sources.

The proposed project is not near a large body of water that could potentially create seiches during seismic activity, and the Pacific Ocean, which could produce tsunamis, is too far from the project site to potentially cause inundation due to a tsunami. The proposed project site and vicinity are relatively flat, without any steep canyons or ridges nearby. Because of this topography, the proposed project site is not likely to experience inundation by a mudflow.

General Plan

The following program is relevant to new development:

Program 2.B Establish regulations and guidelines for the development and maintenance of project-specific on-site retention/detention basins which enhance groundwater recharge and complement regional flood control facilities.

The proposed detention basin will need to comply with any applicable guidelines developed as part of this program identified in the Town's Water Resources Element.

3.13.4 - Standard Conditions and Uniform Codes

As indicated above, the project is required to obtain coverage under the statewide NPDES permit for construction activities, and develop and implement a SWPPP to control erosion and protect water quality during the construction phase of the project.

3.13.5 - Mitigation Measures

The following mitigations measure will further document the construction SWPPP requirement and the types of measures that should be developed to protect stormwater flows during construction activities.

WR-1 Each owner/operator shall be required to obtain coverage under the statewide NPDES permit for construction activities and develop and implement a SWPPP to protect water quality during construction activities. The SWPPP shall at a minimum address the following items:

- **Erosion Control.** Measures shall be employed to prevent the movement of soil by wind or water during construction and may include watering, and physical barriers to the movement of soil particles.
- **Tracking of Soil.** Measures **shall** be employed to effectively minimize the tracking of soil by vehicles and may include gravel driveways, wheel washes and street sweeping.

- **Wastes and Cleanup.** The SWPPP shall address washout, cleanup and disposal related to debris, trash, concrete, **asphalt**, paint, coatings, solvents and other materials applicable to preparation and construction at the project site.
- **Other Reasonable BMPs.** The SWPPP shall implement other BMPS as needed to maintain pollutants away from stormwater. The SWPPP shall also identify additional applicable measure during the storm season and when storms are anticipated.

Only rain water, uncontaminated irrigation runoff, natural and permitted discharges are permissible discharges for receiving waters. All other substances are considered pollutants and their entry into receiving waters must be minimized to provide for the beneficial use of receiving waters. The following measure will be implemented in order to provide water quality protection upon operation of the proposed project.

WR-2 In order to minimize the potential for pollutants to enter receiving waters in stormwater runoff upon operation of the Home Depot Retail Center, BMPs shall be implemented. The Community Development director shall have the authority to authorize the substitution of a particular measure that would achieve similar results. Such substitution shall be documented by letter or memo for the project file. The emphasis of these requirements is to separate storm water from potential pollutants. The owner/operator for each given parcel shall be responsible for implementing these requirements.

- **Parking Lot and Roadway Cleaning.** Parking lots and internal roadways shall be cleaned a minimum of once a week so that they are maintained free of trash and debris. Cleaning should include vacuuming or sweeping of all parking lots, and internal roadways. Most soaps are considered a pollutant and should not be used for parking lot cleaning.
- **Parking Lot Runoff.** Parking lot drainage points shall be equipped with oil/water separators which shall be maintained according to the manufacturer's requirements for maintenance.
- **Sidewalks and Refuse Storage Areas.** All project sidewalks and refuse storage areas shall be maintained clean on a minimum daily basis. Refuse containers shall be sealed so that pollutants do not seep out of them.
- **Material Storage Area.** Any materials stored outdoors shall be covered so that material cannot come into contact with materials.
- **Detention Basin.** The project detention basin shall be maintained with vegetation that will facilitate the absorption of pollutants.

- **Other Reasonable BMPs.** The owner/operator shall implement other good housekeeping and storage measures as needed to maintain pollutants away from stormwater.
- **Education/Outreach.** This measure is applicable to the home improvement center in particular. As requested by an appropriate agency, or community group, participate in any storm water pollution education program by allowing the distribution of education materials or outreach effort in the facility focusing on materials applicable to home improvement (paint, pesticides, fertilizer, construction materials, etc.). This measure emphasizes access as opposed to commitment of materials or resources.

WR-3 The design and maintenance of the project detention basin shall comply with any applicable guidelines developed as part of Program 2.B identified in the Town's Water Resources Element.

3.13.6 - Level of Significance After Mitigation

With implementation of mitigation measures WR-1 through WR-3, impacts to water resources would be less than significant.

SECTION 4: CUMULATIVE IMPACTS

4.1 - Introduction

The CEQA Guidelines Section 15130(a) requires identification of related projects, both public and private, that together with the proposed project could have cumulative impacts on the environment. The following sections evaluate the cumulative impacts of the project and other planned development in the project area. In evaluating cumulative impacts, it is useful to define the context for the particular impact being evaluated. This is the geographic extent of the environmental setting for the issue being impacted, and will be identified for each subject being evaluated. For the purposes of this analysis, the general context will be major private development or public works projects within the Town. However, each section will describe the particular context being used for the analysis.

4.2 - Cumulative Projects

The proposed project area is in the eastern portion of the Town of Yucca Valley, approximately 0.5 mile west of Twentynine Palms. It is located within San Bernardino County. The location of the project is relation to the Town boundaries, along with the locations of the various development projects, are shown in Exhibit 4-1. This area has been experiencing recent housing and commercial growth. Known projects within the Town of Yucca Valley are shown in Table 4-1 below, including projects for which an application is on file with the Town, as well as other projects of which the Town is reasonably aware.

Table 4-1: Cumulative Projects

Map Number ¹	Project	Units/Square Feet
Commercial		
1	Hutchins Motorsport Facility (SPR-03-01)	8,000 sf
2	Nathraj Hotel of 94 rooms (SPR-01-04 & PM 16204)	20,000 sf*
3	In-N-Out Burger (CUP-07-03 & Vesting PM 16506)	3,220 sf
4	Velasquez Commercial Retail center (SPR-01-03)	6,448 sf
5	Yucca Valley Retail Center, Wal-Mart, gas station, other retail (CUP-02-04, SP-01-04, PM 16632)	280,00 sf*
6	High Desert Animal Hospital (SPR-03-04)	4,724sf
7	Sav-On Plumbing (CUP-03-01)	2,000sf
8	Phelps Chevrolet Auto Dealership (CUP-02-03)	22,850 sf
9	Horak ,Office and Retail (SPR-05-04)	17,786 sf
10	Morrison & Heard, Office and Retail (SPR-04-04)	15,840 sf
11	Applebee's Restaurant (SPR-01-05)	6,286 sf
12	Salsha Enterprises LLC, conversion of Kmart building to commercial/office space and five new commercial/office buildings (CUP-03-05)	12,500 sf*
13	Fluet, commercial building complex (pre-application)	unknown

Table 4-1 (Cont.): Cumulative Projects

Map Number ¹	Project	Units/Square Feet
Residential		
14	Danmark Development, 57 residential lots on 33 acres (TM 16587, GPA-01-04)	57 units
15	Scholar Housing Park, 106 lots on 20 acres for manufactured housing park (CUP-03-03, TM 16471)	106 units
16	Living Space GP, 34 lots on 20 acres (TM 16957)	34 units
17	Villas, 40 condominiums, SPR-02-03 & TM 16649-40	40 units
18	Eddins, 12 unit apartment complex (SPR-06-04)	12 units
19	Rondel Enterprises, 54 residential lots on 98 acres (TM 16787)	54 units
20	Schultz, 17 residential lots on 90 acres, (TM 16733)	17 units
21	Dove Run by Coste, 91 condominiums (TM 11740)	31 units
22	Century Homes, 1,667 residential lots on 476 acres (EA-01-05)	1,667 units
23	17 residential lots on 9.35 acres (TM 17328)	17 units
24	Yucca Valley 87, LLC, 61 residential lots on 87 acres (TM 17354)	61 units
25	Danmark, 157 residential lots on 640 acres (pre-application)	157 units
26	20 apartment units on 1.9 acres (pre-application)	20 units
27	Destafani, 35 residential lots on 90 acres (pre-application)	35 units
28	Copper Hill Homes, 105 residential lots on 63.4 acres (pre-application)	105 units
29	Pine Tar, LLC, 135 residential lots on 161 acres (pre-application)	135 units
	Subtotal Total Square Footage/Housing	399,654 sf / 2,654 units
★	Proposed Project	174,893 sf
	Total Square Footage/Housing	574,547 sf / 2,654 units
¹ see Exhibit 4-1 * Square footage estimated. Source: TYV 2005b.		

Table 4-1 represents the potential development that may be experienced in the Town of Yucca Valley in the next few years. Based on Table 4-1 the Town of Yucca Valley anticipates up to 574,547 square feet of commercial development. Residential development would involve 2,654 units with a related potential increase in population of 6,317 (based on average of 2.38 persons per household (USCB 2005)). Given the current population of the Town of 19,726 (DOF 2005), the proposed cumulative housing projects represent a potential population increase of 32%.

4.3 - Cumulative Impacts Analysis

The following sections evaluate cumulative impacts of the proposed project and other development projects in the order that project-specific impacts were analyzed in Section 3.0, Environmental Impacts Analysis.

4.3.1 - Aesthetics

The context for aesthetic impacts is the Town of Yucca Valley, especially views from SR-62. The growth anticipated in the immediate project area will be a combination of commercial retail and single-family residential development. Development in other areas of the Town will be similar and

represent a growth spurt being experienced by the Town. While this represents an increase in development, it will not fundamentally change the aesthetic character of the Town, so long as the scale of project in terms of height, appropriate setbacks for large structures, and quality architectural standards are employed. Similarly, the implementation of the Town's night sky ordinance will safeguard the Town's dark skies conditions. With implementation of mitigation measure A-1 (see Section 3.1.6), the proposed project would meet these conditions, and would not contribute to cumulatively considerable aesthetic impacts. Therefore, no additional mitigation is required.

4.3.2 - Air Quality

The context of the cumulative air quality impact analysis is the air basin because that is the limits in which the air pollutants generated by the cumulative projects sources are circulated and often trapped. Therefore, the cumulative analysis of air quality needs to be comprehensive to the air basin. The Mojave Desert Air Quality Management District (MDAQMD) has already evaluated the entire air basin in developing their 2004 Ozone Attainment Demonstration Plan and the Final Mojave Desert Planning Area Federal Particulate Matter (PM₁₀) Attainment Plan. These air plans developed emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments based upon each City and County General Plan. The Town of Yucca Valley General Plan land use designation and density for the project area was utilized in the air plans and the density of the proposed project is actually below what is allowed for in the land use designation.

CEQA Guidelines Section 15064 (h)(3) [formerly Section 15064 (i)(3)] addresses evaluation of cumulative effects allowing the use of approved air quality plans in a cumulative impact analysis. In addressing cumulative effects for air quality, the "2004 Ozone Attainment Demonstration Plan" and the "Final Mojave Desert Planning Area Federal Particulate Matter (PM₁₀) Attainment Plan" for the San Bernardino County portion of the Mojave Desert are the most appropriate documents to use because they set forth comprehensive programs that will lead the Mojave Desert into compliance with all federal and state air quality standards and utilize control measures and related emission reduction estimates based upon the population growth and land use characteristics within the air basin. The reduction measures in these air plans focused on change of regulatory controls on four major source categories: (1) industrial activities, (2) construction/demolition activities, (3) disturbed areas, and (4) unpaved road travel.

The proposed project will not exceed the significant thresholds during the long-term operation phase of the project. Since the proposed project density was accounted for in these air plans and with mitigation the proposed project is in conformance with the emission reduction measures in these air quality plans, it is appropriate to conclude that the project's incremental contribution to cumulative air quality impacts is less than significant due to project operations.

The proposed project will exceed the thresholds for air pollutant emissions for NO_x emissions and ROG emissions during the construction phase of the project and the proposed project would be individually significant. Because the proposed project would be significant on an individual basis, and is not consistent with the above-mentioned plans, the project would contribute incrementally to cumulative impacts, and would be cumulatively significant during the construction phase of the project.

4.3.3 - Biological Resources

The context for this issue is the general project vicinity, but any potential impacts must be viewed in the context of available natural areas/habitat, and any planned regional habitat preservation programs. Continued development in this portion of Yucca Valley will incrementally remove native vegetation/habitat. There is no established regional or multiple species Habitat Conservation Plan for the area, but the Town has a local ordinance for the preparation of Joshua trees and other native plant species. As long as project level mitigation is implemented, along with implementation of the Town's Joshua tree ordinance, potential impacts to regional biological resources will remain at less than cumulatively considerable levels.

No significant impacts to sensitive species are anticipated from project implementation of the project, since the project is not within a wildlife corridor and would not significantly contribute to a loss of wildlife movement, and does not support any listed or otherwise sensitive species. Therefore, the project does not contribute to cumulatively considerable biological impacts and no additional mitigation is required.

4.3.4 - Cultural Resources

The context is the Town of Yucca Valley. Section 4.3 of the EIR determined that this project would not significantly impact any identified cultural resources. However, development in the Town has the potential to impact archaeological and/or paleontological resources because excavation activities will disturb native soils and formations. The area is known to have historical routes and be used by past cultures, and it is possible the area contain undiscovered archaeological, paleontological, or historical resources. As long as qualified personnel are retained to conduct surveys of land with the potential for resources, potential impacts to these resources will not be cumulatively considerable. Therefore, the project will not make a substantial contribution to any cumulatively considerable impacts to cultural resources.

4.3.5 - Earth Resources

Geologic Hazards

The context for this issue is development in this portion of the County of San Bernardino (Town of Yucca Valley and neighboring valleys). The City's development standards and state uniform codes provide guidelines for development in areas within liquefaction, earthquake faults, or other earth-related hazards. The presence of local and regional faults creates the potential for damage caused by

major earthquakes. Proper building design can reduce potential damage to a minimum. Anticipated development in the project area will not have a cumulatively considerable impact on earth resources, nor will regional geotechnical constraints have a cumulatively considerable impact on the proposed project or cumulative projects, as long as proper design and engineering are implemented based on available seismic and other geotechnical data. The proposed project represents an incremental portion of this potential impact that is not cumulatively considerable. Therefore, no mitigation is required relative to cumulative impacts.

Mineral Resources

The context for this issue is the general project area, but any potential impacts must be viewed in the context of available mineral resources within the region. As construction of new development continues in the community, greater demand will be placed on mineral resources. However, no significant mineral resources have been identified in the Town that would be affected by the proposed project, or cumulative projects. Because the project site will not make a significant contribution to cumulatively considerable regional impacts to mineral resources, no mitigation is required.

4.3.6 - Hazards and Hazardous Materials

The context for this issue is the project vicinity but within a portion of the County in terms of transport of hazardous materials and fire danger. As development occurs, the area will experience an incremental increase in the use of hazardous materials, mainly from domestic sources (i.e., household cleaners, gardening chemicals, automotive fluids, etc.). It is expected that these materials will be handled, transported, and disposed of properly, according to existing regulations.

The area is served by east-west SR-62 and SR-247, and several rural roads which can provide relatively direct routes for evacuation out of the area in all directions. SR-62 provides two lanes in each direction. Assuming the availability of all routes, evacuation of the entire Town is estimated to take approximately 4 hours, and over 6 hours longer in the event that east or west SR-62 is unavailable. However, in most instances (earthquake, flooding), the entire Town would not need to be evacuated, just affected areas. In 2005, the Morongo Valley experienced a wildland fire, and reaction to the fire required evacuation of the area and evacuation routes were considered insufficient. For this reason, it is important to identify areas within the jurisdiction that would be safe from wildland fire, where a portion of the population could gather, rather than attempting to evacuate the entire Town. Large paved areas are generally sufficient and the proposed project and other proposed developments may be eligible evacuation locations, and should be further evaluated.

The proposed project does not contribute population or affect evacuation routes and therefore, does not contribute to cumulatively considerable impacts related to hazards. Therefore the project's contribution to cumulative impacts is considered less than significant and no mitigation is required. Nonetheless, the anticipated increase in population resulting from future residential project's (see

Table 4-1) is likely to further increase evacuation times. Therefore, the Town should begin to identify safe evacuation areas within the Town.

4.3.7 - Land Use and Planning

The context for this issue is the Town of Yucca Valley. Development of the area will eventually modify vacant land to suburban-type land uses.

This and other planned projects will not fundamentally change the character or quality of life of the project area. In addition, the Town and regional planning agencies are anticipating this transition, and have planned for them in their General Plans and other planning documents. The anticipated level of growth is consistent with regional plans including Southern California Association of Governments plans, the Air Quality Management Plan and the County's Congestion Management Plan.

Surrounding developments will eventually add new residents resulting from 2,168 new residential units and 526,000 square feet of commercial or industrial. In terms of percent growth, the Town is one of the fastest growing areas in the County. This growth is not expected to have cumulatively considerable impacts on the environment as long as it occurs according to the General Plan. The proposed project is not expected to make a substantial contribution to land use impacts from growth, but rather is being developed to support existing and future residents. The project will not make a significant contribution to any cumulatively considerable land use impacts, so no mitigation is required.

4.3.8 - Noise

Noise impacts are generally very locally defined, so the context for this issue is the project vicinity, including projected traffic levels for vicinity roadways. Noise would also be created during construction of the proposed project; however, once construction is complete, this will no longer be an impact. The major cumulative noise impacts in the area would result from increased traffic volumes impacting surrounding dwelling units as well as delivery trucks at the proposed project site during operation.

Long-term traffic noise was analyzed at buildout of the project area. This analysis included the proposed Yucca Valley Retail Center immediately west of the project site on the southeast corner of the intersection of SR-62 and Avalon Avenue. Table 3.8-5 in Section 3.8 summarizes the results of this analysis. Project generated increases in noise levels at buildout of the area is predicted to be approximately 0.4 dBA CNEL or less, which is not considered a noticeable increase. Therefore, long-term roadway noise impacts are less than significant.

Other Long-term Operational Impacts

Other operational long-term impacts include noise generated onsite due to idling trucks making deliveries, fork lifts used for loading materials both at the loading docks and at the retail customer loading areas, roof mounted air conditioning/air circulation fans, and vehicle and pedestrian traffic in

the parking lot. The nearest sensitive receptors are north of the project site and SR-62. At this location, reception of the delivery trucks and forklifts at the loading docks will be shielded by the buildings. Noise generated in the parking lots and retail customer loading areas will have a direct line of sight between the sensitive receptors and the noise sources and will only be attenuated by distance. Hard surfaces between the noise sources and receptors are assumed because the majority of this area will be covered in asphalt with only small segments of landscaping. Table 3.8-6 summarizes the results of onsite noise generation upon opening.

Project related impacts resulting from the generation of onsite noise are well within the Town's noise standards (67 dBA CNEL in the parking lot and 60 dBA CNEL at residential land uses). Considering the intensity of roadway noise in the project area, onsite noise generation will not be perceptible at residential land uses. Therefore, long-term onsite noise generation impacts are less than significant.

4.3.9 - Public Services

The context for public services is the Town of Yucca Valley and adjacent jurisdictions.

The Fire Protection District has indicated that they need additional funding and staff to accommodate planned growth. To that end, they have proposed staff funding by project on an incremental basis. As the surrounding county areas continue to develop, their level of service may decline, however, at present, the project's impacts to fire services are not cumulatively considerable due to proposed project contributions for staffing.

The County Sheriff's Department has indicated it has adequate facilities and staffing to accommodate the project and continued growth in the area. Therefore, the long-term impacts on the Sheriff's Department will not be cumulatively considerable, and no further mitigation is required.

4.3.10 - Socioeconomics

The context for this issue is the Town of Yucca Valley. Socioeconomics applies to the relationship between housing, population, jobs, and commerce. The cumulative projects include new housing, which will contribute to population, and commercial land uses, which will contribute to jobs and tax revenues. The combined projects represent the economic growth being experienced by the Town, which is consistent with the Town's General Plan. The cumulative housing projects would result in a potential population increase of 6,317. The project would contribute employment opportunities and tax revenues, and the socioeconomic impacts to the Town are expected to be positive. Therefore, the project's contribution to cumulative impacts is considered less than significant.

4.3.11 - Traffic and Circulation

The context for this issue is the Town of Yucca Valley and the regional traffic anticipated in the year 2030 which includes the cumulative projects, and other growth anticipated by 2030. The traffic

impact analysis (TIA) analyzed the impacts to traffic for the build-out year 2030, which are presented in Section 3.11 of the EIR.

Based on the traffic model the following intersections will operate at an unacceptable LOS in 2030 without the proposed project (also see Table 3.11-7 in Section 3.11):

- Inca Trail at SR-62;
- Pioneertown Road/Deer Trail at SR-62;
- Sage Avenue/Yucca Trail at SR-62;
- SR-247 at Aberdeen Drive;
- SR-247 at Buena Vista Drive/ Skyline Ranch Road;
- SR-247 at SR-62;
- Joshua Lane ay Yucca Trail;
- Joshua Lane at Onaga Trail;
- Balsa Avenue/Palomar Avenue at Yucca Trail;
- Avalon Avenue at Yucca Valley Retail Center (proposed);
- Avalon Avenue/Palomar Avenue at Yucca Trail;
- Palomar Avenue at Joshua Lane;
- Yucca Mesa Road at Buena Vista Drive;
- Yucca Mesa Road/La Contenta Road at SR-62;
- La Contenta Road at Yucca Trail;
- Sunny Vista Road at Alta Loma Drive; and
- Alta Loma Drive at Park Boulevard/Quail Springs Road.

The project would contribute traffic to the above intersections. In addition, with consideration of project traffic one the proposed project would cause one additional intersection will operate at an unacceptable LOS (see Table 3.11-8 in Section 3.11):

- Avalon Avenue at Palisade Drive.

Therefore, the proposed project would contribute to a cumulatively considerable impact on traffic and circulation at these intersections. In order to mitigate the project's contribution to this cumulative traffic impact, the project will implement mitigation measure TR-1 (see Section 3.11.6) and will pay fair share fees to contribute to traffic improvements at the affected intersections commensurate with the project's contribution to cumulative impacts.

4.3.12 - Utilities

The context for utilities is the geographic service area provided by a particular utility. The proposed project in combination with the cumulative projects, would create an incremental increase in the demand for utility services.

Water Supply

Water would be provided to the project by the Hi-Desert Water District. The District has guaranteed water supply entitlements sufficient to serve the Town, the proposed project, and anticipated growth through 2030. With continued implementation of applicable fees (connection and delivery), impacts related to groundwater supply or water supply entitlements are considered less than significant.

Wastewater

The proposed project will utilize an onsite septic system initially, until construction of planned infrastructure for a wastewater treatment plant is completed, when the project will switch to a sewer system. The new wastewater treatment plant, and will be designed to include the Town's present development as well as future development and connections will implemented in phases. The Hi-Desert Water District has developed connection and usage fees schedules to ensure that sufficient funds are available to maintain and operate the future sewer system and that future projects will not adversely impact the provision of this utility. Based on these considerations, cumulative impacts to wastewater are considered less than significant.

Solid Waste

The County of San Bernardino has current and future capacity to handle solid waste from the proposed project and cumulative project's in the area for at least the next twelve years. The County continually plans, expands and develops new solid waste facilities in accordance with regional growth funded through the collection of disposal fees. Based on these continued efforts, cumulative impacts to solid waste are considered less than significant.

Other Utilities

The proposed project and the cumulative projects would result in an increase in the demand for other utilities including phone service, electricity and natural gas. These services are provided by private utilities on an on-demand basis. Connection and users fees paid by individual projects and users are considered sufficient to ensure services under standard conditions. The project's contribution to the increased demand is not considered substantial, and therefore, is not cumulatively considerable.

4.3.13 - Water Resources

The context for this issue is the San Bernardino County portion of the Colorado River Basin. The City and County continue to require developers to decrease onsite runoff and to properly plan flood control for new developments. In particular, most development projects, including the proposed project, include detention basins or similar features to ensure that development does not result in the increase to either the volume or the velocity of storm water runoff. Based on these standard provisions, impacts related to runoff and flood control are not considered cumulatively considerable.

Development projects in this area are required to comply with NPDES requirements including the provisions of a Storm Water Pollution Prevention Plan to safeguard water quality during project

construction. However, this portion of the basin does not require *operational* requirements for water quality. Given the low density of development in the area overall, and the highly permeable soils, the cumulative contribution to water quality impacts for the Colorado River are not considered cumulatively considerable. In addition, with water quality mitigation (see Section 3.13.6), the project's contribution to water quality impacts are not cumulatively considerable.



Projects

- 1 Hutchins Motorsport Facility
- 2 Natharj Hotel
- 3 In-N-Out
- 4 Velasques Commercial Center
- 5 Yucca Valley Retail Center
- 6 High Desert Animal Hospital
- 7 Sav-On Plumbing
- 8 Phelps Chevrolet Auto Dealership
- 9 Horak
- 10 Morrison & Heard
- 11 Applebee's Restaurant
- 12 Salsa Enterprises
- 13 Fluet
- 14 Danmark Development 57
- 15 Scholar Housing Park
- 16 Living Space
- 17 Villas
- 18 Eddins
- 19 Rondel Enterprises
- 20 Schultz
- 21 Dove Run by Coste
- 22 Century Homes
- 23 17 Residential lots
- 24 Yucca Valley 87
- 25 Danmark 157
- 26 20 Apartment Units
- 27 Destafani
- 28 Copper Hill Homes
- 29 Pine Tar

Data Sources: San Bernardino County, Town of Yucca Valley, 2005



- Roads
- Major Roads
- Project Site
- City Boundary

SECTION 5: GROWTH INDUCING, UNAVOIDABLE ADVERSE, AND IRREVERSIBLE IMPACTS

5.1 - Growth Inducing Impacts

The CEQA Guidelines §15126(d) and §12126.2(d) require the evaluation of growth-inducing impacts of a proposed project. This discussion must address ways the project could encourage economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also required is a discussion of project characteristics, which may encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The purpose of this analysis under CEQA is to identify and acknowledge potential growth-inducing impacts of a proposed project so that the public and its decision-makers will be aware of them and consider them in the decision-making process. This helps the Town to adequately plan for future needs such as infrastructure or services, if it decides to approve a project with growth-inducing consequences.

Growth inducement can take many forms. A project can remove barriers, provide access, or eliminate other constraints, which encourage growth that has already been approved and anticipated through the General Plan process. The “planned” growth would be reflected in land use plans that have been developed and approved with underlying assumption that adequate supporting infrastructure will be built. This is perhaps best described as accommodating or facilitating growth, but for the purpose of this section, the term inducing is used.

The primary purpose of the proposed project is to provide commercial retail services, including a home improvement center to meet the needs of a growing Yucca Valley community. The project is intended to serve growth that has taken place, and is anticipated to continue. The project has no housing component and therefore, would not directly induce growth through population increases. The project would provide additional employment opportunities; however, most retail employment is filled locally and there are not a large number of positions, so that no substantial influx of population specifically to fill these positions is anticipated. Also see Section 3.10 on socio-economics for further discussion of employment. Therefore, the proposed use is not expected to be a growth-inducing factor.

The proposed project involves the minor expansion of infrastructure in the project vicinity. Local infrastructure requires connections from Avalon or across SR 62. Much of the infrastructure will be extended along Palisades Road on the south side of the project site. While this would allow easy connection for future development on adjacent vacant lands, infrastructure in these areas is not a

major impediment to growth, and the project has not markedly changed that circumstance. Therefore, the expansion of infrastructure is not considered a growth-inducing factor.

5.2 - Unavoidable Adverse Impacts

The proposed project will produce significant short-term air quality impacts from air pollutants generated by construction activities, primarily dust and vehicular emissions. Mitigation has been identified to reduce impacts to the extent feasible.

No other adverse environmental impacts are expected if the proposed project is implemented as proposed, with imposition of the mitigation measures identified in this EIR.

5.3 - Irreversible and Irretrievable Commitment of Resources

The transformation of vacant undeveloped land into a commercial retail center will produce several environmental changes. Various, essentially irretrievable, non-renewable resources will be utilized in the construction of the proposed project. These resources include sand and gravel, asphalt, lumber, petrochemical construction materials, metals, fossil fuels, and water.

The primary irreversible environmental changes produced by implementation of the project will occur as a result of alterations to the physical environment in the form of committed capital, labor, and materials to construct and occupy the area.

The project site will be in a long-term use as commercial retail center. In addition, the new uses will utilize additional fossil fuel resources over the long-term. Over the long-term, resource commitment for daily operation and occupation of the project will be similar to other retail projects in the Town of Yucca Valley.

SECTION 6: ALTERNATIVES TO THE PROPOSED PROJECT

6.1 - Development of Alternatives

The California Environmental Quality Act (CEQA) Guidelines Section 15126.6 requires consideration of alternatives to the proposed action in the Environmental Impact Report. More specifically, Section 15126.6 prescribes the following:

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.

Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21001.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objective, or would be more costly.

The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination.

The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. The EIR need examine in detail only those alternatives that the lead agency determines could feasibly attain most of the basic objectives of the project while reducing one or more potential significant environmental impacts of the project to less than significant levels.

6.2 - Project Objectives

As indicated in 6.1 above, the development of project alternatives shall focus on those alternatives which can reduce significant impact and reasonably achieve project objectives. Therefore, for context in developing alternatives, it is useful to reiterate the project objectives. The following five objectives are outlined in the Project Description, Section 2.4:

- To provide a conveniently located, attractively designed retail commercial center that will offer a range of products and services that satisfy the demand for home improvement merchandise and other retail and dining opportunities for the community of Yucca Valley.
- To provide commercial development within the specific plan overlay district that incorporates high quality and consistent design standards that are compatible with the desert community.
- To develop and land use consistent with the property's General Plan designation and the land use designation for adjacent properties.
- To provide the applicant/owner a fair return in the subject property.
- To provide commercial tax revenues to the Town.

6.3 - Evaluation of Alternatives

The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. The emphasis is on the merit of the given alternative compared to the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed but in less detail than the significant effects of the project as proposed.

Based on the analysis in Sections 3.1 through 3.13 of this EIR most of the significant adverse impacts of the proposed project would be less than significant with implementation of the feasible mitigation, with the exception of short-term and cumulative air quality impacts from construction (see Section 3.2, Air Quality, and its section 4.3.2, Cumulative Air Quality). Therefore, an evaluation of project alternatives to reduce or eliminate significant adverse impacts should be included in this EIR.

Section 6.4 provides a detailed comparative analysis of the environmental impacts for the proposed project and each alternative.

In Section 6.5, for each alternative evaluated there is a description and a summary comparing the alternative to the proposed project based on environmental impacts, project objectives and benefits.

Based on an analysis of project impacts and mitigation measures, several alternatives have been developed to reduce impacts of the proposed project:

- No Project-No Development Alternative: discussed in Section 6.5.2
- No Project - Build Alternative: discussed in Section 6.5.3
- Alternative Project Site: discussed in Section 6.5.4
- Reduced Intensity Alternative: discussed in Section 6.5.5

In Section 6.6, the environmentally superior alternative is identified. Where the No Project-No Development Alternative is identified as the environmentally superior alternative, an additional build alternative is identified as the environmentally superior alternative.

6.4 - Comparative Analysis of Alternatives

Table 6-1 provides a summary of each alternative and their impacts, including quantification of impacts where appropriate, by issue in a tabular format for easy comparison of each alternative. The Table is followed by a textual description of each alternative, and a comparative analysis of the impacts of that alternative to the proposed project.

Table 6-1: Comparison of Project Alternatives in Relation to the Proposed Project

Proposed Project	No Project-No Development Alternative	No Project-Retail Build Alternative	Alternative Project Site	Reduced Intensity Alternative
Summary				
<p>Site acreage: 18.2 Developed uses: 174,893 SF The proposed project involves the development of a home improvement center, including a garden center, two retail buildings and a restaurant or bank under a Specific Plan.</p>	<p>Site acreage: 18.2 Developed uses: none Under this alternative, the property would remain vacant and would not be developed into a commercial retail center or other land use.</p>	<p>Site acreage: 18.2 Developed uses: 200,000 SF This alternative would involve development of two anchor stores and a string of smaller commercial retailers under a Specific Plan.</p>	<p>Site acreage: 10.34 Developed uses: 137,283 SF This alternative would involve the development of only the home improvement center on a smaller site.</p>	<p>Site acreage: 18.2 Developed uses: 171,893 SF This alternative would be similar to the proposed project, but eliminate the restaurant in favor of a water quality basin and conform to an extended construction schedule to reduce daily construction emissions.</p>
Aesthetics				
<p>The project will produce short-term visual impacts during construction, which are less than significant.</p> <p>The project will convert open space to commercial retail uses; but is consistent with existing land use and zoning. Restaurant set closest to SR-62 would have greatest visual impact, but will not substantially block viewsheds.</p> <p>The project will introduce new sources of glare and light which can result in degradation of the night sky.</p>	<p>Short-term visual impacts would be avoided.</p> <p>Impacts from the conversion of open space would be avoided.</p> <p>Impacts associated with introduction of glare and new light sources would be avoided.</p>	<p>Since the alternative would involve the same project area, short-term impacts would be the same.</p> <p>Since the alternative would involve the same area, long-term aesthetic impacts would be similar. Impacts from additional square footage could be somewhat greater than proposed project.</p> <p>The alternative would introduce similar sources of glare and light resulting in similar impacts.</p>	<p>The alternative would also produce short-term visual impacts, but in a different location, also on SR-62.</p> <p>Long-term aesthetic impacts would be similar in nature to the project, but would not involve any commercial retail near the highway, which would somewhat break up the massing of the home improvement center.</p> <p>The alternative would introduce similar sources of glare and light resulting in similar impacts.</p>	<p>Since the alternative would involve the same project footprint, short-term impacts would be the same.</p> <p>The project would involve the same area, but would also eliminate the restaurant closest to SR-62, and thereby reduce aesthetic impacts.</p> <p>The alternative would introduce similar sources of glare and light resulting in similar impacts.</p>

Proposed Project	No Project-No Development Alternative	No Project-Retail Build Alternative	Alternative Project Site	Reduced Intensity Alternative
Air Quality				
<p>Project construction emissions would exceed MDAQMD daily thresholds as follows in lbs/day:</p> <ul style="list-style-type: none"> • ROG: 452 (threshold is 137) • NOx: 336 (threshold is 137) • PM10: 321 (threshold is 82) <p>Annual construction emissions are below thresholds.</p> <p>Operational emissions associated with project traffic are below MDAQMD thresholds as follows in lbs/day:</p> <ul style="list-style-type: none"> • ROG: 43 (threshold is 137) • NOx: 42 (threshold is 137) • CO: 421 (threshold is 548) • SOx: 0.23 (threshold is 137) • PM10: 34 (threshold is 82) 	<p>Emissions associated with project construction would be avoided.</p> <p>Emissions associated with project operation would be avoided.</p>	<p>Since the alternative would involve the same development footprint, and a similar construction program, so maximum daily construction emissions would be the same. The MDAQMD daily thresholds would be exceeded, and impacts would be significant.</p> <p>Operational emissions would be increased due to increase traffic so that operational emissions would be as follows in lbs/day:</p> <ul style="list-style-type: none"> • ROG: 62 lbs/day • NOx: 61 lbs/day • CO: 606 lbs/day • SOx: 0.33 lbs/day • PM10: 49 lbs/day <p>Resulting daily CO emissions would exceed thresholds, so impacts would be greater under this alternative.</p>	<p>The reduced project footprint and reduced facilities would reduce total emissions, but with a similar project schedule, daily emissions would be similar, and maximum daily construction emissions would be the same. The MDAQMD daily thresholds would be exceeded, and impacts would be significant.</p> <p>Operational emissions would be reduced due to reduction in project traffic as follows:</p> <ul style="list-style-type: none"> • ROG: 26 lbs/day • NOx: 25 lbs/day • CO: 253 lbs/day • SOx: 0.14 lbs/day • PM10: 20 lbs/day <p>All operational emissions are below thresholds, so impacts would be reduced under this alternative.</p>	<p>The alternative would involve the same development footprint, but an extended construction program so that maximum daily emission due to construction would not exceed thresholds. Annual thresholds would also remain within MDAQMD limits. Therefore, construction impacts would be less than significant.</p> <p>Operational emissions would be slightly reduced due to reduction in project traffic as follows:</p> <ul style="list-style-type: none"> • ROG: 36 lbs/day • NOx: 35 lbs/day • CO: 349 lbs/day • SOx: 0.19 lbs/day • PM10: 28 lbs/day <p>All operational emissions are below thresholds, so impacts would be reduced under this alternative.</p>

Proposed Project	No Project-No Development Alternative	No Project-Retail Build Alternative	Alternative Project Site	Reduced Intensity Alternative
Biological Resources				
<p>The project would impact approximately 18.2 acres of native vegetation to commercial retail land uses and result in the removal of approximately 235 Joshua trees, including 69 trees which are not eligible for relocation.</p> <p>The project site also has a moderate potential to support desert tortoise, a federally threatened species.</p>	<p>Impacts to biological resources would be avoided.</p>	<p>Since the alternative would involve the same development area, impacts would be the same as those for the proposed project.</p>	<p>The alternative project site is similar in the composition of biological resources, being located in close proximity to the project site. It would involve a smaller development footprint—10 acres, as compared to 18.2 for the proposed project site. Therefore, impacts would be reduced under this alternative.</p>	<p>Since the alternative would involve the same development area, impacts would be the same as those for the proposed project.</p>
Cultural Resources				
<p>The project site has a moderate potential to contain buried cultural and paleontological resources that could be uncovered during grading activities.</p>	<p>Impacts to buried cultural and paleontological resources would be avoided.</p>	<p>Since the alternative would involve the same development area, impacts would be the same as those for the proposed project.</p>	<p>The alternative site is in close proximity to the project site, is near the intermittent stream channel and has a similar soils composition. Based on these characteristics the alternative site has the same potential to contain buried cultural and paleontological resources, and impacts would be similar.</p>	<p>Since the alternative would involve the same development area, impacts would be the same as those for the proposed project.</p>
Earth Resources				
<p>The project would introduce a home improvement center and other retail uses to a site with potential for moderate ground shaking, settling and other seismic related hazards. Strong ground shaking could result in injuries from falling merchandise or shelving.</p>	<p>Impacts associated with seismic related hazards would be avoided.</p>	<p>Since the alternative would involve the same development area, this alternative would have a similar potential for seismic related hazards, and therefore similar impacts.</p>	<p>The alternative site is in close proximity and would have a similar potential for seismic hazards, and therefore similar impacts.</p>	<p>Since the alternative would involve the same development footprint, this alternative would have a similar potential for seismic related hazards, and therefore similar impacts.</p>

Proposed Project	No Project-No Development Alternative	No Project-Retail Build Alternative	Alternative Project Site	Reduced Intensity Alternative
Hazards and Hazardous Materials				
<p>Limited hazardous materials would be used during project construction, though proper use would be controlled through a SWPPP.</p> <p>Hazardous materials would be used in operation of retail uses and maintenance of exterior areas (fertilizers, pesticides, paint, and detergents).</p> <p>Materials would also be transported to and sold at the home improvement center (fertilizers, pesticides, solvents, paint, etc.) in accordance with federal, state and local agency regulations.</p>	<p>Impacts associated with hazardous materials would be avoided.</p>	<p>Use of hazardous materials during construction would be similar to the proposed project.</p> <p>Use of materials for retail operations would be similar.</p> <p>Impacts associated with the transport and sale of hazardous materials would be largely reduced.</p>	<p>The same materials would be used during project construction, but less material would be involved due to the reduced project footprint.</p> <p>Use of materials for retail operations would be similar.</p> <p>Impacts associated with the transport and sale of hazardous materials would be the same as the proposed project</p>	<p>Use of hazardous materials during construction would be similar to the proposed project.</p> <p>Use of materials for retail operations would be similar.</p> <p>Impacts associated with the transport and sale of hazardous materials would be the same as the proposed project</p>
Land Use & Planning				
<p>The project is consistent with Town land use designations and would not create any significant land use impacts.</p>	<p>Under this alternative, the project site would not be developed consistent with the Town's zoning and would not contribute to goals identified in the Town's Land Use or Economic Development Elements. Therefore, impacts would be greater under this alternative.</p>	<p>This alternative would also be consistent with Town land use designations and would not create any significant land use impacts, resulting in similar impacts.</p>	<p>This alternative would also be consistent with Town land use designations, but would not involve a Specific Plan overlay. Due to the reduced retail uses the alternative would contribute less to the Town's Land Use or Economic Development Elements.</p>	<p>This alternative would also be consistent with Town land use designations and would not create any significant land use impacts, resulting in similar impacts.</p>

Proposed Project	No Project-No Development Alternative	No Project-Retail Build Alternative	Alternative Project Site	Reduced Intensity Alternative
Noise				
<p>Construction noise levels are less than significant with conformance to City noise standards for time restrictions on construction. See Table 3.8-3 for range of potential daily noise levels during construction by equipment.</p> <p>Operational noise associated with traffic increases on roadways are less than significant since roadways noise levels are within noise standards and the project will not create a noticeable increase in roadway noise levels (3 dBA CNEL increase). The maximum anticipated increase in noise is 0.9 dBA CNEL.</p> <p>Operational noise associated with on-site activities such as truck idling and loading are estimated at up to 62.4 dBA which is below the Town's noise standard of 67 dBA.</p>	<p>Construction noise impacts would be avoided.</p> <p>All operational noise impacts associate with the project, including roadway and on-site noise associated with retail land use would be avoided.</p> <p>Operational noise associated with on-site activities would be avoided.</p>	<p>Daily construction noise levels would be similar to the proposed project, with a slightly increased construction period associated with construction of additional square footage.</p> <p>Since vehicle trips would be increased by approximately 44%, traffic related noise would be greater than the proposed project, but would still be less than significant.</p> <p>Operational noise associated with on-site activities would be similar, however noise would slightly increased due to additional land use activities on the project site.</p>	<p>Daily construction noise levels would be similar to the proposed project, with a reduced grading and construction period since only the home improvement center would be constructed.</p> <p>Since vehicle trips would be decreased by approximately 40% traffic related noise would be less than the proposed project.</p> <p>Operational noise associated with on-site activities would be similar; however, noise would be lesser due to less activity on the project site associated with reduced facilities.</p>	<p>Daily construction noise levels would be similar to the proposed project, with a slightly reduced construction period since the restaurant would not be constructed.</p> <p>Roadway noise would be similar to the proposed project, but slightly reduced due to minor increase in traffic associated with fewer vehicle trips.</p> <p>Operational noise associated with on-site activities would be similar; however, noise would be slightly reduced since there would be no restaurant.</p>
Public Services				
<p>Conversion of the project site to commercial retail would create a new demand for fire and police services at this location.</p>	<p>There would be no new demand for police and fire services under this alternative.</p>	<p>The demand for fire and polices services would be similar under this alternative.</p>	<p>The demand for fire and polices services would be slightly reduced under this alternative due to the decrease in land use activities.</p>	<p>The demand for fire and polices services would be the slightly less under this alternative.</p>

Proposed Project	No Project-No Development Alternative	No Project-Retail Build Alternative	Alternative Project Site	Reduced Intensity Alternative
Socioeconomics				
<p>The project would create approximately 100 new full and part –time jobs to operate the new retail uses.</p> <p>The project would contribute to the Town’s tax base through property improvement and sales tax revenue.</p> <p>Similarly, the project contributes to socioeconomic goals identified in the General Plan.</p>	<p>Under this alternative, none of the positive socioeconomic impacts of the proposed project would be realized and socioeconomic impacts are considered greater.</p>	<p>The alternative would result in similar socioeconomic impacts.</p>	<p>The alternative would result in reduced positive socioeconomic impacts due to the reduced number of retailers since this alternative would only involve development of the home improvement center.</p> <p>There would be about 30 fewer employees under this alternative.</p>	<p>The alternative would result in slightly reduced positive socioeconomic impacts due to the elimination of the restaurant.</p> <p>There would be about 10 fewer employees under this alternative.</p>
Traffic & Circulation				
<p>5,695 trips</p> <p>Traffic would adversely affect the following intersections:</p> <ul style="list-style-type: none"> • Inca Trail at SR-62 • SR-247 at Buena Vista • Joshua Lane at Yucca Trail • Avalon Avenue at Palomar Avenue 	<p>0 trips (100% decrease)</p> <p>No traffic would be generated, so no intersections would be affected.</p>	<p>8,214 trips (44% increase)</p> <p>Traffic distribution would be the same, but number of trips would be greater.</p> <p>Intersection impacts would be similar. This alternative would adversely impact the same intersections as the proposed project and would also impact an additional intersection:</p> <ul style="list-style-type: none"> • SR-247 at SR-62. 	<p>3,417 trips (40% reduction)</p> <p>Traffic distribution would be slightly different under this alternative:</p> <ul style="list-style-type: none"> • new turning movements at alternative site; • turning movements at project site eliminated • reduced intersection volumes at Avalon and SR-62 • Intersections impacts at SR-62 and Yucca Mesa Road would be greater than for the proposed project but still less than significant. <p>Distribution to other intersections along SR-62 and vicinity would be less than the proposed project, though</p>	<p>4,728 trips (17% reduction)</p> <p>Traffic distribution would be the same, but number of trips would be reduced. Intersection impacts would be slightly reduced compared to the proposed project, but still adversely affect the same intersections as the proposed project.</p>

Proposed Project	No Project-No Development Alternative	No Project-Retail Build Alternative	Alternative Project Site	Reduced Intensity Alternative
			impacts would be lesser due to 40% reduction in vehicle trips.	
Utilities				
<p>The project would result in the extension of utilities to the project site along with resulting construction impacts.</p> <p>The project would result in a new demand for utilities including water, waste water, solid waste, electricity and natural gas.</p>	Under this alternative, impacts associated with construction and use of utilities would be avoided.	<p>Under this alternative, impacts associated with construction of utilities would be similar to the proposed project.</p> <p>Utility usage would be slightly higher due to increased square footage.</p>	<p>Since most utility mains are located along SR-62, impacts associated with construction of utilities would be similar to the proposed project.</p> <p>Utility usage would be reduced since only the home improvement center would need service.</p>	<p>Under this alternative, impacts associated with construction of utilities would be similar to the proposed project.</p> <p>Utility usage would be slightly reduced due to elimination of the restaurant.</p>
Water Resources				
<p>The project will convert vacant land to retail land use, reducing the impervious surfaces and expose storm water to urban pollutants.</p> <p>Construction will potentially expose soils to erosion and potentially introduce construction materials to storm water.</p>	Under this alternative, impacts associated with impervious surfaces would be avoided. Storm water would not be exposed to urban pollutants or construction materials.	This alternative would involve the same development area, similar impervious surfaces, urban environment and construction program. Therefore, impacts would be similar.	This alternative would involve a smaller development area, similar impervious surfaces, urban environment and construction program. Therefore, impacts would be slightly reduced due to the reduced level of impervious surfaces.	This alternative would involve the same development area, urban environment and a similar construction program. However, it would also have less impervious surfaces and a water quality detention basin to treat parking lot runoff prior to release. Therefore, impacts would be less than those for the proposed project.

6.5 - Identification of Alternatives and Summary of Evaluation

6.5.1 - Alternatives Not Selected for Further Review

No additional design alternatives have been considered by the Town or the project proponent.

6.5.2 - No Project - No Development Alternative

Alternative Description

CEQA requires the evaluation of the impacts of a specific “No Project” (no development) alternative compared to the proposed project. The “No Project” analysis essentially evaluates existing conditions on the site (i.e., no development). Under the No Project Alternative, the property would remain vacant and would not be developed into a commercial retail center or other land use.

Evaluation of Impacts

The No Project Alternative would eliminate any adverse environmental consequences associated with land development such as those associated with the proposed project. Impacts resulting from project construction would be avoided, including impacts to biological resources, air quality, and noise. Impacts resulting from long-term project operation would also be avoided, including impacts to aesthetics, air quality, traffic and water quality. Socioeconomic impacts would be greater under this alternative because this Alternative would not provide any employment opportunities, compared with the proposed project, but the Town would still experience an increase in population. This alternative would also not be consistent with Town zoning, or further the Town’s Land Use or Economic Development Elements.

Summary

Assuming that the site remains undeveloped, most of the project specific impacts of the project would be avoided, including physical impacts to the site resulting from conversion of open space, construction impacts, and impacts from the long-term operation of the project. Socioeconomic impacts would be greater because of the lack of employment opportunities. However, none of the project objectives or the project benefits derived from the objectives would be achieved. In particular, the Town would not have a large retail home improvement center, and the Town would not receive any commercial tax revenue from this project. Since mitigation would not be implemented, the project would not contribute any fees for fire protection or fair share traffic improvements. Although these fees are intended to offset project impacts, they are likely to benefit the Town at large as well by providing additional fire protection staffing and contributing to traffic improvement funding.

6.5.3 - No Project - Retail Build Alternative

Alternative Description

The CEQA Guidelines state that the alternatives analysis should discuss “predictable actions by others, such as the proposal of some other project” (Section 15126.6). These “predictable actions”

are to be assessed based on current plans and consistent with available infrastructure and community services. Therefore, if there are no serious impediments to development, an alternative which would involve development of the site under a different proposal consistent with the land use requirements should be considered. This alternative represents the likely proposal for development of the project site in the near future.

The Town's recent economic growth, reflected in increased population, housing and commercial development (and proposals for development) contributes to development pressure on the project site. The project site is also ideally situated along SR-62 for retail commercial access. These factors warrant consideration of a no project-build alternative. The applicable Town land use designation for the project site is GC - General Commercial with an SP-Specific Plan overlay. This designation favors most types of retail commercial development, including shopping centers, department stores and recreational uses such as theatres. See Section 3.7, Land Use, for the specific designation descriptions.

The Retail Build Alternative assumes the development of quality retail commercial development consistent with a Specific Plan integrated design and consistent with other Town development requirements (Joshua tree protection, etc.). According to the development code, approximately 60% of the site could be used for commercial facilities with a floor to area ratio of 1.2 that would allow development of up to 951,000 square feet (SF). However, a more reasonable square footage consistent with other retail development in the town for a site of this size would be 200,000 SF. For purposes of this analysis, the Retail Build Alternative assumes the development of 200,000 SF feet of commercial retail facilities comprised of two anchor stores and a string of smaller commercial retailers on the project site, which is 25,107 SF more than the proposed project.

Evaluation of Impacts

Since the Retail Build Alternative involves land uses which are similar to the proposed project (retail commercial development), this Alternative is likely to result in impacts that would be similar in nature as those for the proposed project. Since the Retail Build Alternative involves development of the same project site, the same on-site resources would be impacted by construction (e.g. Joshua tree, buried cultural resources). Project construction is likely to result in similar air quality and noise impacts. Operational impacts would also be slightly increased due to the increase in commercial activity. In particular, the traffic generated by this alternative would represent an increase of 44% over the proposed project. This increase in traffic would result in unacceptable levels of service at the following intersections: Inca Trail at SR-62, SR-247 at Buena Vista, Joshua Lane at Yucca Trail, Avalon Avenue at Palomar Avenue, and SR-247 at SR-62. Construction emissions for ROG, NO_x and PM₁₀ would exceed MDAQMD thresholds and would be significant. Operational CO emissions from project traffic would exceed MDAQMD thresholds.

Summary

Impacts from the Retail Build Alternative would be similar to those for the proposed project; although traffic and traffic related impacts (noise, air quality) would be greater under the Retail Build Alternative. This alternative is likely to achieve the project objectives in a similar way. Project benefits and mitigation would be similar to those for the proposed project, but would not provide a large home improvement center.

6.5.4 - Alternative Project Site

Alternative Description

State CEQA Guidelines Section 15126.6 requires an EIR to evaluate the potential impacts of moving the proposed project to an alternative site. The purpose of this alternative is to determine whether project impacts would be substantially reduced by implementing the project in a different location.

The Home Depot has investigated potential sites in the Town and found another site that would be potentially suitable for a Home Depot. The alternative project site considered for this proposed project is located at the southwest corner of SR-62 and Yucca Mesa Road, approximately 3,000 feet east of the current proposed project site. The Alternative Project Site is approximately 10.34 acres and would only be large enough to fit a Home Depot store and garden center, without any additional retail commercial out parcels. The square footage for the Home Depot including the garden center would be 137,283 SF which is 37,610 SF less than for the proposed project. The design and operation of the site would be similar to the proposed project, but would be excluding the outparcel land uses. The alternative site topography, vegetation, and surrounding area are very similar to the proposed project site. The alternative site is designated for General Commercial development, but does not include a Specific Plan Overlay.

Evaluation of Impacts

Under the Alternative Project Site, construction and operational impacts would generally be the same in nature; however, the magnitude would be reduced because the project site footprint is smaller and the development is less intensive. However, the lack of a Specific Plan on the site could lead to disjointed development and incompatible designs, which could result in greater aesthetic impacts than the proposed project.

Since the alternative project site is smaller than the current proposed project site, impacts related to construction of the project would be reduced. Specifically, the area to be graded would be reduced and total air quality emissions would be reduced. However, assuming a similar construction schedule as for the proposed project, daily construction emissions would still exceed MDAQMD thresholds for ROC, NO_x and PM_{2.5}. Impacts to buried cultural resources would be similar to the project due to proximity to the stream channel and similar soil conditions.

Additionally the magnitude of some operational impacts would also be reduced because of the less intensive development. Daily trip generation would be reduced by nearly 40%, reducing traffic impacts and traffic related noise and air emissions. The following intersections would operate at less than acceptable levels: Inca Trail at SR-62, SR-247 at Buena Vista, Joshua Lane at Yucca Trail and Avalon Avenue at Palomar Avenue. Because the alternative site would include only the Home Depot, the demand for public services would be slightly reduced. Impacts to aesthetics would be greater because of less massing of building structures, and less setback of the large home improvement center, compared to the proposed project. Long-term aesthetic impacts would be similar in nature to the project, but would not involve any commercial retail near the highway, which, if present, would somewhat break up the massing of the home improvement center. Impacts to socioeconomics would be marginally greater under the Alternative Site because of slightly reduced (30 jobs) employment opportunities from the elimination of the fast food and retail components of the proposed project.

Summary

Impacts from the Alternative Project Site would be generally similar in nature to those for the proposed project, but would accrue to a different project site. The main differences can be attributed to the smaller project site and less intense development. Impacts to aesthetics would be greater because of less massing of building structures (see above). Impacts to socioeconomics would be marginally greater because of fewer employment opportunities. Impacts associated with traffic, noise and air quality would be reduced. This Alternative would achieve the project objectives, but to a lesser extent than the proposed project.

6.5.5 - Reduced Intensity Alternative

Alternative Description

This alternative would reduce the intensity of land use on the project site by eliminating one of the commercial out parcels, specifically, the parcel proposed for potential restaurant use. This elimination of the restaurant was identified because on a per square footage basis, restaurants generate more traffic than general retail; because the location is suitable for capturing parking lot runoff; and the restaurant is located on the most prominent site location on a curve near SR-62 and somewhat constrains views along this corridor. The construction period would be extended so that grading would be completed prior to the commencement of additional construction and daily emissions are constrained to comply with MDAQMD thresholds. Total square footage for the project would be 171,893, which is 3,000 SF less than the proposed project. Under the Reduced Intensity Alternative, the restaurant and related parking and driveway square footage would be replaced with additional landscaping and a water quality basin that would filter parking lot runoff prior to release.

Evaluation of Impacts

Since the Reduced Intensity Alternative involves land uses which are similar to the proposed project (retail commercial development), this Alternative is likely to result in impacts that would be similar in nature as those for the proposed project. However, due to the extended construction period air quality emissions would be sufficiently reduced so that project and cumulative impacts from construction would be less than significant. The slightly reduced development intensity would also somewhat reduce the magnitude of impacts, primarily from operation. Impacts to traffic and circulation would be reduced 17%; however, intersections would still be adversely affected by alternative contributions to traffic as follows: Inca Trail at SR-62, SR-247 at Buena Vista, Joshua Lane at Yucca Trail and Avalon Avenue at Palomar Avenue. Although a less intense land use is proposed, development of the project site is still likely to impact the same project footprint so that impacts to cultural resources and biological resources would be the same. However, the Reduced Intensity Alternative would include a second water quality basin that would filter water runoff from parking lots, further reducing water quality impacts compared to the proposed project. Removal of the restaurant would also provide more landscaping, reducing the massing of developed features and improving the aesthetics along a scenic highway. The reduced intensity would also produce less traffic, and therefore, less traffic related noise and air pollutant emissions.

Summary

Impacts from the No Project-Build Alternative would be reduced as compared to those for the proposed project. The extension of the construction period would reduce construction emissions to less than significant levels. Other impacts would be slightly reduced in magnitude due to a less intense use of the project site. This alternative is likely to achieve the project objectives in a similar way to the proposed project with a minor decrease socioeconomic benefits, primarily sales tax revenue. In addition, the extended construction period would somewhat delay the project opening resulting in missed revenues for both the Town and the applicant/operator associated with the delay. Project benefits and mitigation would be similar to those for the proposed project.

6.6 - Environmentally Superior Alternatives

The CEQA Guidelines require identification of an environmentally superior alternative (Section 15126.6(e)(2)). The “No Project” (i.e., “No Development”) alternative is environmentally superior to the proposed project, as it would avoid all project related environmental impacts. However, it would not meet any of the goals of the project.

The CEQA Guidelines stipulate that, “if the environmentally superior alternative is the no project alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives” (Section 15126.6(e)(2)). After consideration of the No Project-No Development Alternative, the Reduced Intensity Alternative is considered the environmentally superior alternative because it would reduce project level and cumulative air quality construction emission to less than

significant levels, and it would reduce impacts from operation of the proposed project, including improved aesthetics, reduction in traffic, a reduction in traffic related air quality and noise impacts. Aside from air quality reductions, none of the reduction in impacts are considered substantial. In addition, the Reduced Intensity Alternative would not achieve the project objectives by reducing the potential revenues by a small amount.

SECTION 7: REPORT PREPARATION RESOURCES

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7.3 - Bibliography

- AGA 2005 Albert Grover and Associates, *Traffic Impact Analysis for the Proposed Home Depot Project on Twenty-Nine Palms Highway/SR-62 East of Avalon Avenue*, July 2005. (Appendix H).
- AIR 1992 San Bernardino County Planning Department, *Airport Comprehensive Land Use Plan Yucca Valley Airport*, February, 1992.
- BOE 2004 California State Board of Equalization, *Taxable Sales in California (Sales and Tax Use)*, Third Quarter, 2004.
- CARB 2005 California Air Resources Board, *Historical Air Quality Data*, at <http://www.arb.ca.gov/adam/cgi-bin/db2www/adamtop4b.d2w/start>, accessed July 20, 2005.
- DOF 2005 California Department of Finance. *E-1: City/County Population and Housing Estimates with Annual Percent Change*, at www.dof.ca.gov/HTML/DEMOGRAP/E-1table.xls, dated January 1, 2004-2005.
- ENV 2005 ENVIRON International Corporation, *Phase 1 Environmental Site Assessment Vacant Land Near Southeastern Corner of Twenty-Nine Palms Highway and Avalon Avenue Yucca Valley, California*, February 18, 2005. (Appendix G).
- EPA 1971 Environmental Protection Agency, *Noise from Construction Equipment and Operations, Building Equipment and Home Appliance*, PB 20617, 1971.
- FEMA 2005 Environmental Systems Research Institute and the Federal Emergency Management Agency, *Online Hazard Map* at <http://www.esri.com/hazards/makemap.html>, accessed July 29, 2005.
- GI 2005 Geotechnics Incorporated, *Report of Preliminary Fault Rupture Hazards Evaluation, Proposed Home Depot - Yucca Valley, California*, September 15, 2005. (Appendix E).
- MA 2005 McIntosh & Associates, *Home Depot - Yucca Valley, California, Conceptual Drainage Plan*, June 27, 2005. (Appendix I).
- MBA 2005a Michael Brandman Associates, *Phase 1 Cultural Resource Survey: The Yucca Valley-Home Depot Retail Center (APN#0601-201-31, -32 and -37), Town of Yucca Valley, California with Notes on Paleontology*, June 14, 2005. (Appendix D)

- MBA 2005b Michael Brandman Associates, *Air Quality Impact Analysis Report Home Depot Retail Center EIR Town of Yucca Valley Yucca Valley, California*, August 17, 2005. (Appendix B).
- MBA 2005c Michael Brandman Associates, *Biological Resources Assessment, Home Depot Retail Center Site (29.3 acres), Town of Yucca Valley, San Bernardino County, CA*. August 2, 2005. (Appendix C).
- MBA 2005d Michael Brandman Associates, *Results of Joshua Tree Survey for Proposed Home Depot Site in Yucca Valley, California*, August 2, 2005. (Appendix C).
- MBA 2005e Michael Brandman Associates, *Focused Desert Tortoise Survey Report for an 29.3-Acre Site in the Town of Yucca Valley, San Bernardino County, California*, August 2, 2005. (Appendix C).
- MBA 2005f Michael Brandman Associates, *Joshua Tree Salvage Plan for the Home Depot Center in the Town of Yucca Valley, CA*, August 2005. (Appendix C).
- MBA 2005g Michael Brandman Associates, *Noise Modeling Calculations for the Home Depot Retail Center in the Town of Yucca Valley, CA*, September 2005. (Appendix F).
- MDPA 1995 Mojave Desert Planning Area, *Final Mojave Desert Planning Area Federal Particulate Matter (PM₁₀) Attainment Plan*, July 31, 1995.
- SBC 1992 San Bernardino County Planning Department. *Airport Land Use Comprehensive Land Use Plan*, February 1992.
- SBF 2005 San Bernardino County Fire Department, *Letter from Division Chief Paul Summers in response to request for service information*, received July 2005 (undated). (Appendix J).
- SBS 2005 San Bernardino County Sheriff's Department, *Letter from Sheriff Gary Penrod in response to request for service information*, July 21, 2005. (Appendix J).
- SWG 2005 Southwest Geotech, Inc., *Report of Geotechnical Engineering Study, Proposed Home Depot Store Yucca Valley, California*, June 30, 2005. (Appendix E).
- SEG 2005 Stephen E. Jacobs, C.E.G., *Report of Fault Investigation, Home Depot Parcel, Yucca Valley, California*, April 6, 2005. (Appendix E).
- SEG 2004 Stephen E. Jacobs, C.E.G., *Seismic Hazards Study, Proposed Home Depot Building Complex, Yucca Valley, California*, August 25, 2004. (Appendix E).

- TYV 1995 Town of Yucca Valley, *Comprehensive General Plan*, December 14, 1995.
- TYV 2004 Town of Yucca Valley, *Official Zoning District Map*, revised October 6, 2004.
- TYV 2005a Town of Yucca Valley, *Development Code*, updated 2005.
- TYV 2005b Town of Yucca Valley, *Active Project Map*, April 2005.
- USCB 2005 U.S. Census Bureau, *American Fact Finder website data from 2000 census*, <http://factfinder.census.gov>, accessed in 2005.
- USGS 2005 United States Geological Survey, *California Important Mineral Resources Data*, 2005.

