

D R A F T
MITIGATION NEGATIVE DECLARATION

SAN DIEGO GAS & ELECTRIC COMPANY
GARFIELD SUBSTATION PROJECT
Application No. 00-02-047

Lead Agency:

CALIFORNIA PUBLIC UTILITIES COMMISSION

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JULY 2000

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**SECTION 1.0
INTRODUCTION**

1.1 SUMMARY OF PROJECT DESCRIPTION

On February 29, 2000, San Diego Gas & Electric Company (SDG&E) filed Application No.

00-02-047 pursuant to the California Public Utilities Commission (CPUC) General Order No. 131-D requesting authority for a Permit to Construct the Garfield Substation project. The Garfield Substation project would be located in the City of El Cajon in eastern San Diego County. The proposed substation is planned to be a 60 MVA substation with two sections of switchgear and eight 12 kV (kilovolts) circuits. A perimeter wall varying from 10 to 13 feet will enclose the substation and landscaping will be established from the beginning of the project (see *Section 2, Project Description*, for further details).

SDG&E is a public utility corporation engaged principally in the business of providing electric service to a portion of Orange County, California, and electric and gas service to San Diego County, California. In providing electrical power sources to the El Cajon/Murray area of San Diego County, SDG&E currently operates three substations. A recent SDG&E area planning study indicates that the current capacity of these substations will be reached in 2001.

The objective of the proposed Garfield Substation is to provide additional electricity to meet expected load growth and meet reliability criteria.

1.2 ENVIRONMENTAL ISSUES AND CONCERNS

The CPUC is the lead agency pursuant to the California Environmental Quality Act (CEQA) and is responsible for authorizing the construction of the Garfield Substation project. The CPUC's process for granting a Permit to Construct is focused on consideration of the environmental issues and concerns surrounding the project as proposed. A public outreach program was conducted by SDG&E during 1999. Public outreach consisted of contacting the City of El Cajon (Mayor, Council Members, City Manager, Community Development Director), City of La Mesa (Council Members, Community Development Director), Caltrans, a community task force comprised of members of the public from both the City of El Cajon and City of La Mesa, and members of the community regarding environmental issues and concerns surrounding the proposed project. Feedback received during public outreach identified the following areas of concern:

- ! Siting/alternative project locations
- ! Need and purpose of the project
- ! Land use compatibility
- ! Degradation of viewshed particularly in public viewsheds, scenic vistas or community gateways
- ! Health and safety (Electric and Magnetic Fields)
- ! Noise impacts on residences
- ! Construction effects such as dust, noise, traffic on residences
- ! Residential property values

These areas of concern are addressed in this document.

1.3 DECISION TO PREPARE A MITIGATED NEGATIVE DECLARATION

As provided for in the State CEQA Guidelines, the CPUC prepared an Initial Study with particular attention to the areas of concern raised during the public outreach program to determine whether construction and operation of the proposed Garfield Substation project would have a potentially significant effect on the environment. CEQA Guideline Section 15382 states:

“Significant effect on the environment” means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment.

The Initial Study is specific to the construction of the Garfield Substation at the proposed site. An Initial Study under CEQA does not require the CPUC to analyze alternatives including alternative sites (CEQA Guidelines §15063[d]). However, as part of SDG&E’s application to the CPUC, a site selection study was done (see APPENDIX A). The site selection study led to the proposed site and project design and was conducted in consultation with the City of El Cajon, City of La Mesa, and a community task force comprised of members of the general public, civil groups and other public institutions from the cities of El Cajon and La Mesa.

As required by CEQA, the evaluation conducted in this study analyzes the project’s physical

effects to the environment. The determination of the property value effect with regard to the proposed project is understandably difficult since so many variables can affect the sale price of a residence. In the appraisal process, the appraiser looks at “comparable” units which have recently sold in a similar area of the development. To determine if there is an actual property value effect on housing units if surficial changes are implemented cannot be known until the first unit is sold after implementation of the project. It can be assumed that some property values immediately adjacent to the proposed project would be negatively affected by the project. This is primarily due to the fact that the project would be visible to certain homeowners. However, even if property value changes were to occur following implementation of the project, there would be no physical changes in the environment (e.g., no significant effect on the environment) as a direct or indirect result of property value changes.

Based on the conclusions reached in the site selection study along with the findings of the Initial Study/Environmental Evaluation (see *Section 4, Initial Study/ Environmental Checklist* and *Section 5, Discussion of Environmental Impacts*), the CPUC has made the determination that a Mitigated Negative Declaration (MND) is the appropriate environmental document to be prepared in compliance with CEQA. As provided for by CEQA §21064.5, an MND may be prepared for a project subject to CEQA when an Initial Study has identified potentially significant effects on the environment but revisions in the project have been made where clearly no significant effect on the environment would occur.

This MND has been prepared in conformance with §15070, subsection (a), of the State CEQA Guidelines. The purpose of the MND and the Initial Study/Environmental Evaluation is to determine the potential significant impacts associated with the proposed Garfield Substation project and incorporate mitigation measures into the project design as necessary to reduce or eliminate the significant or potentially significant effects of the project.

1.4 CONTENT AND FORMAT OF MITIGATED NEGATIVE DECLARATION

This MND includes the following:

Section 1.0, Introduction: Provides an Introduction to the MND.

Section 2.0, Project Description: Provides a detailed description of the proposed project evaluated in this MND. This section also includes project purpose and need, location, site selection, project characteristics, construction, operation and maintenance and measures incorporated into the project to reduce environmental impacts.

Section 3.0, Proposed Finding of No Significant Effect: Provides finding that the project would not have a significant effect on the environment and rationale supporting this finding.

Sections 4.0 – 5.0, Initial Study/Environmental Discussion: Provides an analysis of environmental issues and concerns surrounding the project.

Section 6.0, Electric and Magnetic Fields (EMF): Describes the CPUC's current policy regarding EMF exposure.

Sections 7.0 and 8.0, Report Preparation/References: Provides report preparation personnel and references.

Appendices to the MND:

- ! Appendix A Site Selection
- ! Appendix B Public Distribution List
- ! Appendix C Noise

Technical Reports: Separate technical reports providing further project details and analysis include the following:

- ! Proponents Environmental Assessment (PEA) for the Garfield Substation, SDG&E February 2000 amended May 3, 2000. This document provides the basis for preparation of this MND and includes the following technical reports:
 - *Geotechnical Investigation*, GEOCON, December 1999

- *Hydrology Study*, Nolte Associates, Inc., March 2000
- *Sound Level Analysis*, SDG&E, February 2000

These technical studies are incorporated into this MND by reference and are available for review at the CPUC, Energy Division, Analysis Branch, 505 Van Ness Avenue, San Francisco, California.

1.5 OTHER AGENCIES THAT MAY USE THE MITIGATED NEGATIVE DECLARATION AND INITIAL STUDY/ENVIRONMENTAL EVALUATION

This MND is intended to be used by responsible and trustee agencies that may have review authority over the project. SDG&E will obtain all permits as required by law. Based on the analysis in *Sections 4 and 5* of this document, other permits/approval by responsible agencies with jurisdiction over the proposed project include:

- ! A demolition permit for the removal of the existing single-family residence (125 Garfield Avenue purchased by SDG&E) will be obtained from the City of El Cajon.
- ! A grading permit for the filling and grading of the site and a building permit for the construction of the substation perimeter wall will be obtained from the City of El Cajon.
- ! An encroachment permit from the City of El Cajon where work is done within the public right-of-way.
- ! A Nationwide Permit from the U.S. Army Corps of Engineers (ACOE) will be obtained for work in the ephemeral stream at the rear (east side) of the property.
- ! A Streambed Alteration Agreement from the California Department of Fish and Game (CDFG) for work in the ephemeral stream at the rear (east side) of the property.
- ! A Section 401 waiver from the San Diego Regional Water Quality Control Board (RWQCB), for use of an Army Corps Nationwide Permit.

1.6 PUBLIC REVIEW PROCESS

In accordance with CEQA, a good faith effort has been made during the preparation of this MND to contact affected agencies, organizations and persons who may have an interest in this project. The distribution list for the MND is provided in APPENDIX B.

The CPUC will also be providing a notice of availability to property owners within 300 feet of the project and will also be publishing this notice in the local newspaper, in accordance with the CPUC Rule 17.1 of the Rules of Practice and Procedures. This document is also being made available on CPUC's website at the following address: <http://www.cpuc.ca.gov>.

In reviewing the MND and Initial Study/Environmental Evaluation, affected public agencies and the interested public should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project are proposed to be avoided or mitigated.

Comments may be made on the MND either in writing before the end of the comment period or at the public hearing to be held by the CPUC on the MND. A 30-day review and comment period from July 21, 2000 to August 21, 2000 has been established, in accordance with §15105(b) of the CEQA guidelines. Following the close of the public comment period, the CPUC will consider this MND and comments thereto in determining whether to approve the proposed project. Written comments on the MND should be sent to the following address by August 21, 2000, at 5:00 PM.

California Public Utilities Commission
Energy Division, Analysis Branch
505 Van Ness Avenue, Room 4007
San Francisco, CA 94102
Attention: Beth Shipley

SECTION 2.0

PROJECT DESCRIPTION

2.1 PURPOSE AND NEED

SDG&E provides electrical power services to the City of El Cajon/Fletcher Hills area located within San Diego County. In providing these services, SDG&E currently operates three substations, referred to as the *El Cajon Substation*, the *Garfield Substation*, and the *Murray Substation*. A July 1998 distribution area planning study, prepared by SDG&E indicates that the El Cajon and Murray substations will exceed their capacities by 2001. Growth in electrical demand in the area served by these three substations will result from major projects such as the Marshall Avenue extension (County of San Diego), a new pump station and filtration plant, and other small commercial developments. In addition to these projects, additional minor loads are projected to increase due to smaller residential development and redevelopment projects.

The El Cajon and Murray substations are fully built out. To avoid exceeding the capacity, load must be transferred off the Murray and El Cajon substations. The proposed Garfield Substation is required in order to offload the Murray and El Cajon substations, meet expected customer-driven electrical load growth and ensure reliable service.

2.2 PROJECT LOCATION/SITE SELECTION

The proposed substation site is located on the east side of Garfield Avenue, south of Louie Court in the City of El Cajon in eastern San Diego County. The northern corporate boundary of the City of La Mesa is immediately south of the project site. *Figure 1* shows the regional location of the project site. *Figure 2* shows the project site location on a USGS topographic map. *Figure 3* provides an aerial photograph of the project site and vicinity. The site is situated in a residential zone, bordered by existing residential development. The proposed site combines the existing 12/4 kV Garfield substation site (APN 486-063-08-00) with the adjacent residential parcel (APN 486-063-07-00) to the north of the substation at 125 Garfield Avenue. The combined parcels provide a total area of 0.61 acre of land area available for development. The closest residences to the proposed substation perimeter wall would be as follows:

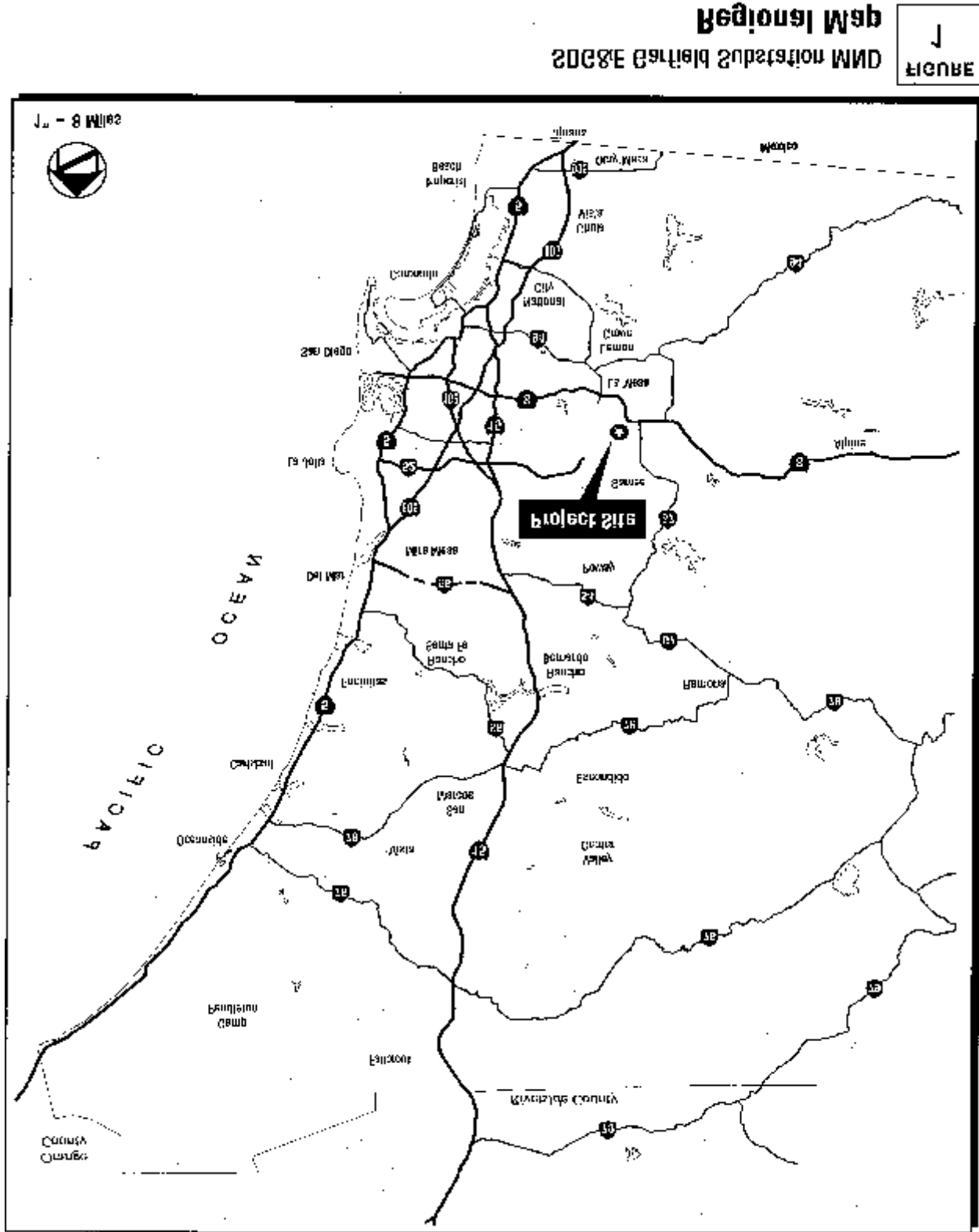
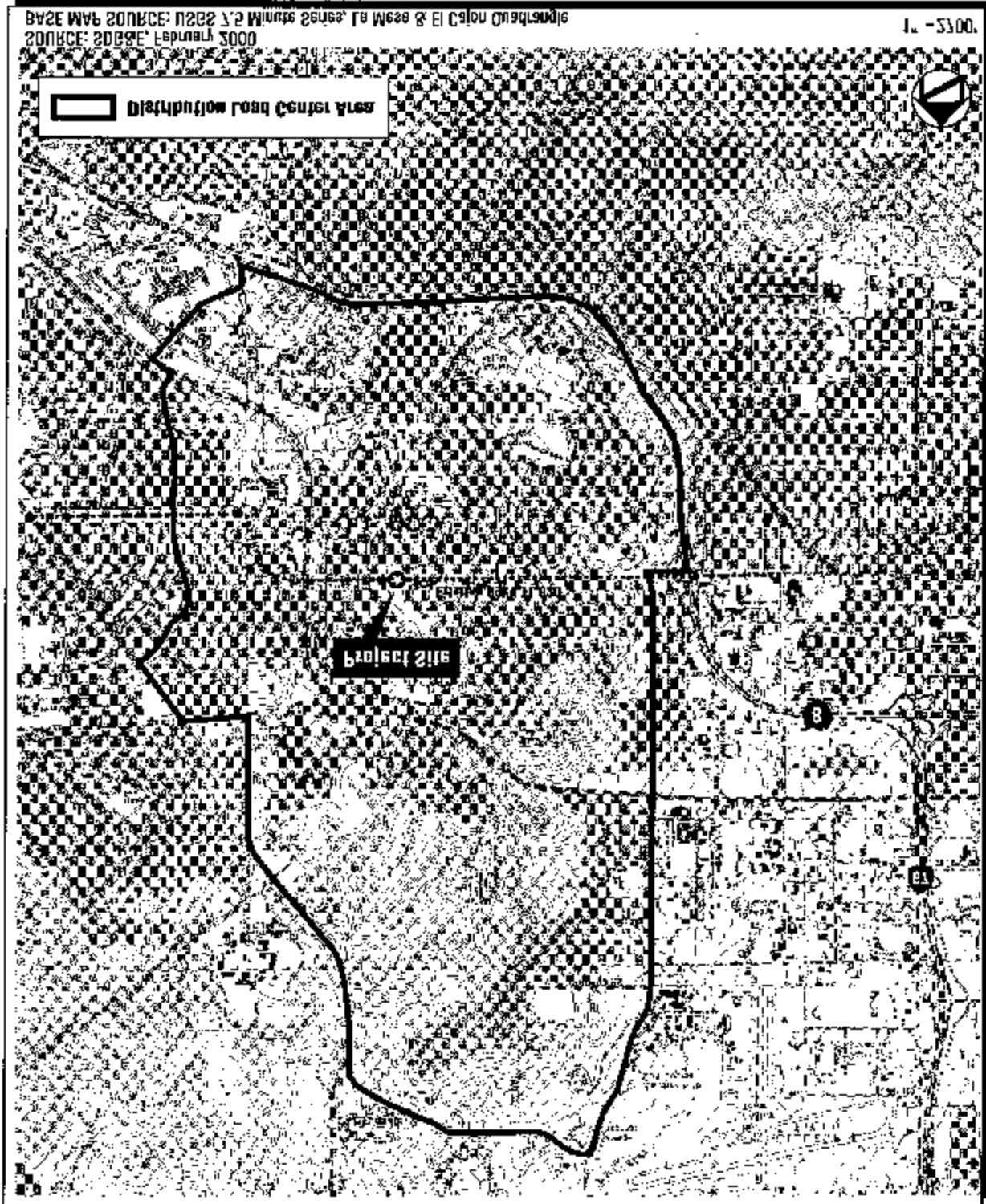


FIGURE 2

Project Vicinity Map
SDG&E Garfield Substation MND

5
FIGURE



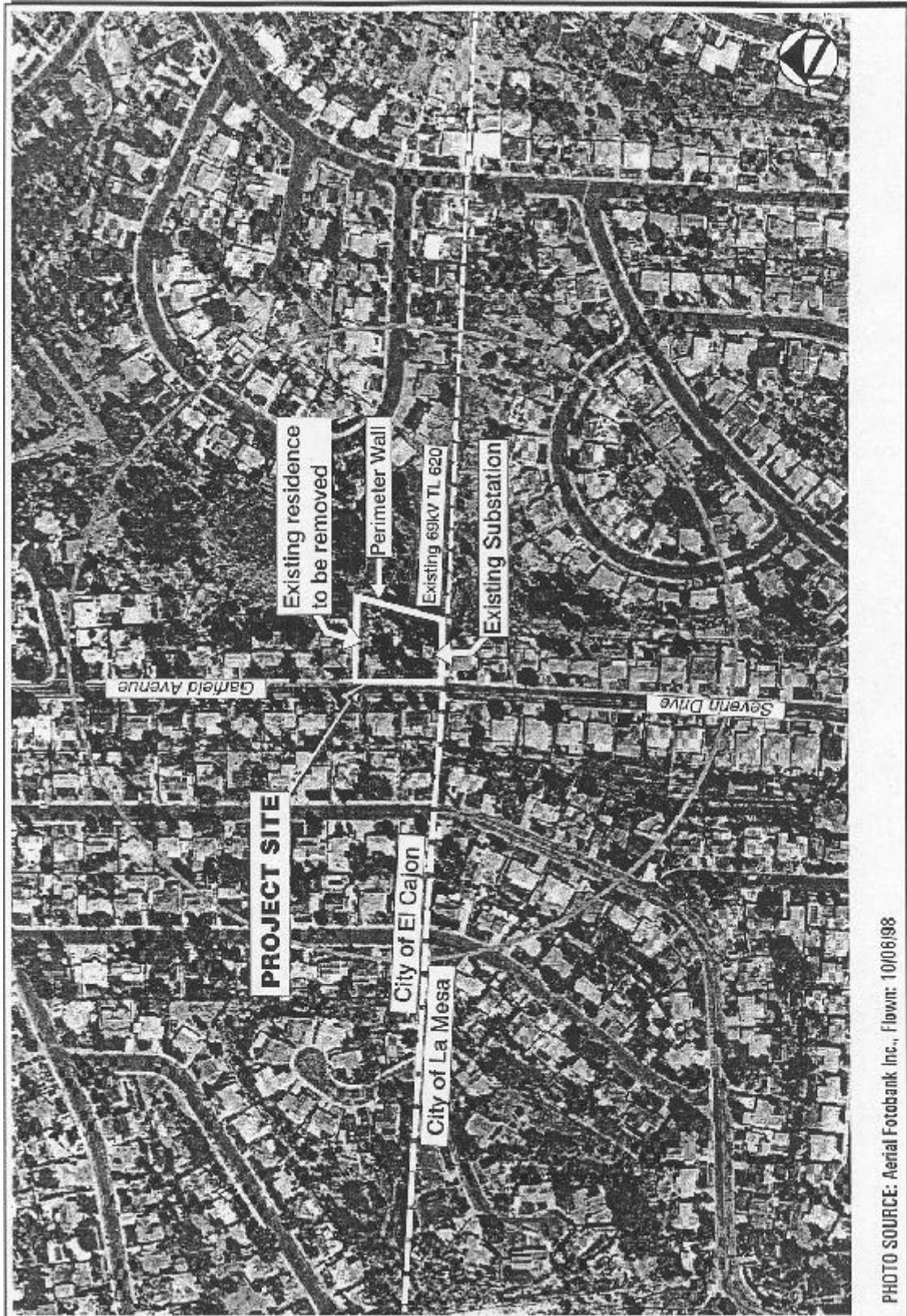


PHOTO SOURCE: Aerial Fotobank Inc., Flown: 10/06/98

FIGURE 3
SDG&E Garfield Substation MND
Aerial Photograph of Project Site and Vicinity

- ! South side (6341 Severin Avenue) approximately 10 feet.
- ! North side (143 Garfield Avenue) approximately 45 feet.
- ! East side (residences) approximately 190 feet.
- ! West side (residences) approximately 90 feet.

One of the main requirements in siting the proposed substation was that the proximity to the mid-point of the load center defined in the 1998 distribution planning study and the proximity to existing SDG&E 69 kV electrical transmission line circuit TL620. Other requirements included:

- ! A minimum lot area of approximately 150 feet by 150 feet or one-half acre.
- ! Ability to acquire the property to accommodate a June 1, 2001 in-service date.
- ! Minimize disruption to existing land use patterns (land use compatibility).
- ! Maximize potential for community acceptance.
- ! Minimize the need for extensive site remediation or grading.
- ! Avoid interference between new underground and existing underground infrastructure.
- ! The ability to provide opportunity for landscape screening along the perimeter of the site.

As further discussed in APPENDIX A to this MND, the proposed project site which would expand the existing Garfield Substation, was selected based on meeting the above requirements and in consultation with the City of El Cajon, City of La Mesa and a community task force comprised of members of the general public, civil groups and other public institutions from the cities of El Cajon and La Mesa.

2.3 PROJECT CHARACTERISTICS

The proposed project is planned to be a 69/12 kilovolt (kV), 60-megavolt ampere (MVA) distribution substation with the loop-in of the existing 69 kV transmission line. The proposed project and expansion area is illustrated in *Figure 4*. Substation equipment will be low profile with a maximum height of 13 feet and be enclosed by a perimeter wall. The substation perimeter wall will enclose an approximately 26,000 square-foot area. The perimeter wall will be designed to comply with architectural guidelines of the City of El Cajon covenants, conditions, and restrictions to the extent feasible. Access to the substation will be from Garfield Avenue to the west of the station. Two sliding gates will be provided in the perimeter wall on the west side of the project site. The height of the wall is expected to be between 10 and 13 feet along Garfield Avenue and about 30 feet on the eastern boundary. The site will be landscaped at initial development of the station and will be done in accordance with City of El Cajon guidelines. *Figure 5* shows the concept landscape plan.

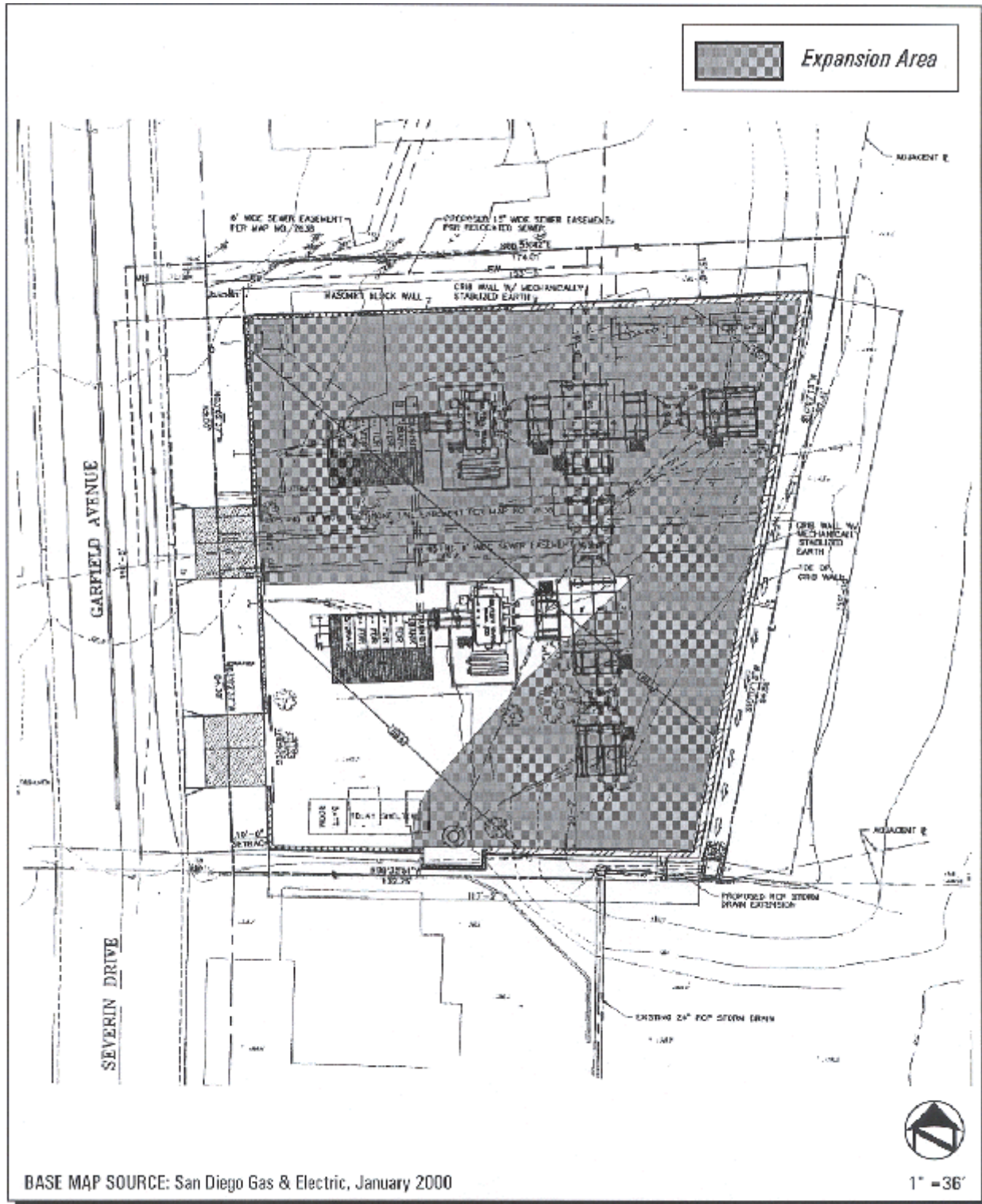
The existing 69 kV tie line will be routed underground into the substation using one double circuit steel cable pole. The cable pole will replace the existing wood poles on the south side of the substation. Underground routes to and from the new pole will be in the existing transmission corridor and substation. *Figure 6* shows a typical steel cable pole (actual dimensions will depend on design requirements).

The distribution circuits will extend underground out to Garfield Avenue/Severin Drive, transition to overhead, and tie into the existing circuitry. Reconductoring and rearrangement will be completed to accommodate the load, as will additional circuitry as the need arises.

2.4 PROJECT CONSTRUCTION/SITE DEVELOPMENT

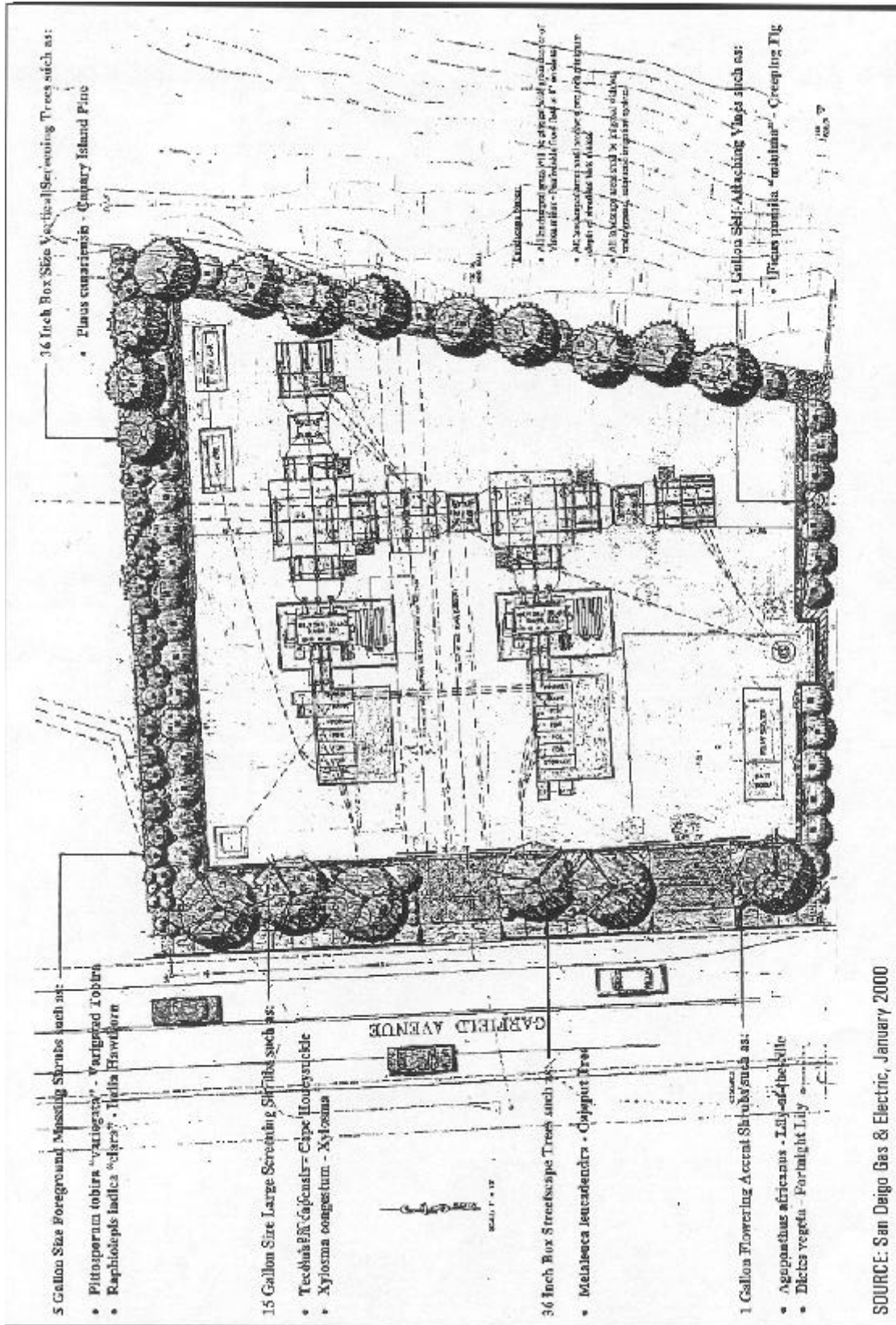
Project construction including testing and energizing is anticipated to take nine months and primarily consists of the following:

- ! Demolition of the existing residence purchased by SDG&E at 125 Garfield Avenue, brushing, grading and fill;
- ! Removal and relocation of existing onsite utilities;
- ! Perimeter wall construction and underground 23 kV and 138 kV duct installation;
- ! Construction of the substation and removal of existing substation; and
- ! Landscape and irrigation installation.



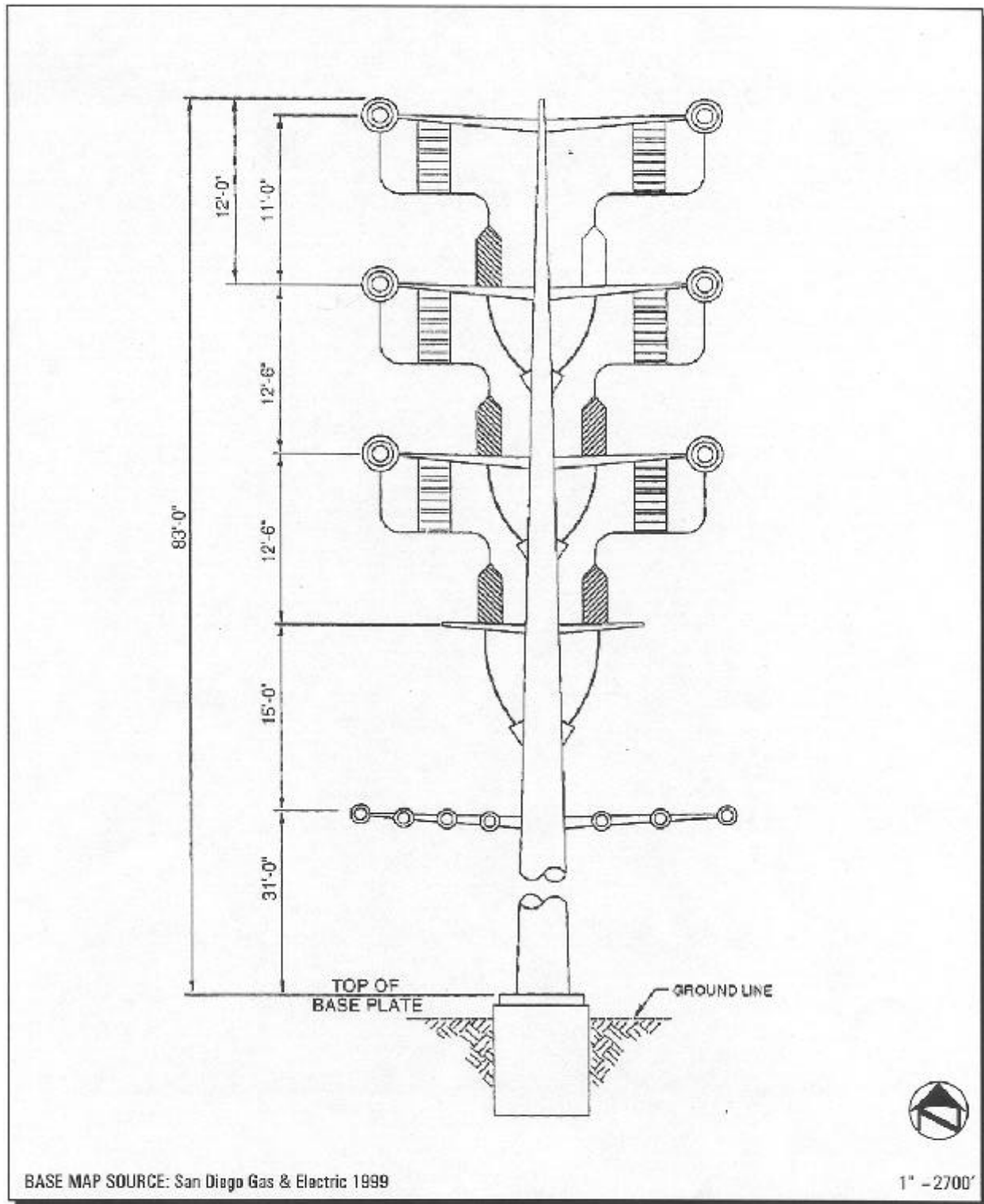
SDG&E Garfield Substation MND
Preliminary Project Site/Grading Plan

FIGURE
4



SOURCE: San Diego Gas & Electric, January 2000

FIGURE 5
SDG&E Garfield Substation MND
Landscape Concept Plan



SDG&E Garfield Substation MND
General Arrangement 69kV Steel Cable Pole

FIGURE
6

Demolition and brushing work take place concurrently and are estimated to be completed within an eight-day timeframe. All debris and vegetation will be hauled to an appropriate landfill.

Following site demolition and brushing, grading will be performed according to the GEOCON December 1999 geotechnical report. Grading will begin with the removal of approximately 6 to 8 feet of material on the entire site, with deeper (15 feet) removal on the existing slope and shallower removal (3 feet) in the existing ravine at the rear (east side) of the property. The removed soils will be hauled from the site and replaced with new imported compacted fill. As shown in *Figure 4*, the proposed Garfield Substation pad expansion will extend the pad approximately 90 feet to the north and 60 feet to the east. The expansion will include placing fill into the western portion of the existing natural ravine that runs north-south along the eastern limits of the substation.

It is estimated that approximately 7,000 cubic yards of fill will be placed to create the building pad for the substation. The fill operation will require approximately 350 trips by 25-ton dump trucks, which can carry an average of 20 cubic yards per trip. It is expected that fill material will be delivered at the rate of 20 trucks per day, or 400 yards per day. At this estimated rate, fill, compaction, and rough grading operations would take approximately 20 days. An offsite work area approximately 15 to 20 feet wide adjacent to and east of the rear property line of the substation will be needed for equipment access during grading and during construction of the gravity stacked retaining wall. To obtain this work area, SDG&E will need to obtain right-of-entry from several property owners to the east of the site on Charles Way.

During site preparation, SDG&E will relocate an existing 8-inch sewerline located on the property of 125 Garfield Avenue in accordance with the City of El Cajon's requirements. This relocation consists of installing a new manhole extending down approximately 7 feet to the 8-inch pipe at the northeast corner of the 125 Garfield Avenue property. The 8-inch sewer pipe would then extend along the north property line in a 15-foot easement. The sewer would extend approximately 125 feet out to Garfield Avenue, at which point a manhole would be installed extending down approximately 17 feet to the 8-inch pipe. The sewer would then extend south along Garfield Avenue approximately 75 feet and rejoin the existing sewer at existing manhole no. 18 at the southwest corner of the property. The abandoned portion of the 8-inch sewer will be removed or plugged as required. Other utilities on the 125 Garfield Avenue property such as water, natural gas and telephone would be removed.

Following site development, actual construction of the substation equipment foundations will commence and is the only activity within the substation enclosure until it is completed. Removal of the existing substation will commence after temporary facilities are installed to provide uninterrupted electric service to customers fed from the existing station.

Construction equipment would include tractors, scrapers, loaders and trucks for excavating, compacting, hauling, and finish grading the site. A substantial amount of soil import will be transported to the site with street-legal haul trucks. Portable cranes and heavy hauling trucks would be employed for the 69/12 kV transformer, 50 tons, and the double-circuit steel cable pole delivery and installation. Concrete trucks, backhoes, crew trucks, and pick-up trucks would be coming and going to the site during the installation of the foundations, ground grid, and underground ducts. Crew trucks, boom trucks, and pick-up trucks would be going to and from the site daily for the balance of the construction activities, testing and check out, final transmission tie-ins, and 12 kV circuit cabling until the station is energized. *Table 1* lists probably vehicle types and duration of use.

**TABLE 1
ESTIMATED VEHICLE TYPES AND DURATION OF USE**

Vehicle Type	Estimated Number Required	Duration
Tractor	1	1 month
Scraper	1	1 month
Loader	1	1 month
Compactor	1	1 month
Grader	1	1 week
Truck (25-ton dump)	20 trips/day	3 weeks
Concrete trucks	10 trips/day	2 months
Backhoe	1	1 month
Crew trucks	3	5 months
Boom truck	1	3 months
Pick-up truck	3	5 months
Personal vehicles	8	9 months

2.5 FACILITY OPERATION AND MAINTENANCE

The substation will be unmanned, and electric equipment within the substation also will be controlled automatically. The equipment can be controlled remotely from SDG&E's central operations facilities. The substation wall will be of sufficient height and texture to prevent unassisted and unauthorized entrance. The entrance gate will be locked and warning signage will be posted on the perimeter wall. Entry to an operational substation will be restricted to authorized SDG&E personnel. Maintenance will include equipment testing, equipment monitoring and repair, as well as emergency and routine procedures for service continuity and preventive maintenance. It is anticipated that maintenance would require about four trips per year with a two to four-person crew. One pick-up truck with one troubleman could visit the station once per day.

Substation lighting will be intended to provide safety lighting inside the station during emergency only when a troubleman may require night lighting. It is anticipated that these lights would not be used more than once a year.

2.6 MEASURES INCLUDED INTO THE PROJECT TO REDUCE ENVIRONMENTAL IMPACTS

The following identifies mitigation measures identified in this MND which SDG&E has incorporated into the project as well as those measures identified as part of the project in SDG&E's application for a Permit to Construct.

General

- ! Prior to substation site development, SDG&E will submit project construction and grading plans to the City of El Cajon for review and comment. The plan submittal will follow a typical building permit and grading permit submittal process, with the exception that SDG&E will not receive building, grading, electrical or plumbing permits from the City. SDG&E will incorporate the plan check comments into the project, where those comments do not conflict with, or compromise, the CPUC's General Orders regulating the location, design, construction, operation and maintenance of the substation.

- ! Due to the proximity of existing residences to the south and north of the proposed substation site, prior to construction, SDG&E will install a temporary, 8-foot high, chain link enclosure fence with an attached green colored screen (similar to tennis court screening). The temporary fencing will provide for enhanced public safety, interception of dust, and screen any unsightly views into the construction site from adjacent residences.

- ! SDG&E will send pre-construction notices to all properties within 500 feet of the project giving the construction start date, anticipated completion date, and hours of operation. The notice will explain that during that time period, residents may experience some inconvenience on local streets and noise from equipment and vehicles. The notice will provide an SDG&E and CPUC phone number for residents who have concerns during the construction period.

Aesthetics

- ! The substation will be enclosed by a 10 to 13-foot wall that will obscure substation equipment that is of “low profile” design. The perimeter wall will be designed to comply with the City of El Cajon architectural guidelines to the extent feasible. Low profile substation structures and equipment with a maximum height of approximately 13 feet will be used. The site will be landscaped and irrigated with an automatic irrigation system at initial development of the station and will be done in accordance with City of El Cajon landscape guidelines.

- ! During project design, SDG&E will coordinate with affected residences to look for opportunities to retain and enhance views.

Air Quality

- ! All unpaved construction areas will be sprinkled with water or other acceptable San Diego APCD dust control agents during dust-generating activities to reduce dust emissions. Additional watering or acceptable APCD dust-control agents will be applied during dry weather or windy days until dust emissions are not visible.

- ! All trucks hauling dirt and debris will be covered to reduce windblown dust and spills.

- ! On dry days, dirt or debris spilled onto paved surfaces will be swept up immediately to reduce resuspension of particulate matter caused by vehicle

movement. Approach routes to construction sites will be cleaned daily of construction-related dirt in dry weather.

- ! Onsite stockpiles of excavated material will be covered or watered.

Biological Resources

- ! If any of the onsite trees must be removed, they will be felled outside the raptor-breeding season that is considered to be January through August. If the project schedule requires the trees to be removed during the raptor breeding season, the trees will be carefully checked for nests. If a nest is present in a tree, a biologist will check to determine if eggs or hatchlings are in the nest and if they are, the trees will remain in place until the young are no longer dependent on the nest.
- ! Construction equipment will temporarily impact the ravine on the east side of the project site by compacting soil and altering the existing contours. Subsequent to completion of the project, the eastern ravine will be returned to pre-construction contours in order to achieve proper drainage to the existing 24-inch culvert.
- ! A State Water Quality Certification or Waiver from the Regional Water Quality Control Board under Section 401 of the Clean Water Act will be obtained to meet the terms and conditions of the Nationwide permit program. In addition, the California Department of Fish and Game will be notified and a Streambed Alteration Agreement obtained prior to project approval to cover any alterations to the ephemeral system.

Geology/Soils

- ! Site preparation including grading and construction standards based on the site-specific conditions identified in the Applicant's Geotechnical Report (Geocon 1999) will be incorporated into the design and construction of the proposed facilities.
- ! Project design will meet or exceed existing earthquake design standards.
- ! Pole and substation construction will meet CPUC's General Order for seismic standards.

Hazards and Hazardous Materials

- ! The project will be in compliance with State Title 22 and federal Title 40 requirements, including the oil spill control and countermeasure plan (SCCP) required by Title 40 CFR Section 112.7.
- ! As part of the final design, a site assessment will be performed to identify where hazardous materials or wastes may be encountered. In the event that grading, construction or operation of proposed facilities will encounter hazardous waste, SDG&E will ensure compliance with the State of California CCR Title 23 Health and Safety Regulations as managed by the San Diego County department of Environmental Health. Excavated soils impacted by hazardous waste or material will be characterized and disposed of in accordance with CCR Title 14 and Title 22. The California Regional Water Quality Control Board, San Diego Region will be contacted regarding provisions for possible reuse as backfill of soils impacted by hydrocarbons. Excavated soils will be lined and covered with an impermeable material to prevent spread of contaminated material. SDG&E will have an experienced environmental professional with 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training onsite while working in areas where contamination may be encountered. The responsibility of this professional would be to monitor the work site for contamination and to implement mitigation measures as needed to prevent exposure to the workers or public.

Hydrology/Water Quality

- ! The project will implement short-term construction BMPs (Best Management Practices) and will employ the protective erosion control measures described in the State Water Resources Control Board (SWRCB) General Permit for Discharges associated with construction activities (Permit No. CA 0108758). These measures designed to control short-term construction sedimentation and erosion include, but are not limited to sandbags, matting, mulch, berms, hay bales, or similar devices along all graded areas to minimize sediment transport. All project runoff will be directed towards Garfield Avenue into the existing storm water system. The existing storm drain system is designed to accommodate storm flows. The proposed project would not discharge any water or runoff to groundwater.

Noise

- ! As stipulated in the City of El Cajon's Noise Ordinance, project construction noises

will be limited to daylight hours on weekdays when residential noise sensitivity is generally lower than during morning and evening hours and on weekends. Nocturnal noise-generating construction activities would be expected to occur only as emergency operations are necessary. Although construction noise impacts may be intrusive, they are considered below significant levels because of the progressive construction of the project. No single location will experience long-term construction noise impacts.

- ! To limit inconvenience to neighboring properties, SDG&E will employ the following measures:
- Construction activity will be limited to the hours of 7AM to 5PM.
 - All construction vehicles and equipment will be equipped with mufflers and silencers to the greatest extent practical to limit noise emissions.
 - All equipment will be appropriately sized for the work.
 - Whenever possible, hand operations for digging, trenching and compaction will be utilized to limit the use of motorized equipment.
 - The perimeter wall will be constructed as soon as possible in the construction sequencing of the project in order to achieve the maximum noise attenuation possible to neighboring properties.

Traffic

- ! During grading operations and import of fill, deliveries of fill will be made by using the existing substation driveway. During these deliveries, a flagman will be present to warn and guide pedestrians or bicyclists of incoming trucks. As a condition of the grading permit issued by the City of El Cajon, the City would review and approve the proposed haul routes for import soil delivery. The City of La Mesa will also review and approve haul routes as necessary.
- ! Construction crews will park personal vehicles in the park and ride lot located at the intersection of Severin Drive and Amaya Drive. Crews will be picked up at the parking lot and shuttled in groups to the job site.
- ! When work is done in the public right-of-way, encroachment permits will be obtained from the City of El Cajon.
- ! A traffic control plan will be prepared in accordance with the cities of El Cajon and

La Mesa traffic control guidelines and will specifically address construction traffic during import of fill and concrete and any work done within the public right-of-way. The traffic control plan will include signage and flagmen when necessary to allow the heavy equipment to utilize residential streets. The traffic control plan will also include provisions for coordinating with local school hours and emergency service providers regarding construction times.

Public Utilities

- ! SDG&E will coordinate the proposed project design, specifically proposed relocation of the 8-inch sewer line, with the City of El Cajon to ensure that the project does not conflict with existing utilities and maintenance of those utilities.

SECTION 3.0

PROPOSED FINDING OF NO SIGNIFICANT EFFECT

The CPUC finds that the project will not have a significant adverse effect on the environment based on the results of the Initial Study/Environmental Checklist (see *Section 4*) and the Environmental Evaluation Discussion (see *Section 5*). Some potentially significant effects have been identified and mitigation measures have been incorporated into the project to ensure that these effects remain at less than significant levels (see *Section 2.6, Measures Included into the Project to Reduce Environmental Impacts*). An MND is therefore proposed to satisfy the requirements of CEQA (PRC 210000 et. seq. 14 Cal. Code Regs 15000 et. seq.). This conclusion is supported by the following:

1. **Aesthetics:** The proposed substation will replace an existing smaller substation. The existing substation site is approximately 0.29 acre and is surrounded by a chain-link fence. The proposed substation site will be expanded to total 0.61 acre and be enclosed by a 10 to 13-foot high perimeter wall. The perimeter wall will obscure substation equipment that is of “low profile” (maximum height of approximately 13 feet) design. The perimeter wall will be designed to comply with the architectural guidelines of the City of El Cajon. Outside the perimeter wall, the site will be landscaped in accordance with the City of El Cajon landscape guidelines to further screen views of the wall and substation.

The project site does not currently serve as an aesthetic amenity, nor has any element of the City of El Cajon’s General Plan designated the site for anything other than residential uses. There is a low frequency of visibility for land uses on Garfield Avenue since vehicular and pedestrian traffic is primarily limited to project vicinity residences. Therefore, the limited visual access in the immediate vicinity serves to decrease the public’s perception of aesthetic impacts. Furthermore, the project site is not within view of any designated scenic highways, nor will the proposed project interfere with any scenic vistas in the City of El Cajon or City of La Mesa.

The presence of a substation in a residential neighborhood is not unexpected and the sight of such facilities is relatively common to urbanized areas as such public facilities serve those residential land uses and does not constitute a significant visual impact in such circumstances. While expansion of the Garfield Substation as proposed would result in changes in the expectations of viewers and could result in a negative impression of the viewshed, viewers of the project would be limited to

a small group of residents (approximately five residences) living in the immediate project vicinity. The combination of factors such as limited visual access and incorporation of design and landscaping measures approved by the City of El Cajon that minimize aesthetic obtrusiveness within a site that currently contains a substation, renders the long-term visual impacts of the proposed project to less than significant. See *Section 2.6, Mitigation Measures Included Into the Project to Reduce Environmental Impacts*, and *Section 5.1, Aesthetics*, for further discussion.

Construction activities and heavy equipment will be visible during the construction phase of the project. Some residents are likely to consider this activity visually obtrusive and a nuisance. However, the sight of construction activity is a temporary and common occurrence in San Diego County and is not considered a significant adverse visual impact. Furthermore, during construction, SDG&E will provide temporary fencing to screen views into the construction site from adjacent residences. See *Section 2.6, Mitigation Measures Included Into the Project to Reduce Environmental Impacts*, and *Section 5.1, Aesthetics*, for further discussion.

2. **Agricultural Resources:** The project site is not located on prime or unique/important farmland. The site is not within an agricultural preserve and no agricultural products are produced on the site. Therefore, the project would not affect agricultural resources. See *Section 5.2, Agricultural Resources*, for further discussion.
3. **Air Quality:** Project operation will not generate air emissions. Construction emissions would not exceed identified significance thresholds and are therefore considered to be less than significant. Furthermore, measures are incorporated into the project which reduce short-term construction effects associated with generation of particulate matter less than 10 microns (PM10) as required by the San Diego Air Pollution Control District (APCD). See *Section 2.6, Mitigation Measures Included Into the Project to Reduce Environmental Impacts*, as well as *Section 5.5, Air Quality*, for further discussion.
4. **Biological Resources:** The project would be developed on a site that currently consists of an existing residence and substation and is dominated by non-native plants. Project design includes extending the site and placing fill into an existing natural ravine. The project will impact approximately 0.09 acre (0.04 permanent impacts and 0.05 temporary construction impacts) of disturbed wetland. Due to the lack of native habitat, that no sensitive species exist onsite, and that measures

are incorporated into the project to account for impacts to disturbed wetlands, impacts to biological resources are considered to be less than significant. See *Section 2.6, Mitigation Measures Included Into the Project to Reduce Environmental Impacts*, as well as *Section 5.4, Biological Resources*, for further discussion.

5. **Cultural and Paleontological Resources:** The project site is located on graded lots that contain an existing residence and substation. Therefore, it is anticipated that there is no potential for encountering important paleontological or archaeological resources as a result of project construction. See *Section 5.5, Cultural Resources – Discussion of Environmental Impacts*.
6. **Geology and Soils:** No geologic hazards would occur with project implementation. Measures have been incorporated into the project design in accordance with a site-specific geotechnical investigation (Geocon 1999) to reduce risks associated with geologic hazards to below a level of significance. See *Section 2.6, Mitigation Measures Included Into the Project to Reduce Environmental Impacts*, as well as *Section 5.6, Geology and Soils*, for further discussion.
7. **Hazards:** Measures have been incorporated into the project construction phase to ensure that potential exposure to existing hazardous materials onsite will be reduced to below significant by ensuring public health and safety in accordance with State of California Health and Safety Regulations as managed by the San Diego Department of Environmental Health. The proposed project is not anticipated to generate hazardous materials; therefore, no significant impacts due to public hazards would occur. See *Section 2.6, Mitigation Measures Included Into the Project to Reduce Environmental Impacts*, *Section 5.7, Hazards*, and *Section 6.0, Electric and Magnetic Fields*, for further discussion.
8. **Hydrology and Water Quality:** Measures are incorporated into the project which reduce project effects associated with potential discharge of sediments and runoff to less than significant. The proposed pad expansion will not increase the existing 100-year discharge to the existing downstream drainage system. The fill expansion into the ravine will increase the 100-year ponded elevation by \pm foot. This increase in elevation will not impact surrounding properties or downstream drainage conditions. See *Section 2.6, Mitigation Measures Included Into the Project to Reduce Environmental Impacts*, as well as *Section 5.8, Water*, for further discussion.

9. **Land Use:** The project would be developed on a site that currently consists of a residence (purchased by SDG&E) and a substation. The project proposes to expand the existing substation from 0.29 acre to 0.61 acre. Expansion of the existing Garfield Substation as proposed is an allowed use under the City of El Cajon's zoning ordinance and therefore would not result in any significant impacts to the City's land use planning goals and objectives.

Due to the proposed substation's proximity to a residential neighborhood, concern has been expressed about potential land use compatibility conflicts. Environmental parameters defining land use compatibility are physical factors such as traffic, noise, air quality, aesthetics and public safety. Each of these issues are addressed in *Section 5* of this document. The environmental analysis in *Section 5* of this document indicates that the potential traffic, noise, air quality, aesthetics and public safety impacts of the proposed project will be less than significant. Such physical factors serve as indicators of land use compatibility. The analyses in *Section 5*, along with the fact that the site currently contains a substation and therefore would not introduce a new land use, support the conclusion that no significant impacts to land use would occur as a result of project implementation. Furthermore, it is reasonable to assume that as an allowed use under the City of El Cajon's zoning ordinance, such zoning would be based on the premise of compatibility with surrounding land uses. See *Section 2.6, Mitigation Measures Included into the Project to Reduce Environmental Impacts* as well as *Section 5.9, Land Use and Planning*, for further discussion.

10. **Mineral Resources:** The proposed project would not require long-term natural resource use. See *Section 5.10, Mineral Resources*, for further discussion of environmental impacts.
11. **Noise:** Impacts resulting from both construction and operation noise were determined to be less than significant as they would comply with the City of El Cajon's Noise Ordinance. Additionally, measures have been incorporated into the project construction to further reduce noise impacts. See *Section 2.6, Mitigation Measures Included into the Project to Reduce Environmental Impacts* as well as *Section 5.11, Noise*, for further discussion.
12. **Population and Housing:** The proposed project would not generate additional population, therefore, the approval of the project would have a less than significant effect on human population and housing. See discussion under *Section 5.12, Population and Housing*, for further discussion.

13. **Public Services:** The proposed project would not generate a demand for public services; therefore, no impact to public services would occur. See *Section 5.13, Public Services*, for further discussion.
14. **Recreation:** There are no parks or other public recreational facilities on the project site. Therefore, the project would not affect recreational opportunities. See *Section 5.14, Recreation*, for further discussion.
15. **Transportation and Circulation:** During operation, the proposed project is expected to generate approximately one to two vehicle trips per day. This limited number of vehicle trips would result in less than significant impacts to traffic or traffic congestion.

During construction, testing and energizing the station (approximately nine months), traffic will be generated by construction crews and equipment/material deliveries. Some traffic hazards could result on Garfield Avenue and other area residential streets during construction while slow-moving, heavy equipment access the site from Garfield Avenue. However, traffic control measures, in accordance with City of El Cajon and City of La Mesa's requirements, have been incorporated into the project to reduce short-term construction-related traffic impacts to less than significant. See *Section 2.6, Mitigation Measures Included Into the Project to Reduce Environmental Impacts*, as well as *Section 5.15, Transportation and Circulation*, for further discussion.

16. **Utilities and Service Systems:** SDG&E will relocate an existing 8-inch sewer line located on the property in accordance with the City of El Cajon's requirements. No other impacts to utilities and service system would occur. See *Section 2.6, Mitigated Measures Included Into the Project to Reduce Environmental Impacts*, as well as *Section 5.16, Utilities and Service Systems*, for further discussion.

17. **Cumulative Impacts:** As revealed by the previous discussions for each environmental category, impacts from the proposed project are considered to be less than significant or no impact. Measures are incorporated into the project which reduce impacts associated with geological resources, hydrology and water quality, air quality, traffic, biological resources, hazards, noise, public utilities, and visual resources impacts to less than significant (see *Section 2.6, Mitigation Measures Included Into the Project to Reduce Environmental Impacts*). No long-term significant impacts are associated with the project. In the absence of significant impacts, incremental accumulation of significant effects would not occur.

SECTION 4.0

INITIAL STUDY/ENVIRONMENTAL CHECKLIST

1. Project title: SDG&E Garfield Substation Project (Application No. 00-02-047)

2. Lead agency name and address:
California Public Utilities Commission (CPUC)
Energy Division, 505 Van Ness Avenue
San Francisco, CA 94102

3. Contact person and phone number: Beth Shipley, Regulatory Analyst, Energy Division
Tel: (415) 703-1729

4. Project location: Garfield Avenue, south of Louie Court in the City of El Cajon in eastern San Diego County.

5. Project sponsor's name and address:
San Diego Gas & Electric Company
101 Ash Street, San Diego, CA 92101

6. General plan designation: Residential

7. Zoning: Residential

8. Description of project: *(Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or offsite features necessary for its implementation. Attach additional sheets if necessary.)*

The proposed project is planned to be a 69/12 kilovolt (kV), 60-megavolt ampere (MVA) distribution substation with the loop-in of the existing 69 kV transmission line. Substation equipment will be low profile with a maximum height of 13 feet and be enclosed by a perimeter wall. Access to the substation will be from Garfield Avenue to the west of the station. The existing 69 kV tie line will be routed underground into the substation using one double circuit steel cable pole. The cable pole will replace the existing wood poles on the south side of the substation. Underground routes to and from the new pole will be in the existing transmission corridor and substation. The distribution circuits will extend underground out to Garfield Avenue/Severin Drive transition to overhead, and tie into the existing circuitry.

9. Surrounding land uses and setting: Briefly describe the project's surroundings:

The site is situated in a residential zone, bordered by existing residential development to the north, south and east of Garfield Avenue (a two-lane residential street) and residential land uses to the west. The

proposed site combines the existing 12/4 kV Garfield substation site with the adjacent residential parcel to the north of the substation at 125 Garfield Avenue. Upon completion of the proposed substation, the residence to the north at 143 Garfield Avenue will be approximately 45 feet from the substation enclosure wall. The residence to the south at 6391 will be approximately 12 feet from the substation enclosure wall. Residences to the east on Charles Way would be approximately 190 feet from the substation enclosure wall. Residences to the west across Garfield Avenue would be approximately 90 feet from the substation enclosure wall.

The closest schools to the substation site are: Fletcher Hills Elementary which is approximately one-half mile north of the substation site on 2330 Center Place, in the City of El Cajon, and Northmont Elementary which is approximately one-half mile southeast of the substation site on 9405 Gregory Place in the City of La Mesa.

10. Other public agencies whose approval is required (*e.g., permits, financing approval, or participation agreement.*)

- ! A demolition permit for the removal of the existing single-family residence (125 Garfield Avenue purchased by SDG&E) will be obtained from the City of El Cajon.
- ! A grading permit for the filling and grading of the site and a building permit for the construction of the substation perimeter wall will be obtained from the City of El Cajon.
- ! A Nationwide Permit from the U.S. Army Corps of Engineers will be obtained for work in the ephemeral stream at the rear (east side) of the property.
- ! A Streambed Alteration Agreement from the California Department of Fish and Game for work in the ephemeral stream at the rear (east side of the property).
- ! A Section 401 waiver from the San Diego Regional Water Quality Control Board for use of an Army Corps Nationwide Permit.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/ Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/ Water Quality | <input type="checkbox"/> Land Use/ Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population/ Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/ Traffic |
| <input type="checkbox"/> Utilities/ Service Systems | <input type="checkbox"/> Mandatory Findings of Significance | |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Beth Shipley, Regulatory Analyst

California Public Utilities Commission

Printed Name

For

EXPLANATION FOR ENVIRONMENTAL CHECKLIST FORM:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-

specific conditions for the project.

- 6) The checklist incorporates references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.
- 9) This checklist has been adapted from the form in Appendix G of the State CEQA Guidelines, as amended effective January 1, 2000 and the additional provisions of the CPUC's Rule 17.1 for implementing CEQA.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
II. AGRICULTURE RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) 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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IV. BIOLOGICAL RESOURCES – Would the project:				

Section 4.0

Initial Study/Environmental Checklist

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinance protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VI. GEOLOGY AND SOILS – Would the project:				
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? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 or siltation on- or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IX. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
X. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XII. POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for 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 public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Section 4.0

Initial Study/Environmental Checklist

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
XIV. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XV. TRANSPORTATION/TRAFFIC – Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVI. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider/s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SECTION 5.0

DISCUSSION OF ENVIRONMENTAL IMPACTS

The following provides a discussion of the environmental impacts that are anticipated to occur as a result of constructing the proposed Garfield Substation project. This section provides a brief explanation for the answers provided in the Initial Study/Environmental Checklist.

5.1 AESTHETICS

- a) ***Would the project have a substantial adverse effect on a scenic vista?***

Less than Significant Impact. There are no scenic vistas in the project area. The site is currently visible from motorists along Garfield Avenue as well as from approximately five neighboring residences (see *response 5.1-c* for further discussion).

- b) ***Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

No Impact. There are no scenic highways in the project vicinity. The site is currently visible from motorists along Garfield Avenue (a two-lane residential street as well as from approximately five neighboring residences (see *response 5.1-c* for further discussion).

- c) ***Would the project substantially degrade the existing visual character or quality of the site and its surroundings?***

Less than Significant Impact with Mitigation Incorporated. The site is situated in a residential zone, bordered by existing residential development to the north, south and east of Garfield Avenue (a two-lane residential street) and residential land uses to the west. The proposed site combines the existing 12/4 kV Garfield substation site with the adjacent residential parcel to the north of the substation at 125 Garfield Avenue. Approximately five residences have direct views of the site. Upon completion of the proposed substation, the residence to the north at 143 Garfield Avenue will be approximately 45 feet from the substation enclosure wall. The residence to the south at 6391 will be approximately 12 feet from the substation enclosure wall. Residences to the east on Charles Way would be approximately 190 feet from the substation

enclosure wall. Residences to the west across Garfield Avenue would be approximately 90 feet from the substation enclosure wall.

Construction of the proposed project would cause short-term and long-term visual quality impacts to motorists, nearby residences and others within the project vicinity. Site preparation for construction would include clearing the project area of existing structures, vegetation, landscaping, fences, pavement, etc. SDG&E will install a temporary 8-foot high chain link fence with a green colored screen to screen views of the site during construction. Short-term visual impacts directly related to these construction activities are considered to be adverse, but due to their temporary nature and limited number of viewers, are not considered significant.

Long-term visual impacts include removal of mature vegetation and adverse changes in the existing visual setting due to grading impacts and views of permanent above-ground facilities (the substation and steel cable pole). The substation will require an area approximately 26,000 square feet and will be enclosed by a perimeter wall to prevent views to the interior of the substation. Substation equipment will be low profile with a maximum height of approximately 13 feet. The perimeter wall will be 10 to 13 feet high along Garfield Avenue and northern and southern site boundaries. The perimeter/retaining wall on the eastern site boundary will be approximately 30 feet high. The perimeter wall be designed in accordance with the City of El Cajon's architectural guidelines to better blend with the surrounding area. Screening of the substation with landscaping in accordance with the City's landscape guidelines is also proposed as part of the project.

No new transmission lines or reconductoring of existing transmission lines will be done in conjunction with the substation project. A new steel transmission pole approximately 83 feet in height will replace two existing wood poles, thereby reducing visual clutter. A portion of the existing 12 kV circuit running north/south on Garfield Avenue will be reconductored, however, the reconductoring of the line will not require any additional poles and should not have a visual impact.

In order to assess the visual effect of the finished substation, photographs were taken of the existing site from two viewpoints. *Figure 7* shows an existing view of the project site taken from south of the project site on Garfield Avenue looking northeast towards the existing substation and adjacent residential building. This view shows the existing driveway and gate to the Garfield Substation at the right side of the photograph. Currently, an eight-foot chain-link fence surrounds the site. Thick ornamental shrubbery and eucalyptus trees screen views to the interior of the substation except at the driveway. The existing house on the adjacent lot to the north (left side of photograph) is partially screened by a block wall that runs parallel to Garfield Avenue. Several large trees left of the center of the photograph are located on the southern portion of the residential lot.

Figure 7 shows the same view with the proposed project after installation of landscaping and upon energizing the substation. The proposed substation wall runs the full length of the two lots or approximately 160 feet. All of the existing mature vegetation, including the residential building and the tall trees have been removed and replaced with the low-profile substation equipment perimeter wall and landscaping.

Figure 8 provides existing and proposed views from east of the project site looking to the west and the rear of the proposed substation. As can be seen in the photograph, the substation equipment is completely screened by dense vegetation and trees. The rear yard and rear of the residence to be removed can be seen from this point of view. In the foreground of the photograph is the deepest part of the canyon that will be partially filled for the project site pad development.

Figure 8 shows that the proposed retaining wall (approximately 30 feet high) will run almost the full length of the eastern edge of the project site, approximately 160 feet. Since the topography slopes steeply from north to south (right to left), the face of the wall would be higher at the southern portion of the site than at the northern end. This wall will be visible from most properties east of the project; however, the substation equipment generally will be obscured by intervening landscaping, residential structures, and the proposed retaining wall. The rear of the substation is not visible from any public view.



Existing View



Proposed Project View

SOURCE: SDG&E, February 2000

SDG&E Garfield Substation MND
Site View from the West Side of Garfield Avenue

FIGURE
7



Existing View



Proposed Project View

SOURCE: SDG&E, February 2000

SDG&E Garfield Substation MND
Site View from the East to the Rear of the Project Site

FIGURE
8

As shown in *Figure 7*, the proposed substation project will be visible from motorists along Garfield Avenue (a two-lane residential street) as well as approximately five residences.

The project site does not currently serve as an aesthetic amenity, nor has any element of the City of El Cajon's General Plan designated the site for anything other than residential uses. There is a low frequency of visibility for land uses on Garfield Avenue since vehicular and pedestrian traffic is primarily limited to project vicinity residences. Therefore, the limited visual access in the immediate vicinity serves to decrease the public's perception of aesthetic impacts. Furthermore, the project site is not within view of any designated scenic highways, nor will the proposed project interfere with any scenic vistas in the City of El Cajon or La Mesa.

The presence of a substation in a residential neighborhood is not unexpected and the sight of such facilities is relatively common to urbanized areas as such public facilities serve those residential land uses and does not constitute a significant visual impact in such circumstances. While expansion of the Garfield Substation as proposed would result in changes in the expectations of viewers and could result in a negative impression of the viewshed, viewers of the project would be limited to a small group of residents (approximately five residences) living in the immediate project vicinity. The combination of factors such as limited visual access and incorporation of design and landscaping measures (as illustrated in *Figures 7 and 8*) and approved by the City of El Cajon that minimize aesthetic obtrusiveness within a site that currently contains a substation, renders the long-term visual impacts of the proposed project to less than significant.

d) *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Less than Significant Impact. Depending upon construction techniques and hours, new sources of light and glare may be present during project construction. However, due to the short-term nature of construction, any light or glare effects are anticipated to be less than significant.

During operation, shadows and glare are not expected to be a problem as project facilities would generally be constructed of non-reflective materials. Night lighting will consist of one 100-watt yellow floodlight. Other substation lighting would be used during emergencies only. Light and glare effects from night lighting associated with the project are therefore considered to be less than significant.

5.2 AGRICULTURE RESOURCES

- a) ***Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

No Impact. The project site combines an existing substation with an adjacent residential parcel. The site is situated in an established residential zone and therefore, no impacts to agriculture will occur with project implementation.

- b) ***Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

No Impact. The project site is not within an agricultural preserve and no active agricultural operations occur on the project site. Additionally, the site is zoned Residential One R-1-6.

- c) ***Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?***

No Impact. See response 5.2-a and 5.2-b.

5.3 AIR QUALITY

- a) ***Would the project conflict with or obstruct implementation of the applicable air quality plan?***

Less than Significant Impact with Mitigation Incorporated. The project site is located in the San Diego Air Basin, which is a federal and state non-attainment area for ozone (O₃), and a state non-attainment area for particulate matter less than or equal to 10 microns in diameter (PM₁₀). The applicable O₃ attainment plan is the Regional Air Quality Strategy (RAQS), which is prepared and administered by the San Diego Air Pollution Control District (APCD). The San Diego APCD has not established significance criteria for construction emissions. However, the APCD does specify Air Quality Impact Analysis (AQIA) Trigger Levels for review of new stationary sources. Although these trigger levels are specified for stationary sources, they are used here to assess the potential impacts due to air emissions during project construction. The AQIA Trigger Levels are:

SO _x	–	250 pounds/day
NO _x	–	250 pounds/day
CO	–	550 pounds/day
PM ₁₀	–	100 pounds/day

The proposed project is not expected to release any air emissions during operation. Construction emissions would come from heavy equipment exhaust, construction-related trips by workers, material hauling trucks, and associated fugitive dust generation from clearing and grading activities. Heavy construction equipment will be diesel-powered. The principal pollutants would be carbon dioxide (CO), volatile organic compounds (VOC), oxides of nitrogen (NO_x) and PM₁₀. VOC and Nox are the precursors of O₃. Project construction air emissions were estimated using the California Air Resources Board URBEMIS 7G version 3.2 air emission estimation program. *Table 2* provides estimated construction emissions.

As shown in *Table 2*, total daily construction emissions are not anticipated to exceed identified significance thresholds and therefore are considered to be less than significant.

TABLE 2
DAILY CONSTRUCTION AIR EMISSIONS

Compound	Emissions* (lb/day)	AQIA Trigger Level† (lb/day)
NOx	158	250
SOx	NA	250
PM ₁₀	26	100
CO	92	550

Source: SDG&E February 2000

* URBEMIS7G version 3.2

† From SDAPCD Rules 20.2 and 20.3

NA = SOx compounds are not calculated by URBEMIS7G, but amounts will be less than the amounts computed for NOx compounds.

Additionally, measures to reduce fugitive dust impacts during construction as required by the APCD have been incorporated into the project (see *Section 2.6*). Therefore, short-term construction activities are expected to have a less than significant impact to air quality and the implementation of the RAQS.

- b) *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?***

Less than Significant Impact with Mitigation Incorporated. See response 5.3-a.

- c) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?***

Less than Significant Impact with Mitigation Incorporated. Implementation of the project would result in short-term impacts to air quality associated with construction. The cumulative effect of the proposed project and other projects in the vicinity would incrementally contribute to the San

Diego Air Basin's inability to attain federal and state AAQS for O₃ and PM₁₀. It is anticipated that short-term cumulative effects to air quality due to construction activities can be mitigated to a level of less than significant through implementation of mitigation measures on a project-by-project basis designed to control construction generated particulate matter (PM₁₀) through dust abatement procedures in accordance with APCD rules and control construction-generated O₃ and nitrogen oxides (NO_x) through proper maintenance of construction vehicles and traffic management.

Operations of the proposed project would not generate air quality impacts. Therefore, the project would not contribute to long-term cumulative impacts to ambient air quality.

d) *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Less than Significant Impact with Mitigation Incorporated. The site is situated in a residential zone with the nearest sensitive receptor (residence) to the proposed site is located approximately 12 feet from the proposed substation wall. As discussed in *response 5.3-a*, the proposed project is not expected to release any air emissions during operation and short-term emissions during construction are expected to be less than significant. In addition to implementing the mitigation measures discussed in *response 5.3-a*, SDG&E will install a temporary 8-foot high chain link fence with colored screen to provide interception of dust (see *Section 2.6*). Therefore, emissions associated with the proposed project are expected to have a less than significant impact to sensitive receptors.

e) *Would the project create objectionable odors affecting a substantial number of people?*

Less than Significant Impact. Operation of the proposed electric substation would not produce objectionable odors. Due to the close proximity of residences, construction emissions from diesel-powered heavy construction equipment may be considered unpleasant; however, due to the short-term duration are not considered to be significant.

5.4 BIOLOGICAL RESOURCES

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

Less than Significant Impact. The site is situated in a residential zone, bordered by existing residential development to the north, south and east of Garfield Avenue (a two-lane residential street) and residential land uses to the west. The proposed site combines the existing 12/4 kV Garfield substation site with the adjacent residential parcel to the north of the substation at 125 Garfield Avenue. No sensitive biological resources including sensitive habitat and/or endangered species were found on the project site. Non-native trees and shrubs have been planted densely around the existing substation and on the slope behind the substation. A grassy swale northeast of the project site conveys seasonal runoff from the north into a 24-inch concrete pipe located at the southeastern corner of the project site. This area is highly disturbed and has limited biological value (SDG&E, February 2000). For further discussion of impacts to this ephemeral stream, please refer to *response 5.4-c*.

Although no sensitive biological resources exist onsite, raptors have been observed in the project vicinity. If any of the onsite trees must be removed, they would be felled outside the raptor breeding season that is considered to be from January through August. If the project schedule requires the trees to be removed during the raptor breeding season, the trees would be carefully checked for nests. If a nest is present in a tree, a biologist would check to determine if eggs or hatchlings are in the nest and if they are, the trees will remain in place until the young are no longer dependent on the nest (see *Section 2.6*). These measures will ensure that potential impacts to raptors will be less than significant.

- b) **Would the project 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 the U.S. Fish and Wildlife Service?**

Less than Significant Impact. See *response 5.4-a and 5.4-c*.

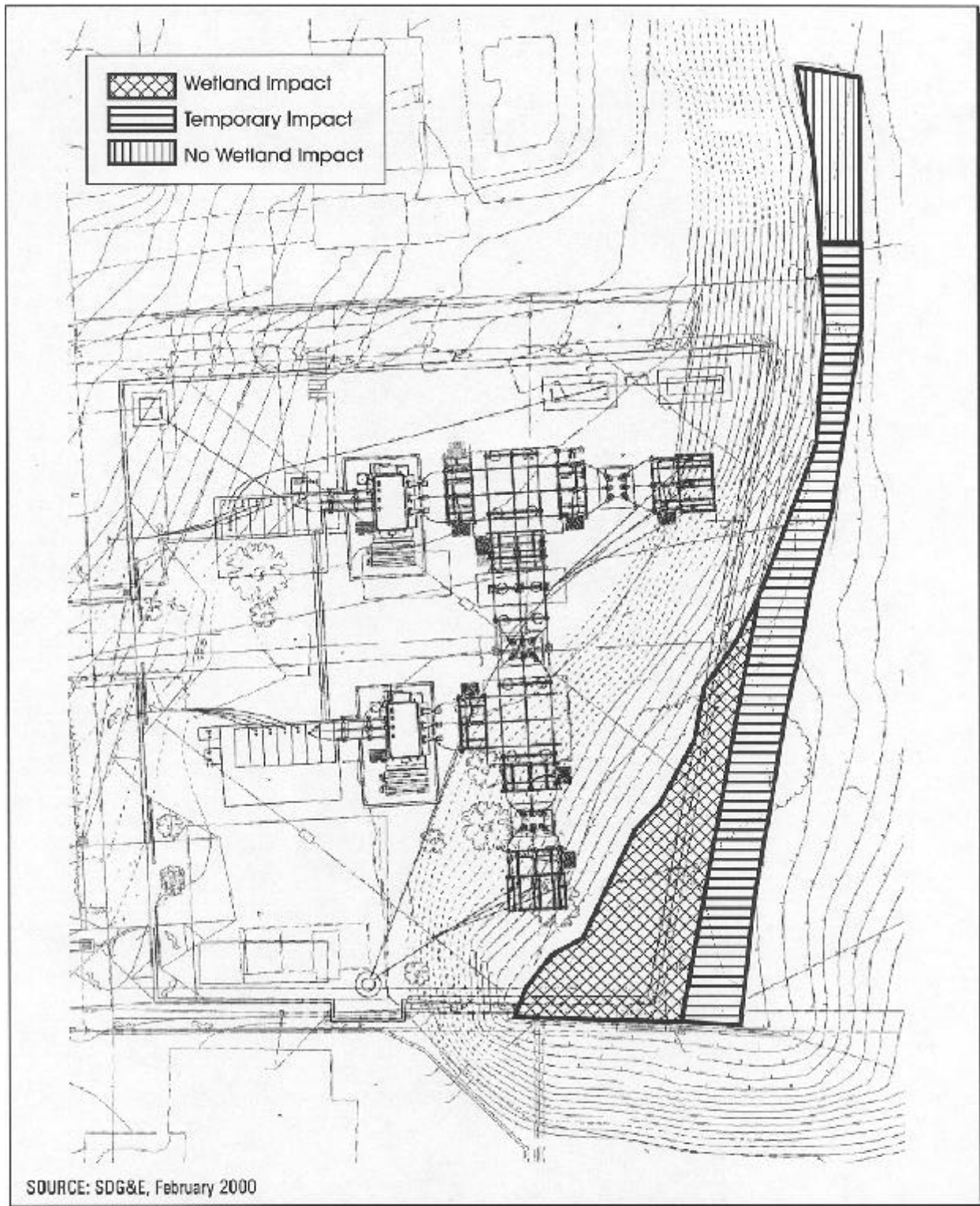
- c) **Would the project have a substantial adverse effect on federally protected**

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?

Less than Significant Impact. An ephemeral stream northeast of the project site conveys seasonal runoff from the north into a 24-inch concrete pipe located at the southeaster corner of the project site. Stormwater runoff provides the major source of wetland hydrology for this drainage course and supplemental water could come from dry season urban runoff. Even though hydrophytic vegetation species were not dominant, enough wetland indicator species are present to consider the area a disturbed wetland given the hydric soils and wetland hydrology indicators observed. The functional values of the wetland are considered low due to lack of native habitat, but the drainage course does provide some benefits to water quality through the temporary detainment of water and sediments. This wetland meets the California Department of Fish and Game (CDFG) criteria for wetlands and would be considered jurisdictional by the U.S. Army Corps of Engineers (ACOE).

The project proposes to place fill into the disturbed wetland permanently impacting approximately 0.04 acre (see *Figure 9*). The existing 24-inch culvert headwall would remain in place and minor modifications would be made to the culvert headwall. An additional 0.05 acre of the disturbed wetland would be temporarily impacted by construction equipment driving over the area. This area would be returned to pre-construction contours after the project is completed.

The project would qualify under both the existing and new Nationwide permit program authorized by the ACOE. A State Water Quality Certification or Waiver from the RWQCB under Section 401 of the Clean Water Act would be required to meet the terms and conditions of the Nationwide permit program. In addition, the CDFG will be notified and a Streambed Alteration Agreement obtained prior to project approval to cover any alterations to the ephemeral stream. Compliance with these permit requirements will ensure that project impacts to wetland will be less than significant (see *Section 2.6*).



SDG&E Garfield Substation MND
Wetland Impacts

FIGURE
9

- d) *Would the project 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?***

Less than Significant Impact. As discussed in *response 5.4-a*, the project combines an existing substation site with the adjacent residential parcel. An isolated canyon exists adjacent to the eastern boundary of the proposed site. Several species are known in residential areas and isolated canyons including northern mockingbird, house sparrow, house finch, mourning dove, bushtit, yellow-rumped warbler, red-shouldered hawk, barn owl, great horned owl, coyote, gray fox, striped skunk, and opossum. Western fence lizard, alligator lizards, and an occasional king snake are also found in the canyon.

The proposed project will primarily affect the existing substation site and residential parcel and as discussed in *response 5.4-c*, will permanently fill 0.04 acre of disturbed wetlands within the adjacent canyon. Because of the size of disturbance as well as the location in an area not likely to constitute an important wildlife movement corridor, the proposed project is not anticipated to interfere substantially with wildlife movement or disrupt use of wildlife corridors and linkages.

- e) *Would the project conflict with any local policies or ordinance protecting biological resources, such as a tree preservation policy or ordinance?***

Less than Significant Impact. No sensitive tree species exist onsite.

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

No Impact. The existing substation and adjacent residential lot are located in fully built-out urbanized areas and are not subject to any adopted local, regional, or state habitat conservation plan.

5.5 CULTURAL RESOURCES

- a) ***Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?***

No Impact. The project site does not contain any site or area listed in or eligible for listing in the National Register of Historic Places. A record search of the sacred lands filed by the Native American Heritage Commission (NAHC) failed to indicate the presence of Native American cultural resources in the immediate project area. A record search for cultural resource sites within or in the vicinity of the existing substation was conducted in December 1999 by the San Diego Museum of Man and San Diego State University. No sites were located within the existing facility site or adjoining parcel (SDG&E, February 2000).

- b) ***Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?***

No Impact. Please refer to *response 5.5-a*.

- c) ***Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

No Impact. Much of the existing project site is located on fill. This soil is not considered paleontologically significant. The remaining grading consists of filling the eastern portion of the site to pad depth. The fill soils have no paleontological significance as well.

- d) ***Would the project disturb any human remains, including those interred outside of formal cemeteries?***

No Impact. Based on the results of the cultural resources survey performed for the site, which included Native American consultation, no disturbance of human remains is expected.

5.6 GEOLOGY AND SOILS

Geocon, Inc. conducted a geotechnical investigation for the proposed project (December 1999). The following responses are based on this report which is available for review at the CPUC's office.

a) *Would the project 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? Refer to Division of Mines and Geology Special Publication 42.*

No Impact. Based on a review of this report, there are no known active faults located in the project vicinity. Therefore, the potential for fault rupture is considered extremely low (Geocon 1999).

ii. *Strong seismic ground shaking?*

Less than Significant Impact with Mitigation Incorporated. The project site will likely be subject to ground shaking in response to either a local moderate or more distant large magnitude earthquake. As described in *Section 2.6* of this MND, project design has incorporated the following measures to reduce geological hazards due to seismic groundshaking to less than significant.

- ! Project design will meet or exceed existing earthquake design standards.
- ! Pole and substation construction will meet CPUC's General Order for seismic standards.
- ! Project design will adhere to the specifications provided in the geotechnical engineering study (Geocon 1999).

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. No groundwater was encountered during the field investigation in all the exploratory trenches and test pits excavated to an elevation of about 637 feet MSL. Due to the relatively great depth to groundwater and dense nature of the formational materials at the site, the potential for soil liquefaction would be considered low (Geocon 1999).

iv. Landslides?

No Impact. Landslides are not present on or adjacent to the site (Geocon 1999).

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact with Mitigation Incorporated. Clearing, grading and filling of the site for project construction would result in the potential to increase erosion onsite. Erosion control will be employed during the construction phase, including the short-term use of sandbags, matting, mulch, berms, hay bales, or similar devices along all graded areas to minimize sediment transport. The exact design, location and schedule of use for such devices will be determined pursuant to direction and approval by the City of El Cajon during review and approval of the grading permit (see *Section 2.6*).

c) Would the project 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 offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact with Mitigation Incorporated. This site is occupied primarily with undocumented fill that is unsuitable in their present condition to build the project. Remedial grading in the form of removal and recompaction will be required. Adherence to the grading and construction standards provided in the geotechnical engineering study (Geocon 1999) including recommended fill compaction and site preparations for the project would reduce any potential geologic impacts to below a level of significance.

- d) ***Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks of life or property?***

Less than Significant Impact. As identified in the geotechnical investigation (Geocon 1999), the majority of the soils encountered in the geotechnical investigation are considered to have a low expansion potential as defined by the Uniform Building Code Table No. 18-1-B. It is anticipated that implementation of grading and construction standards identified in the geotechnical investigation will reduce potential adverse impacts from expansive soils to less than significant.

- e) ***Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?***

No Impact. No sewer or wastewater disposal is required as part of the project.

5.7 HAZARDS AND HAZARDOUS MATERIALS

- a) ***Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

Less than Significant Impact. The only hazardous material that would be used in operation of the substation is transformer oil. Hazardous wastes would be produced during maintenance and operation activities and would primarily include used oil and oil saturated materials. This would be an increase over current hazardous material use and production of hazardous waste onsite, but would not be a significant hazard. Aboveground, concrete containment basins would be constructed around the transformers to contain the oil in the event of a spill. Transformer oil would not be stored onsite, but at SDG&E's central maintenance facility in San Diego. Hazardous wastes generated from maintenance and operation activities would be transported to SDG&E's central maintenance facility for disposal. All use of hazardous materials and disposal of hazardous wastes would be in compliance with state Title 22 and federal Title 40 requirements, including the oil spill control and countermeasure plan

(SCCP) required by Title 40 CFR Section 112.7. No extraordinary risk of accidental explosion or the release of hazardous substances is anticipated with development and implementation of the proposed substation.

- b) *Would the project 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?***

Less than Significant Impact with Mitigation Incorporated. Please refer to *response 5.7-a* regarding project operations. Also please refer to *Section 6.0* of this document for a discussion on electric magnetic fields (EMF).

Site development will include demolition and removal of an existing residence, removal and relocation of existing onsite utilities and relocation onsite of the existing substation. Existing hazardous substances associated with these existing onsite facilities may exist. Therefore, there is the possibility that project construction could include a risk of releasing existing hazardous substances and exposing people to potential health hazards.

As part of the final design, a site assessment will be performed to identify where hazardous materials or wastes may be encountered. In the event that grading, construction, or operation of proposed facilities will encounter hazardous waste, SDG&E will ensure compliance with the State of California CCR Title 23 Health and Safety Regulations as managed by the San Diego County Department of Environmental Health. Excavated soils impacted by hazardous waste or materials will be characterized and disposed of in accordance with CCR Title 14 and Title 22. SDG&E will have an experienced environmental professional with 40-hour HAZWOPER training onsite while working in areas where contamination may be encountered. The responsibility of this professional would be to monitor the work site for contamination and to implement mitigation measures as needed to prevent exposure to the workers or the public. These measures may include signage and dust control. Implementation of these measures will ensure that the identified impact is reduced to below significant by ensuring public health and safety including those of project construction workers and adjacent residences in accordance with State of California Health and Safety Regulations as managed by the San Diego Department of Environmental Health.

- c) *Would the project emit hazardous emissions or handle hazardous or acutely***

hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact. Please refer to *response 5.7-a* and *5.7-b*. The closest school to the project site, Fletcher Hills Elementary School, is more than one-quarter mile away (1,900 feet).

- d) *Would the project 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 it create a significant hazard to the public or the environment?***

Less than Significant Impact with Mitigation Incorporated. See *response 5.7-b*.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?***

No Impact. The project site is not located within an airport land use plan area nor within two miles of an airport.

- 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?***

No Impact. No private airstrips exist within the vicinity of the project site.

- g) *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Less than Significant Impact. Some traffic hazards would occur during construction activities which could interfere with emergency response plans or evacuation plans (see *response 5.15-d*). However, with proper traffic control, construction activities would have a less than significant impact to emergency response plans or emergency evacuation plans.

- h) *Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are***

adjacent to urbanized areas or where residences are intermixed with wildlands?

Less than Significant Impact. The project is an unnamed facility and development of the substation pad would remove all flammable vegetation within the perimeter substation wall. The pad would be cleared, graded, paved, and then surrounded by a 13-foot high masonry wall and gunite drainage ditches. No vegetation is proposed within the walled area. Consequently, the addition of the substation to the project site is not anticipated to increase the fire hazard in the area and therefore, impacts related to increased fire hazard due to the substation will remain below a level of significance.

Although energized lines that fall to the ground would be automatically de-energized by protective relays, the possibility of a fire still exists. Because the project basically involves the addition of underground lines and the replacement of existing overhead lines with new lines, the potential for fires ignited by power lines would remain unchanged. Therefore, impacts related to increased fire hazard due to power lines are anticipated to be below a level of significance.

5.8 HYDROLOGY AND WATER QUALITY

a) *Would the project violate any water quality standards or waste discharge requirements?*

Less than Significant Impact with Mitigation Incorporated. All project runoff will be directed to the existing stormwater system in Garfield Avenue/ Severin Drive. The project will implement short-term construction BMPs and will employ the protective erosion control measures described in the State Water Resources Control Board (SWRCB) General Permit for Discharges associated with construction activities (Permit No. CA 0108758) to reduce potential water quality impacts to an insignificant level (see *Section 2.6*). No local, state, or federal water quality standards will be violated.

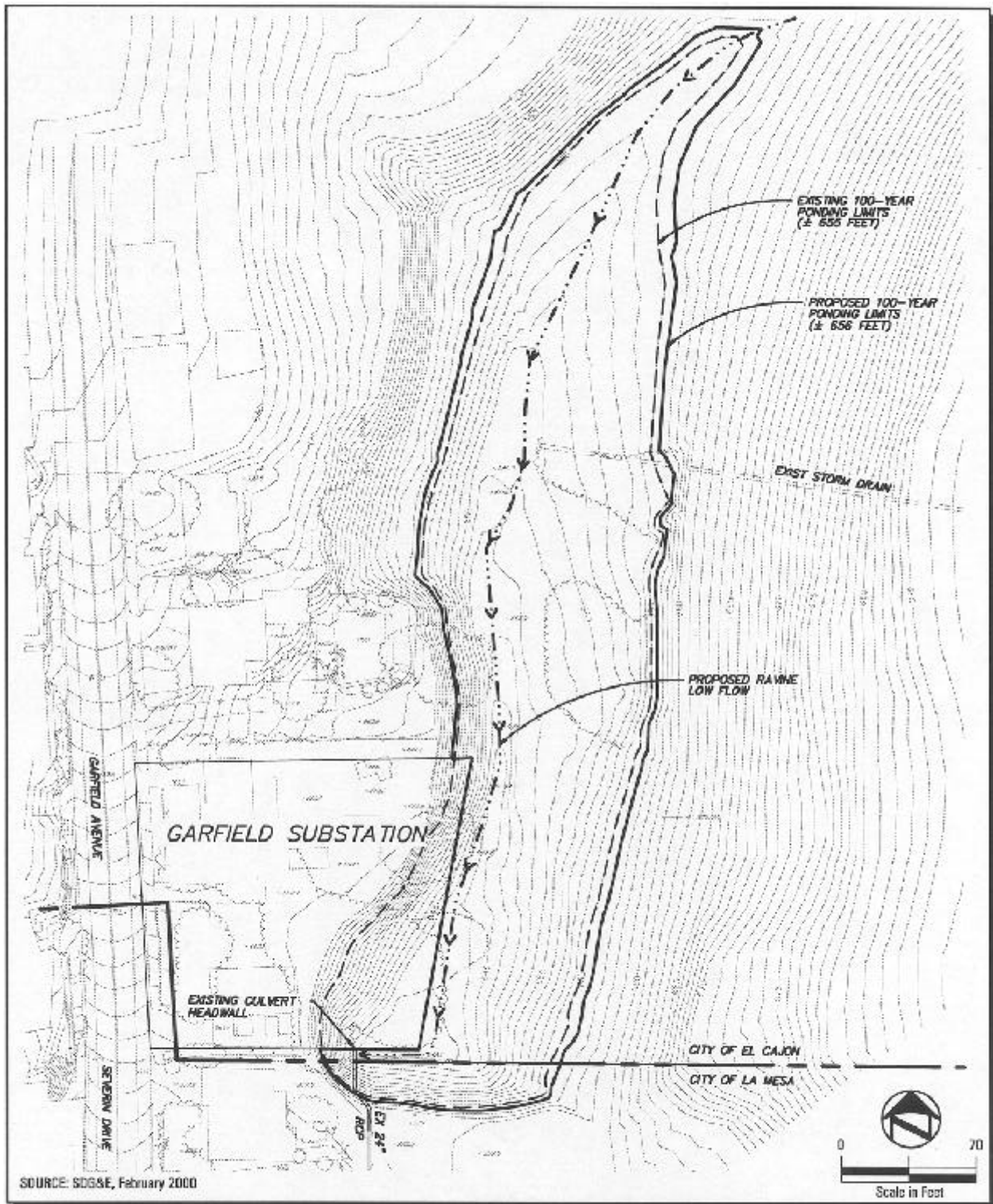
b) *Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of a local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level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

permits have been granted)?

No Impact. The proposed project involves only surface or near-surface improvements which should have no effect on groundwater flows, quantities, or quality. The project also does not involve any groundwater withdrawals or additions.

- c) ***Would the project 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 or siltation on or offsite?***

Less than Significant Impact. See *response 5.8-a*. An ephemeral stream east of the project site conveys seasonal runoff from the north into a 24-inch concrete pipe located at the southeastern corner of the project site. The proposed project will include placing fill into the western portion of the ravine. A hydrology report was conducted to evaluate the existing stormdrain facilities and project impacts (Nolte Associates, Inc., December 1999 and updated March 2000). This report is available for review at the CPUC. This report concluded that the proposed pad expansion will not increase the existing 100-year discharge to the existing downstream drainage system, that the fill expansion into the ravine will increase the 100-year ponded elevation by ± 1 foot and that this increase in elevation will not impact surrounding properties or downstream drainage conditions. *Figure 10* provides the existing as well as proposed 100-year ponding limits.



SDG&E Garfield Substation MND
Existing & Proposed 100-Year Ponding Limits

FIGURE
10

- d) Would the project 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 offsite?**

Less than Significant Impact. Proposed improvements would not substantially change the existing water drainage flow in the area and would not result in flooding on or offsite (see *response 5.8-c*).

- e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Less than Significant Impact. See *response 5.8-a and 5.8-c*.

- f) Would the project otherwise degrade water quality?**

Less than Significant Impact. See *response 5.8-a*. No other degradation of water quality would result from project implementation.

- g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?**

Less than Significant Impact. See *response 5.8-c*. No housing is proposed by the project.

- h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

Less than Significant Impact. See *response 5.8-c*.

- i) Would the project 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?**

Less than Significant Impact. See *response 5.8-c*.

- j) Would the project be susceptible to inundation by seiche, tsunami, or**

mudflow?

No Impact. Hydrologic and topographic conditions of the project site and surrounding area do not lend themselves to these conditions. The proposed project is not near any water body. Slopes onsite and in the vicinity are gradual, so mudflows would be unlikely.

5.9 LAND USE AND PLANNING**a) *Would the project physically divide an established community?***

Less than Significant Impact with Mitigation Incorporated. The current project site is located within the City of El Cajon and contains an existing substation and single residential home. The project site is bounded by existing residential development to the north, south and east, and by Garfield Avenue (a two-lane residential street) and residential land uses to the west. All uses within the 500-foot radius are residential. The site is zoned Residential One (R-1-6). The proposed project will expand the existing Garfield substation into the adjacent residential parcel owned by SDG&E (see *Figure 4*).

Expansion of the existing Garfield Substation as proposed is an allowed use under the City of El Cajon's zoning ordinance (Chapter 17.20.030) and therefore would not result in any significant impacts to the City's land use planning goals and objectives.

Due to the proposed substation's proximity to a residential neighborhood, concern has been expressed about potential land use compatibility conflicts. Environmental parameters defining land use compatibility are physical factors such as traffic, noise, air quality, aesthetics and public safety. Each of these issues are addressed in *Section 5* of this document. The environmental analysis in *Section 5* of this document indicates that the potential traffic, noise, air quality, aesthetics and public safety impacts of the proposed project will be less than significant. Such physical factors serve as indicators of land use compatibility. The analyses in *Section 5*, along with the fact that the site currently contains a substation and therefore would not introduce a new land use, support the conclusion that the project would not disrupt or divide the existing community.

- b) *Would the project 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?***

Less than Significant Impact with Mitigation Incorporated. It should be noted that the CPUC has exclusive jurisdiction over the proposed project. Therefore, the project is not subject to local or county plans, policies, or zoning regulations. The CPUC is however required to consider local land use regulations and policies when making decisions. The following is presented, therefore, to assist in determining land use compatibility.

The project site is located in the City of El Cajon. The proposed project is the expansion of the existing Garfield substation site onto the adjacent residential project. The area is designated by the El Cajon General Plan for residential uses and zoned for residential uses. As discussed in *response 5.9-a*, the project with implementation of mitigation measures designed to reduce construction impacts as well as long-term aesthetic impacts would not conflict with the City's zoning ordinance (Ramirez, 2000).

- c) *Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?***

Less than Significant Impact. Please refer to *response 5.4-f*.

5.10 MINERAL RESOURCES

- a) *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?***

No Impact. No known mineral resources occur on the project site.

- b) *Would the project 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?***

No Impact. See response 5.10-a.

5.11 NOISE

- a) ***Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

Less than Significant Impact. Construction and operation of the proposed project would result in an increase in existing noise levels due to construction equipment and operation of transformers. The proposed project is located within the City of El Cajon. The City's Noise Ordinance places limits on noise generated by stationary sources. The noise level limits are specified in A-weighted decibels [dB(A)] at the boundary of the property. For residential properties, the noise ordinance specifies a daytime limit of 60 dB(A) and a nighttime limit of 50 dB(A).

The noise ordinance also sets specific limits on construction activities. No general construction may occur on Sundays, on specific holidays, or from 7 PM to 7 AM except in an emergency or for individual home improvement projects. No construction noise limit other than hours stated above is established.

Construction Noise. The proposed project will produce short-term noise during the construction stage of development of the facility. Temporary construction noise impacts vary markedly because the noise strength 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 site clearing and grading, then by foundation construction, and finally by building and facility construction.

The nearest residence to the substation pad is located approximately 10 feet south of the property boundary. The earthmoving (grading) activities are the noisiest sources during construction, with equipment noise ranging from 78 to 98 dB(A) at 50 feet from the source. For point sources such as construction equipment, noise decreases by approximately 6 dB for each doubling of distance for a hard, flat site (no topography). Construction noise impacts are therefore

likely to be intrusive. However, given the fact that they are short-term in nature, will occur within the City of El Cajon's limits for construction, and that SDG&E has incorporated measures to reduce construction noise impacts to the extent feasible, noise impacts are not considered significant (see *Section 2.6*).

Operational Noise: Operation of the proposed facilities would result in the production of long-term noise from transformers. Each transformer would generate a maximum sound level of 61 dB(A) at a distance of six feet (SDG&E, PEA February 2000).

The City's noise ordinance specifies a noise level of 60 dB(A) at the property line as the acceptable limit during the daytime hours and a nighttime limit of 50 dB(A). For point sources such as transformers, noise decreases by approximately 6 dB for each doubling of distance for a hard, flat site with no topography. All maximum calculated values along the perimeter of the proposed project site were less than 47 dB(A) (SDG&E, PEA February 2000). Noise from substation operation would comply with the City of El Cajon's noise standards and therefore are considered to be less than significant.

b) *Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

Less than Significant Impact. The project will not result in the generation of excessive groundborne vibration or groundborne noise levels.

c) *Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less than Significant Impact. See response 5.11-a.

- d) *Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?***

Less than Significant Impact with Mitigation Incorporated. See response 5.11-a.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

No Impact. No airport exists within two miles of the project.

- f) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?***

No Impact. No private airstrip exists within two miles of the project.

5.12 POPULATION AND HOUSING

- a) *Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes or businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

Less than Significant impact. SDG&E provides electrical power services to the City of El Cajon/Fletcher Hills area located within San Diego County. In providing these services, SDG&E currently operates three substations, referred to as the *El Cajon Substation*, the *Garfield Substation*, and the *Murray Substation*. Electrical demand in the area served by these three substations is projected to increase at approximately 3.6 MW (megawatts) per year. The 3.6 MW growth rate in the service area will result from major projects such as the Marshall Avenue extension (County of San Diego), a new pump station and filtration plant, and other small commercial developments. In addition to these projects, additional minor loads are projected to increase due to smaller residential development and redevelopment projects.

A July 1998 distribution area planning study, prepared by SDG&E Distribution Management and Strategies, indicates that the El Cajon and Murray substations will exceed their capacities by 2001. Both substations are fully built out. To avoid exceeding the capacity, load must be transferred off the Murray and El Cajon substations.

The proposed Garfield Substation is required in order to offload the Murray and El Cajon substations, meet expected customer-driven electrical load growth and ensure reliable service. No portion of the project would result in the generation of additional population. The project will not provide additional long-term employment opportunities. No residences are proposed as part of the proposed project, and no extension of services beyond that currently planned for is associated with the proposed project. Therefore, the proposed project would not generate additional population or cumulatively exceed official regional or local population projections, nor would it induce substantial growth in an area either directly or indirectly.

- b) *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?***

Less than Significant Impact. The proposed expansion of Garfield Substation would remove a single residence. No other housing will be displaced or otherwise affected by the proposed project.

- c) *Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?***

Less than Significant Impact. See response 5.12-b.

5.13 PUBLIC SERVICES

- a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government 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:***
- i. *Fire protection?***

Less than Significant Impact. See *response 5.7-h* regarding the project's impact to fire hazard. There is the potential for an increase in fire response to the project site if neighboring residences see an incident at the project site, such as sparking, that may cause the neighbor to call the local fire department. SDG&E has an agreement with the fire department within their service area to immediately call SDG&E if they receive a call regarding one of SDG&E's properties. This is so that SDG&E can meet the fire department at the site and assess the situation on how to proceed prior to the fire department entering a high voltage area. This would be an infrequent occurrence and would not be an impact to fire protection services.

ii. Police protection?

No impact. As discussed under *response 5.12-a*, the proposed project would not generate population growth; therefore, no new demand would be placed on police protection.

iii. Schools?

No impact. As discussed under *response 5.12-a*, the proposed project would not generate population growth; therefore, no new demand would be placed on schools.

iv. Parks?

No Impact. The proposed substation would be an unmanned facility and no population increase would result with project implementation. There would be no increase in the demand for parks or other recreational facilities.

v. Other public facilities?

Less than Significant Impact. As discussed under *response 5.12-a*, the proposed project would not generate population growth; therefore, no new demand would be placed on public facilities. Heavy trucks used during construction and maintenance of project facilities may result in a minimal increase in the need for roadway maintenance. Over the long-term, as a privately owned, unmanned facility, the proposed project

would not rely on public facilities and would therefore not increase their maintenance needs.

5.14 RECREATION

- a) ***Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

No Impact. As discussed under *response 5.12-a*, no population would be generated by the proposed project. Therefore, no demand for recreational facilities would occur.

- b) ***Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?***

No Impact. No recreational facilities are included or would be required as part of the proposed project.

5.15 TRANSPORTATION/TRAFFIC

- a) ***Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?***

Less than Significant Impact with Mitigation Incorporated. During operation, the proposed project is expected to generate approximately one or two vehicle trips per day. This limited number of vehicle trips would not result in impacts to traffic or traffic congestion.

During construction (approximately nine months), traffic will be generated by construction crews and equipment/material delivery and export. Construction equipment would include tractors, scrapers, loaders and trucks for excavating, compacting, hauling, and finish grading the site. A substantial amount of soil import will be transported to the site with street-legal haul trucks. Portable cranes and heavy hauling trucks would be employed for the 69/12 kV transformer, 50 tons, and the double-circuit steel cable pole delivery and installation. Concrete trucks, backhoes, crew trucks, and pick-up trucks would be coming and going to the site during the installation of the foundations, ground grid, and underground ducts. Crew trucks, boom trucks, and pick-up trucks would be going to and from the site daily for the balance of the construction activities, testing and check-out, final transmission tie-ins, and 12 kV circuit cabling until the station is energized. *Table 3* lists estimated vehicle types and duration of use.

TABLE 3
ESTIMATED VEHICLE TYPES AND DURATION OF USE

Vehicle Type	Estimated Number Required	Duration
Tractor	1	1 month
Scraper	1	1 month
Loader	1	1 month
Compactor	1	1 month
Grader	1	1 week
Truck (25-ton dump)	20 trips/day	3 weeks
Concrete trucks	10 trips/day	2 months
Backhoe	1	1 month
Crew trucks	3	5 months
Boom truck	1	3 months
Pick-up truck	3	5 months
Personal vehicles	8	9 months

It is anticipated that six to eight workers would be employed onsite during the non-electrical phase of site preparation when grading, wall construction and installation of underground conduit would take place. Following this site preparation phase, approximately eight workers could be onsite during the balance of construction of the transmission, substation, and distribution infrastructure until just prior to control wiring checkout and testing. Final

activities, including final tie-ins and energizing the station, would utilize about six to eight electricians and two to four engineers.

Construction equipment, vehicles, and material staging areas would primarily be accommodated within the property lines of the proposed substation property. To reduce personnel vehicle parking on Garfield Avenue, construction personnel will park vehicles in the park and ride lot located at the intersection of Severin Drive and Amaya Drive. It is expected that, with the exception of grading and fill activities, short-term construction-related traffic would not create a substantial impact on traffic volumes nor change traffic patterns in such a way that congestion and delay would be substantially increased on street segments or at intersections.

During grading operations and import of fill, deliveries of fill will be made by using the existing substation driveway on Garfield Avenue. The addition of truck trips during grading and fill activities as shown in *Table 3* may create adverse traffic as well as safety impacts in residential areas. As a condition of the grading permit issued by the City of El Cajon, the City would review and approve the proposed haul routes for import soil delivery. Additionally, a traffic control plan will be prepared to address construction traffic during import of fill and concrete. It is expected that approval of haul routes and a traffic control plan by the City of El Cajon and City of La Mesa will ensure that traffic hazards, congestion and delay of traffic resulting from project construction are not substantially increased and will be of a short-term nature in accordance with the City's engineering guidelines.

- b) *Would the project exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency for designated roads or highways?***

Less than Significant Impact with Mitigation Incorporated. See response 5.15-a. With implementation of traffic control plan approved by the City of El Cajon and City of La Mesa, short-term and limited construction-related traffic would not create a substantial impact on traffic volumes nor change traffic patterns in such a way as to affect the level of service (LOS) or vehicle to congestion ratio on study area roadways.

- c) *Would the project 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?***

No Impact. No airport exists within two miles of the project; therefore, the proposed project would not result in an alteration to aircraft traffic or safety risks.

- d) ***Would the project substantially increase hazards due to a design feature (e.g., sharp curves of dangerous intersections) or incompatible uses (e.g., farm equipment)?***

Less than Significant Impact with Mitigation Incorporated. Access to the site during construction and operation of the substation would be from Garfield Avenue. During construction, some traffic hazards could result while delivering of fill and concrete to the site, and while slow-moving, heavy equipment access the site and use local residential streets. Additional impacts/hazards could occur from construction of the access driveway, underground distribution work and sewer relocation work. A traffic control plan will be included as part of the proposed project. The traffic control plan will be prepared in accordance with the City of El Cajon's and City of La Mesa's traffic control guidelines and will address construction traffic during import of fill and concrete as well as construction of the access driveway, underground distribution work and sewer relocation work. Traffic control will include signage and flagmen when necessary to allow heavy equipment to utilize residential streets. The traffic control plan will also include provisions for coordinating with local school hours and emergency service providers regarding construction times. Additionally, an encroachment permit from the City of El Cajon where work is done within a public right-of-way will be obtained. These measures will ensure access will be maintained to individual properties, that emergency access will not be restricted, and that hazards resulting from project construction are not substantially increased (see *Section 2.6*). Upon completion of construction, no traffic impact would result from operation of the project (see *response 5.15-a*).

e) *Would the project result in inadequate emergency access?*

Less than Significant Impact. See response 5.15-d. The project will not close access to any property or existing roads; therefore, less than significant impacts to emergency access or access to nearby uses are expected due to the project.

f) *Would the project result in inadequate parking capacity?*

Less than Significant Impact with Mitigation Incorporated. As discussed in response 5.15-a, to reduce personnel vehicle parking on Garfield Avenue during project construction, construction personnel will park vehicles in the park and ride lot located at the intersection of Severin Drive and Amaya Drive. Parking areas onsite are sufficient to accommodate operation of the proposed project. Therefore, impacts to parking capacity are considered to be less than significant.

g) *Would the project conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

No Impact. Implementation of the proposed project would not conflict with adopted policies or involve elimination of facilities supporting alternative transportation such as bus turnouts or bicycle racks.

5.16 UTILITIES AND SERVICE SYSTEMS

a) *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

No Impact. Project implementation would not impact wastewater treatment. Sewer is not required nor part of the proposed project.

- b) *Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?***

Less than Significant Impact. No water or wastewater treatment facilities would be required as part of the proposed project. Landscaping is designed to be low water use.

At the present time, an 8-inch sewer line is located in a 6-foot easement along the east and south property lines of 125 Garfield Avenue (the property purchased by SDG&E for expansion purposes). The proposed project will erect structures over the top of the existing sewer line that would make it difficult to service the line in the future. As part of the project, the 8-inch sewer line will be re-routed at the northern property boundary to intersect the existing sewer line in Garfield Avenue. Re-routing this sewer line will take place concurrently with project construction. Measures have been included in the project to reduce project impacts during construction to less than significant (see *Section 2.6*). No further impacts are anticipated.

- c) *Would the project 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?***

Less than Significant Impact. As discussed in *response 5.8-a*, the increased runoff from the site is incremental. All project runoff will be directed to the existing stormwater system such that no additional stormwater systems will be needed.

As discussed in *response 5.8-a*, the project will affect an ephemeral stream that conveys seasonal runoff into a 24-inch concrete stormdrain near the southeastern corner of the project. The existing drainage headwall and 24-inch diameter stormdrain near the southeast corner of the substation site will not be modified. The project includes a concrete lined swale extending along the rear (eastern side) and a portion of the south side of the substation along the toe of the gravity set retaining wall. Drainage will flow along the swale and into the existing stormdrain at the existing headwall. As discussed in *response 5.8-c*, the project will have a less than significant impact to the drainage system. Additionally, as discussed in *response 5.4-c*, the project will have less than

significant impact to wetland resources. Measures have been included into the project to reduce project impacts to less than significant (see *Section 2.6*). No further impacts are anticipated.

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

Less than Significant Impact. Short-term water provision by water trucks would be required during project construction for dust suppression, and would not be an impact to regional water treatment or water distribution facilities. Landscaping is designed to be low water use and therefore is not anticipated to impact water supplies. No other water system is proposed or needed to implement the project.

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

No Impact. No wastewater treatment would be required by the proposed unmanned substation.

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

Less than Significant Impact. The project will generate a limited amount of solid waste during construction. It is anticipated that the solid waste generated by project construction would have a less than significant impact on local solid waste facilities. No regular solid waste disposal is proposed as part of the substation project. Wastes produced at the substation by maintenance and repair activities would be transported back to the central SDG&E maintenance facility in San Diego for disposal. The amount of solid waste generated by the proposed substation would not be substantial or interfere with the sufficient permitted capacity of nearby landfills.

- g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?***

No Impact. See *response 5.16-f*. All solid waste will be disposed of in an approved site in compliance with federal, state and county regulations.

5.17 MANDATORY FINDINGS OF SIGNIFICANCE

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?***

Less than Significant Impact. As discussed in *response 5.5-a* and *5.5-b*, the project would cause no impacts to archaeological resources. As discussed in *response 5.4-a* and *5.4-c*, no sensitive biological resources exist onsite. The project includes measures to reduce impacts to raptors which may use trees onsite to less than significant. Project impacts (0.04 acre permanent and 0.05 acre temporary) to wetlands were determined to be less than significant due to lack of native habitat.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?***

Less than Significant Impact with Mitigation Incorporated. As revealed by the previous discussions for each environmental category, impacts from the proposed project are considered to be less than significant or no impact after the incorporation of mitigation measures. Measures are incorporated into the project which reduce impacts associated with geological resources, hydrology and water quality, air quality, traffic, biological resources, hazardous materials, noise, public utilities, and visual resource impacts to less than significant (see *Section 2.6*). No long-term significant impacts are associated with the project.

In the absence of significant impacts, incremental accumulation of effects would not occur. Therefore, the proposed project does not incrementally contribute to cumulative impacts.

- c) ***Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?***

Less than Significant Impact. Based on the analysis of all the above questions, it has been determined that there would be no significant direct or indirect effect on human beings.

SECTION 6.0

ELECTRIC AND MAGNETIC FIELDS (EMF)

During the last several years, representatives of the public have expressed concern about the potential health risk associated with power frequency electric and magnetic fields (EMF). Numerous internationally recognized scientific organizations and independent regulatory advisory groups have conducted scientific reviews of the EMF research literature. The results of this research are inconclusive and public concern and scientific uncertainty remain regarding the potential health effects of EMF exposure.

In January 1991, the CPUC issued an Order Instituting Investigation to develop policies and procedures for addressing potential health effects of magnetic fields from utility facilities. The CPUC formed the California Consensus Group (CCG), a committee of 17 stakeholders representing diverse interests and perspectives, to provide guidance on interim EMF measures the CPUC might have adopted while waiting for resolution of scientific uncertainties. In March 1992, the CCG issued its report. In part, the report recommended that the CPUC authorize utilities to implement magnetic field reduction techniques if those techniques could be implemented at little or no cost. In November 1993, the CPUC issued Decision 93-11-013 adopting interim policy regarding EMF. California's electric utilities were authorized to implement no- and low-cost (low cost is defined as 4% of total project cost) field management techniques to reduce EMF levels from new and upgraded electrical facilities if a noticeable reduction could be achieved.

The proposed project incorporates measures to reduce EMF exposure in compliance with CPUC Decision 93-11-013. SDG&E's EMF Design Guidelines for Transmission, Distribution and Substation Facilities (SDG&E EMF Design Guidelines, May 1994) describe engineering techniques for reducing exposure to magnetic fields created by its electric facilities in compliance with CPUC Decision 93-11-013. Field management technique/guidelines for the Garfield Substation project include:

- Locate substation equipment as close to the center of the substation as possible.
- Use metal clad switchgear for 12 kV bus work, which reduces phase spacing and produces lower magnetic fields.
- Locate the Garfield substation as close to the existing transmission right-of-way as possible.

- ❑ For transmission and distribution lines entering or leaving the substation, employ magnetic field reduction techniques in accordance with the SDG&E “EMF” Design Guidelines for Transmission Distribution, and Substation Facilities.”
- ❑ Construct an underground 69 kV transmission loop-in from the existing TL 620 to the new substation and:
 - 1) Arrange conductors vertically and phase such that the incoming and outgoing circuits are phased “ABC/ABC” top-to-bottom.
 - 2) Rearrange underground duct bank and trench such that both circuits are in a common trench as they leave the cable pole for as much distance as possible.
- ❑ Modify conductor arrangement, where effective, on existing circuits contributing to overall magnetic field levels associated with the upgrade project.

SECTION 7.0 REPORT PREPARATION PERSONNEL

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Sherri Miller, M.S. Senior Biologist
Lesley Terry, B.S. CADD Operator
Peter Quinlan, M.S. Hazardous Materials
Tonette Foster, B.S. Computer Processing

Asher Sheppard Consulting

Asher Sheppard, Ph.D. Electric and Magnetic Fields

SECTION 8.0 REFERENCES

8.1 Literature Cited

- ! *SDG&E Preliminary Environmental Assessment*, February 29, 2000. Available for review at the California Public Utilities Commission, 505 Van Ness Avenue, Room 4007, San Francisco, California 94102.
- ! *SDG&E Preliminary Environmental Assessment*, Supplemental Information, May 3, 2000.
- ! Geocon, *Geotechnical Investigation, SDG&E Garfield Substation*. December 1999.
- ! Nolte & Associates. *Hydrology Study, SDG&E Garfield Substation*. March 2000.
- ! *SDG&E EMF Design Guidelines for Transmission, Distribution and Substation Facilities*, May 23, 1999.

8.2 Persons Consulted

- ! *Ramirez, Barbara. Senior Planner for City of El Cajon. Personal Communication. April 12, 2000.*

APPENDIX A

Site Selection

APPENDIX A

SITE SELECTION STUDY ♦ SDG&E 1999

ALTERNATIVE PROJECT SITE LOCATIONS

The substation site selection process was initiated based on the recommendations of SDG&E's July 1998 distribution planning study for the El Cajon/Murray Service Area. That study suggested three possible alternatives to avoid exceeding the capacities at the existing Murray and El Cajon substations. These alternatives were:

- ◆ Installing a new 69/12 kV substation at the existing 12/4 kV Garfield Substation site.
- ◆ Installing a new substation to the west of the existing Garfield Substation site.
- ◆ Using the existing Jamacha, Spring Valley, and Carlton Hills substations to offload the Murray and El Cajon substation without building a new substation.

Because the existing Murray and El Cajon substations could not be expanded and, offloading to other substations was not considered a reliable option, SDG&E began looking for new substation sites at the existing Garfield Substation and to the west. The substation site selection process followed a four-tiered analysis of potential sites. The first tier was a preliminary identification of potential sites and development of schematic site plans. The second tier was the presentation of schematic site plans to the City of El Cajon, City of La Mesa, and a community task force. The third tier was a presentation of refined site plans in community outreach meetings. The fourth and final tier was selection of a preferred site based on a consideration of project wants and needs, and feedback from the City, the community task force, and community outreach presentations in second and third tiers.

First-Tier Analysis

In the first-tier analysis, sites considered were selected for their:

- ◆ Proximity to the mid-point of the load center defined by the 1998 distribution planning study; and
- ◆ Proximity to existing SDG&E 69 kV electrical transmission line circuit TL620.

Based on the above criteria, five potential sites were identified. These sites are shown in *Figure A-1*.

Site 1 – Garfield Substation

Site 1, the proposed project site includes the existing 124 kV Garfield Substation site (APN 486-063-08-00) with the existing parcel (APN 486-063-07-00) to the north of the substation.

Site 2

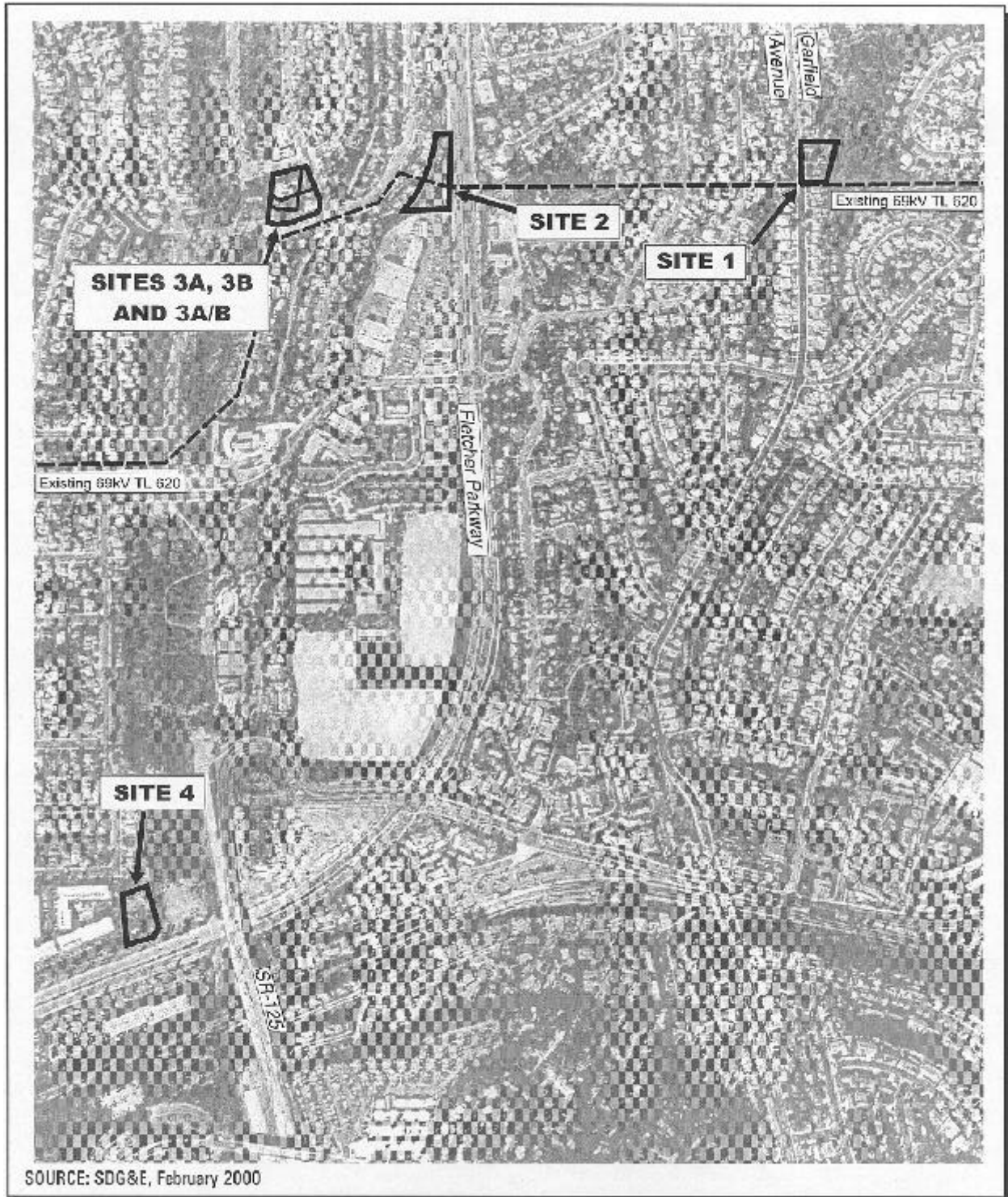
Site 2 is a proposed consolidation of the rear (easterly) portions of four residential lots (APN 481-582-04-00 through 481-582-07-00) located along and abutting the west side of Fletcher Parkway (see *Figure A-1*). The site is bordered by a commercial shopping center to the south, residential land uses to the west and north, and Fletcher Parkway (a six-lane collector street) to the east.

Site 3A

Site 3A would involve the purchase and consolidation of two parcels (APN 481-571-11-00 and 481-571-12-00) located at 2903 and 2921 Tahoe Street in the city of El Cajon. The two parcels are located on the south side of Tahoe Street immediately west of Meadow Crest Drive. Tahoe Street is a short, two-lane residential cul-de-sac street terminating at the east side of the State Route 125 (SR-125) freeway right-of-way. Site 3A is bordered by the SR-125 freeway to the west, residential development to the south, Meadow Crest Drive and residential land uses to the east, and the SR-125 freeway and vacant excess California Department of Transportation (Caltrans) right-of-way to the north. The southerly property lines of the parcels are contiguous to the city limit line separating the city of La Mesa and city of El Cajon (see *Figure A-1*).

Site 3B

Site 3B would involve the purchase and consolidation of two parcels (APN 485-521-05-00 and 485-521-06-00) located at 8960 and 8970 Lake Angela Drive in the city of La Mesa. The two parcels are located on the north side of Lake Angela Drive immediately west of Meadow Crest Drive. Site 3B is bordered by the SR-125 freeway right-of-way to the west, Meadow Crest Drive and residential land uses to the east, residential land uses to the north (Site 3A), and



SDG&E Garfield Substation MND
Alternative Site Locations

FIGURE
A-1

Lake Angela Drive and residential land uses to the south. The northerly property lines of the parcels are contiguous to the city limit line separating the city of La Mesa and the city of El Cajon (see *Figure A-1*).

Site 4

Site 4 would involve the acquisition of a parcel of excess SR-125 right-of-way from Caltrans. The excess right-of-way parcel is designated #26889 on Caltrans right-of-way map 32509.1 for SR-125 dated July 28, 1998. The parcel is located in the city of La Mesa on the north side of Fletcher Parkway, immediately west and abutting the SR-125 right-of-way, and south of the terminus of Lubbock Avenue. Site 4 is bordered by single residential land uses on Lubbock Avenue to the north, the SR-125 right-of-way to the east, Fletcher Parkway to the south, and multi-family residential land uses to the west (see *Figure A-1*).

Second Tier Analysis

In the second tier site analysis, schematic plans of the potential substation sites were prepared for the five site location alternatives. The schematic plans were then presented to the City of El Cajon, City of La Mesa, and a community task force comprised of members of the general public, civic groups and other public institutions from the cities of El Cajon and La Mesa. The purpose of the presentations was to solicit comments about the four alternative sites, from the cities and the public, prior to community outreach meetings. As a result of the meetings with the community task force, site 3A and site 3B were combined to provide a total site area of approximately 34,100 square feet and added as site alternative 3A/B.

During the second tier analysis, SDG&E was informed by Caltrans that purchase of alternative site 4 must be done by public auction. Caltrans did not expect that auction to occur until March of 2001. Because site 4 could not be acquired by SDG&E's estimated October 2000 substation construction start date, it was dropped from consideration as a potential site.

Third Tier Analysis

Third tier analysis consisted of reviewing the project purpose and need, and conceptual site plans for each alternative substation site, with members of the community living in the vicinity of the alternative sites. At the suggestion of the community task force, notices of the community outreach meetings were sent to property owners adjacent to TL 620 (between

Murray and El Cajon substations) as well as those in the vicinity of each of the alternative sites.

SDG&E scheduled two community outreach meetings to obtain input on the site alternatives. Preliminary site plans were developed from the schematic site plans used for second tier analysis, and an additional preliminary site plan was prepared combining sites 3A and 3B as suggested by the community task force. Though site 4 had been dropped from consideration, it was presented along with the other sites to provide the community with background for its initial consideration. Those in attendance at both community outreach meetings concluded that site 1, the expansion of the existing Garfield Substation site, appeared to be the preferred site for the substation project.

Fourth Tier Analysis

The fourth and last tier of site analysis involved developing a list of project needs and wants, and weighing them by taking into consideration: SDG&E's substation engineering and site development criteria, comments received from meetings with the City of El Cajon, City of La Mesa, and the community task force, and comments from the community outreach meetings.

Each of the four remaining sites was compared/contrasted and analyzed for their ability to meet the needs and wants established for the project. Original site 4, Caltrans parcel #26889, was dropped from the fourth tier analysis. Site 3A/B, as suggested by the community task force, was added to the fourth tier analysis.

Project needs were identified as:

- ◆ A minimum lot area of approximately 150 feet by 150 feet or one-half acre.
- ◆ Close proximity to 69 kV transmission line circuit 620 to minimize transmission line bring-up costs and visual impact of lines.
- ◆ Close proximity to the central portion of the load area to maximize distribution system routing and load management benefits.
- ◆ Ability to acquire the property to accommodate a June 1, 2001 in-service date.

Project wants were identified as:

- ◆ Minimize disruption to existing land use patterns (land use compatibility).

- ◆ Maximize potential for community acceptance.
- ◆ Minimize the need for extensive site remediation or grading.
- ◆ Minimize site acquisition costs.
- ◆ The potential to provide two points of access (gates) into the site.
- ◆ The potential to avoid interference between new underground distribution getaways and existing underground infrastructure.
- ◆ The ability to provide opportunity for landscape screening along the perimeter of the site.
- ◆ Avoid siting facilities at community gateway entries unless no other feasible and less impactful sites are available.

Expansion of the existing Garfield Substation onto the adjacent parcel appeared to meet both the needs and wants of the project. The two-parcel 0.6-acre lot provides adequate development area directly adjacent to the 69 kV transmission line circuit 620 and is located in the approximate center of the load area. Because only one property must be acquired to expand the existing facility, it is likely that the transaction would occur in time to meet the development date.

Because an existing substation site would be expanded, a new use would not be introduced to the existing neighborhood; the community has accepted the expanded use concept; site acquisition costs will be minimized and extensive site remedial grading will be limited at the site. Alternative site 1 provides two points of access and can utilize the existing underground infrastructure. Also, the site would be easily landscaped to minimize its visual impact to the surrounding area. For these reasons, alternative site 1 was selected as the proposed project site for the new Garfield substation.

APPENDIX B

Public Distribution

PUBLIC DISTRIBUTION

GARFIELD SUBSTATION DRAFT MND

Public Agencies - Federal

! Attn: Mr Donald Tom
Airways Facilities Division Manager
Federal Aviation Administration
Western Pacific Division AWP 400
Airways Facilities Division
P.O. Box 92007 WPC
Los Angeles, CA 90009

! United States Fish and Wildlife Service
Attn: Field Supervisor
2703 Loker Avenue West
Carlsbad, CA 92008

! United States Department of the Army
Corps of Engineers, Regulatory Branch
10845 Rancho Bernardo Road, Suite 210
San Diego, CA 92127

Public Agencies - State

! Mr. Kent Smith, Acting Executive Director
California Energy Commission
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- ! Mr. Douglas P. Wheeler, Secretary
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San Diego, CA 92123

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California Regional Water Quality Control Board
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9771 Clairemont Mesa Blvd., Suite A
San Diego, CA 92124-1331

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Sacramento, CA 95814

- ! Native American Heritage Comm.
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- ! Mr. David E. Witt, AICP
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City of La Mesa
8130 Allison Avenue
La Mesa, CA 91941

- ! Mr. James Griffin
Director of Community Development

PUBLIC DISTRIBUTION
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County of San Diego
California Department of Transportation
Air Pollution Control District
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! San Diego Herpetological Society
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Environmental Review Committee
P.O. Box A-81106
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Individual/Organizations

! Fletcher Hills Elementary School
2330 Center Place
El Cajon, CA 92020

! Northmont Elementary School
9405 Gregory Place
La Mesa, CA 91941



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! San Diego County Public Library
El Cajon Branch
576 Garfield Avenue
El Cajon, CA 92020

! Mark Chomyn
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101 Ash Street
P.O. Box 1831
San Diego, CA 92112

! Rodney Winter
Sempra Energy
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San Diego, CA 92101

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Other Interested Individuals

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143 Garfield Avenue
El Cajon, CA 92020

Public Distribution

Public Notice - Garfield Substation Project

List of Property Owners

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Henry F. & Betty B. Mustain Trs.
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El Cajon, CA 92020

Dennis A. & Patsy A. Oleary
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El Cajon, CA 92020

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El Cajon, CA 92020

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El Cajon, CA 92020

Mary Louise Morrissey
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Ryllis R. Clark Family Trust
161 Southern Road
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Randall & Noreen Mikulas
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Beverly Jane Johnson
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Helen J. Bolzendahl
211 Garfield Avenue
El Cajon, CA 92020

Stephen/Johanna Boehning
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El Cajon, CA 92020

Martha E. H. Cabral
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Kevin A. & Diana D. James
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El Cajon, CA 92020
Kathryn M. Blackimer

Robert E. & Janie L. Godsil
185 Garfield Avenue
El Cajon, CA 92020
Tranquilina Buckles



July 11, 2000

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3626 Roselawn Avenue
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Occupant
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El Cajon, CA 92020

Beauchamp Family Trust
04-14-95
6661 Avenida La Reina
La Jolla, CA 92037

Ronald C. Moses
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Frank & Lisa R. Muramoto
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San Diego Gas & Electric Co.
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San Diego, CA 92123

Vicente Jr. & Donna D. Cancino
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La Mesa, CA 91942

Ervin & Mary L. Brundege
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El Cajon, CA 92020

Jesse E. & Wilma L. Cook Trs.
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Spring Valley, CA 91977

Javier & Norma Ramirez
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Chula Vista, CA 91910

Occupant
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La Mesa, CA 91942

Occupant
2297 Charles Way
El Cajon, CA 92020

Occupant
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La Mesa, CA 91942

Donald L. & Tess M. Sheaham
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John F. Anderson
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La Mesa, CA 91942

Joyce E. Navratil
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El Cajon, CA 92020

John F. & Helen B. Daley
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La Mesa, CA 91942

William S. Nader
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El Cajon, CA 92021

Gary A. Lamb Tr
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La Mesa, CA 91941

Occupant
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El Cajon, CA 92020

Occupant
9366 De Camp Drive
La Mesa, CA 91942

Joseph R. & Yasuko Nicolas
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La Mesa, CA 91942

Joseph M. St Germaine Trust
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La Mesa, CA 91942

Susan K. Hays
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David & Julie D. Borunda
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Kenneth M. & Darcey J. Enarson
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Kenneth A. & Virginia B Kerr
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La Mesa, CA 91942

Doug & Brenda Kelley
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La Mesa, CA 91942

Beverly Williams
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Miguel A. & Melia Muniozguren
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Albert F. Seeling
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George A. & Maria Bonner
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