FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

GARFIELD AVENUE CAPACITY ENHANCEMENT PROJECT

PARAMOUNT, CALIFORNIA

WILLDAN ENGINEERING

OCTOBER 2017

FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

GARFIELD AVENUE CAPACITY ENHANCEMENT PROJECT

PARAMOUNT, CALIFORNIA

PREPARED FOR:
CITY OF PARAMOUNT
16400 Colorado Avenue
Paramount, CA 90723
(562) 220-2000

PREPARED BY:
WILLDAN
13191 Crossroads Parkway North, Suite 405
Industry, California 91746

OCTOBER 2017

Table of Contents

Appendices

Appendix A: Street and Storm Drain Improvement Plans
Appendix B: Air Quality Assessment, Landrum and Brown
Appendix C: Cultural Resources Inventory Report, Greenwood and Associates
Appendix D: Greenhouse Gas Assessment, Landrum and Brown
Appendix E: Noise Impact Assessment, Landrum and Brown
Appendix F: Traffic Impact Study, Willdan Engineering
Appendix G: AB 52 Consultation Letters and Documentation
Appendix H: Responses to Comments on Draft Initial Study/MND

List of Figures

List of Tables

INITIAL STUDY, ENVIRONMENTAL CHECKLIST AND MITIGATED NEGATIVE DECLARATION

1. Project title

Garfield Avenue Capacity Enhancement Project

2. Lead agency name and address

City of Paramount
16400 Colorado Avenue
Paramount, CA 90723

3. Contact person and phone number

Bill Pagett, City Engineer
(562) 220-2000

4. Project location

Garfield Avenue in the City of Paramount, from Meridian Drive-70th Street to Howery Street

5. Project sponsor's name and address

City of Paramount
16400 Colorado Avenue
Paramount, CA 90723

6. General plan designation

City of Paramount – Major Arterial

7. Zoning

Public Right-of-way (Roadway)

8. Surrounding land uses and setting

The project is located in the City of Paramount, in Los Angeles County, midway between Downtown Los Angeles and Long Beach and bounded by the Long Beach Freeway (I-710) to the west, the Century Freeway (I-105) to the north and the Artesia Freeway (SR-91) to the south. The proposed project encompasses an approximately 2.09-mile segment of Garfield Avenue, which is currently a four-lane arterial street between the north and south City limits at Howery Street to Meridian Drive-70th Street. The existing roadway configuration has a 100-foot public right-of-way consisting of travel lanes, on-street parking, striped and raised medians, and parkways along the project alignment. The existing curb to curb width varies from 77 to 84 feet with parkways ranging from 3.5 to 15 feet along various segments of Garfield Avenue. The City's General Plan classifies Garfield Avenue as a Major Arterial street. As a regional corridor, Garfield Avenue is one of the major north-south arterial street connectors serving many communities in central Los Angeles from Monterey Park to Long Beach.

Garfield Avenue provides convenient access to neighboring residential and industrial uses as well as serving as a regional travel corridor and destination for many businesses located along this street. Land uses along this portion of Garfield Avenue consist primarily of manufacturing/industrial, warehouse-distribution, retail, restaurant and institutional uses. Garfield Park, a 0.8-acre playground with picnic facilities, lies mid-project at the northwest corner of Garfield Avenue and Petrol Street. There are two elementary schools on Garfield Avenue south of Jackson Street - Leona Jackson and Wesley Gaines.

Development further to the west of Garfield Avenue include residential use in addition to manufacturing and other industrial uses. Residential uses south of Rosecrans Avenue consist primarily of low-rise, single- and multiple-family housing. Further north, a newer neighborhood of single-family homes lies between a railway/utility line easement and the I-105 Century Freeway, and extends on the north side of the freeway to the City boundary. Commercial and industrial development predominate in the area to the east, between Garfield Avenue and a north-south railroad corridor.

Commercial building construction consists largely of concrete tilt-up industrial buildings mixed with smaller single-tenant masonry or "stick-built" commercial buildings. Residential architectural design is typically mid-century ranch and California Mission style, with stucco or lap siding façades and mixed hip and gable roof design.

Parkways along Garfield Avenue comprise of 3.5 to 8-foot wide concrete sidewalks abutting the curb, with mature street trees intermittently located along the "inside" edge of sidewalk and in tree wells along the back of roadway curb in other segments. A raised landscaped median separates the northbound and southbound travel lanes from Howery Street to North Somerset Ranch Road and from South Somerset Ranch Road to East Petterson Lane. Overhead utility lines alternate between the east and west side of the street along the length of the entire project.

The regional location of the project and local project area are depicted on Figures 1 and 2, respectively.

Figure 1
Regional/Vicinity Map

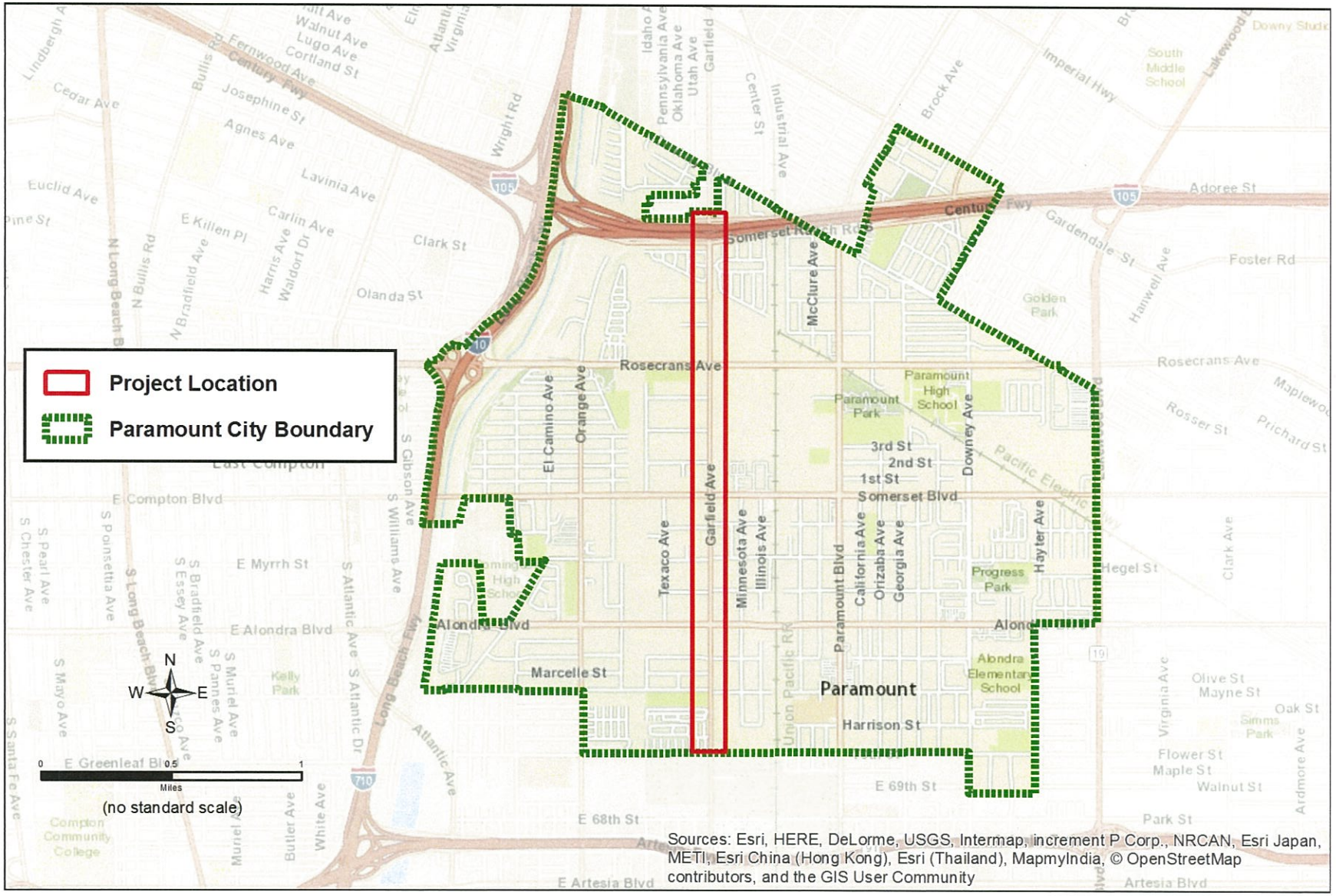


Figure 2
Project Location and Surrounding Uses

9. Description of project.

Background

Garfield Avenue serves as one of the City's major north-south transportation corridors. Located approximately 16 miles south of Downtown Los Angeles and in proximity to several freeways (the I-105 freeway to the north, the I-710 freeway to the west and SR-91 freeway to the south), Paramount includes a diverse mix of residential, commercial, and industrial/manufacturing uses. Due to its proximity to the Ports of Los Angeles and Long Beach, Garfield Avenue provides a vital transportation corridor for its industrial and manufacturing base within the City as well as a link to other parts in the region between the ports and Downtown Los Angeles. Today, because of population growth, employment growth, increased demand for goods movement and increasing traffic volumes, Garfield Avenue experiences heavy congestion and safety issues.

Project Funding

Funding for the project is comprised of local and regional transportation funding programs, including Measure R funds from the I-710 Corridor Program. The total project cost is $39.5 million, which includes $19.8 million for roadway improvement design and construction and $19.7 million for utility undergrounding. Local funding may also be used to provide improvements for signage, ADA ramps, streetscape improvements, storm drains and traffic signals.

Purpose and Need

This project will feature roadway improvements, storm drain, utility undergrounding and streetscape improvements along Garfield Avenue. This project is needed because projected travel demand along Garfield Avenue and other regional corridors within the South Los Angeles region are anticipated to increase in the future, as the region is forecasted to grow 27 percent by 2035, with population and employment expected to grow at 11 and seven percent, respectively.[1] Existing conditions show that three of the nine signalized intersections located along Garfield Avenue are operating at or over capacity (Level of Service [LOS] D or worse) during any peak hour period. Without the proposed project improvements, two of the three intersections will result in a deficient level of service (LOS E or worse) at General Plan Buildout in 2035. The project design and roadway capacity enhancements, based on current and projected traffic volume increases and circulation policies established by the City of Paramount General Plan, will help alleviate these congested conditions. The proposed roadway design will be consistent with the City's design standards for a Major Arterial street.

As a designated truck route, Garfield Avenue also serves as a main thoroughfare for truck traffic along this industrial corridor with local freeway access to I-105 (Century Freeway) to the north, SR-91 (Artesia Freeway) to the south and I-710 (Long Beach Freeway) to the west. Presently, Garfield Avenue supports over 800 truck trips per day with the recent completion and operations for a new 500,000 square foot Ralphs distribution facility at

[1] State of California Department of Transportation & Los Angeles County Metropolitan Transportation Authority, *I-710 Corridor Project (Los Angeles County, California – District 07-LA-710-PM 4.9/24.9 EA 249900) Draft Environmental Impact Report/Environmental Impact Statement and Section 4(f) Evaluation – Executive Summary*, June 2012.

14900 Garfield Avenue.[2] With future regional growth and anticipated increase in goods movement within the Gateway Cities subregion, demand for transport of goods by truck is expected to increase as activity in the nearby Ports of Long Beach and Los Angeles will triple in volume by 2035 and existing rail network and intermodal facilities are currently approaching capacity.[3]

The project would also fulfill the City's long-term infrastructure goals by providing improvements that are intended to ensure the efficient and safe movement of traffic and pedestrians along one of the City's main commercial corridors. Per the City's General Plan Transportation Element, Garfield Avenue is one of several major thoroughfares designated as "Major Arterials" with a maximum of six travel lanes (three travel lanes in each direction between the north and south city limits. Therefore, this project would improve Garfield Avenue from its current configuration as an existing four-lane arterial.

Proposed Improvements

The proposed project improvements consist of implementing several traffic capacity enhancements to improve traffic flow and increase safety for vehicles and pedestrians. The proposed capacity enhancements would include adding a travel lane in each direction, adding second left turn lanes at two intersection locations (Garfield Avenue at Alondra Boulevard and Garfield Avenue at Rosecrans Avenue), and modifying traffic signals for synchronized operations along Garfield Avenue. During non-peak hours, Garfield Avenue will continue to operate as a four-lane arterial street with available on-street parking in each direction. However, during peak hour operations, the project would increase traffic capacity by prohibiting on-street parking and adding the curb lane as a third travel lane in each direction. In all, these roadway improvements would improve traffic flow and enhance traffic safety along the roadway. Street widening will be necessary to accommodate the additional travel lanes. In such instances, widening of the roadway would occur by reducing existing parkway widths by one to eight feet along various segments of Garfield Avenue.

[2] Traffic count data performed by Counts Unlimited at the intersection of Garfield Avenue and Rosecrans Avenue on January 27, 2016 show a total of 626 peak hour truck trips (414 AM Peak, 212 PM Peak). Previously, traffic counts were also performed by Counts Unlimited at the entrance of the Ralphs Distribution Center on September 16, 2015 showing a total of 130 truck trips during their peak hour operations between 3 AM and 6 AM. Combined, the total truck activity represents 756 trips, or more conservatively, over 800 truck trips travelled each day on Garfield Avenue in Paramount.

[3] State of California Department of Transportation & Los Angeles County Metropolitan Transportation Authority, *I-710 Corridor Project (Los Angeles County, California – District 07-LA-710-PM 4.9/24.9 EA 249900) Draft Environmental Impact Report/Environmental Impact Statement and Section 4(f) Evaluation – Executive Summary*, June 2012.

Table 1

Existing and Proposed Roadway Configuration for Garfield Avenue

	Number of lanes	*Eastbound*	*Westbound*	*Proposed Street Parking Restriction*
Existing Configuration	4	2 lanes w/street parking	2 lanes w/street parking	No
Proposed Configuration				
Non-peak Hours	4	2 lanes w/street parking	2 lanes w/street parking	No
Peak Hours[1]	6	3 lanes	3 lanes	Yes[2]

[1] *AM peak hours: 7AM – 9AM, PM peak hours: 4PM – 6 PM.*
[2] *On-street parking will be prohibited during these peak hour travel periods to accommodate the curb lane as an additional travel lane in each direction.*

Other proposed improvements would include utility undergrounding, streetscape median improvements, parkway street trees, street lighting, storm drain upgrades and street overlay and striping. All proposed improvements will generally be accommodated within the existing right-of-way. However, at the intersection of Garfield Avenue/Alondra Boulevard, additional right-of-way acquisition of two feet will be required to accommodate a second left turn lane for both the northbound and southbound direction. The median, pavement resurfacing, storm drain upgrades and streetscape/sidewalk improvements will be constructed in two phases, and overhead utilities would be "undergrounded" prior to roadway and streetscape construction.

The typical existing roadway configuration has a 100-foot public right-of-way consisting of eight-foot parkways and 84 feet curb-to-curb width for travel lanes and on-street parking. Figures 4 through 9 depict the layouts of the proposed underground utilities, median, striping and sidewalk improvements. Figure 9 depict the limits of the project and typical roadway cross sections. With the proposed improvements, Figure 9 shows that the total right-of-way width will remain at 100 feet with reduced 6.5 to 7-foot parkways including a curb-to-curb width of 86 feet, accommodating a 14 to 20- foot center median, and two 11-foot travel lanes and one 12 to 14-foot curb lane in each direction. A portion of the roadway between 70th Street and Jackson Street will have a curb-to-curb width of 83 feet with a 12-foot median, two 11-foot travel lanes, a 13-foot curb lane in the northbound direction and a 14-foot curb lane in the southbound direction.

Utility Undergrounding

The project would place the existing Southern California Edison power lines (66 kilovolt [kV] subtransmission and less than 66 kV distribution lines) and telecommunication facilities in underground ducts and vaults on both the east and west side of the roadway, to improve pedestrian access and safety, improve distribution reliability, improve aesthetics, and accommodate possible future roadway widening improvements. Currently, there are 55 power poles on the east side of Garfield Avenue and 69 power poles on the west side that would be removed as part of the undergrounding. Relocation of underground gas, electric and telephone facilities may be required to construct this

component of the project. The affected utility companies will perform the actual undergrounding work. Project components would include[4]:

Subtransmission Scope: Conversion of approximately 5,600 feet of existing single circuit overhead subtransmission line and associated facilities to an underground position, including removal of approximately 25 subtransmission poles, and installation of ducts and structures with (2) tubular steel pole (TSP) risers, (5) vaults, (3) switches and all associated cable from Garfield Avenue and Alondra Boulevard north to Garfield Avenue and Richfield Street.

Distribution Scope: Conversion of existing overhead distribution circuits and services to approximately 20,000 feet of underground facilities, including the trenching and installation of ducts/substructures (approximately 25 vaults and 5 manholes), substation cutover, and the installation of an estimated (20) poles, (20) pad mount transformers, (10) switches and all associated cable along Garfield Avenue form just south of the I-105 freeway to 70th Street.

Telecommunication Scope:
- Installation of approximately 10,000 feet of 2-5" conduit by District
- Installation of approximately 14 (4'x4'x6') manholes
- Removal of approximately 10,000 feet of fiber optic cables
- Splice and test

The undergrounding work will consist of digging six feet deep and two-foot wide trenches within the roadway. Conduit will be placed in the trench and encased in concrete per Southern California Edison Undergrounding Structures Standards. The trench will then be backfilled with appropriately-compacted soil/fill materials. The existing overhead utility poles will be removed when the undergrounding work has been completed.

Median Construction

The proposed project will construct approximately 6,500 linear feet of raised landscaped medians along Garfield Avenue extending from Petterson Lane to Meridian Drive. These medians would range in widths of 12, 14 and 20 feet. The three primary construction activities associated with the medians include: (1) excavating the existing roadway; (2) constructing raised concrete curbs; and (3) landscaping with a palette of ornamental trees, drought tolerant shrubs and groundcover, and decorative paving (i.e., color stamped portland cement concrete and cobblestone paving). Excavation will remove approximately 19,126 cubic yards of material. The proposed median construction will maintain access at intersection locations. Median breaks will be provided at all intersections along Garfield Avenue including several mid-block locations to maintain left turn access for adjacent businesses.

Sidewalk/Gutter Rehabilitation

The project will repair, replace, and modify curbs, driveways and sidewalks. This work will increase accessibility, improve drainage conditions, and enhance storm water quality

[4] Based on April 14, 2016 letter received by the City from Southern California Edison titled, "Non-Binding Rough Order of Magnitude Estimate for Proposed UG Relocation Project Location: Garfield Ave, from just south of the 105 Freeway to the City limits near 70th Street. Project ID #1156."

treatments. The total project length is approximately 12,122 linear feet. Between 90% and 95% of the sidewalk and gutter will be removed and replaced for the project. Generally, the work will involve removing the gutter and approximately a five-foot width of sidewalk; in some areas as much as ten feet of sidewalk will be removed. On average, approximately six feet of sidewalk will be removed for the project, resulting in approximately 2,550 cubic yards of material to be removed. Where appropriate, sidewalk improvements will include installation or replacement of ADA-compliant ramps, as many existing sidewalk ramps do not meet ADA access standards. These locations are identified in the "Street Improvements" plans in Appendix A.

Storm Drain Upgrades

The project will improve/reduce existing drainage by installing water-quality treatment facilities at existing and proposed storm drain locations and adding bio-retention areas for groundwater recharge. New storm drain improvements will be constructed along Garfield Avenue between Alondra Boulevard and Adams Street to reduce the occurrence of flooding along this segment of the project. Proposed storm drain upgrades will include reconstructing 45 existing catch basins. Of these, 29 catch basin locations will include installation of storm water quality treatment facilities or "infiltration basins" along Garfield Avenue. Per Green Streets requirements, these treatment basins are intended to remove potential contaminants in runoff from discharging into stormwater facilities. Standard basin sizes are approximately seven feet long, four feet wide and six feet deep and will be installed upstream from catch basin locations. Installation will occur along parkways and involve removing portions of the sidewalk, constructing the drywell walls and top in place. To increase groundwater recharge, a landscaped parkway strip between Garfield Avenue and a frontage road at Mendy Street will also be reconstructed as a bio-retention area to reduce stormwater runoff. Together, these storm drain upgrades of existing facilities will treat or reduce approximately 3,656 cubic feet or 27,778 gallons of stormwater during a typical one hour storm event.[5] Additionally, proposed storm drain improvements will occur in areas where roadway widening is needed within the existing Right of Way, generally three feet or less to maintain minimum lane widths.

Streetscape Landscaping Improvements

One of the principal goals of the proposed project is to convey a unique sense of identity to the City's most traveled and historic commercial corridor, as well as to increase accessibility and safety of pedestrians along the boulevard. The proposed landscaped medians will provide a new lush character and identity to the roadway corridor and at selected major intersections.

Streetscape elements include raised landscaped medians, new gateway entry signage, new street trees where feasible, new street lights, and median landscape design with desert/drought-tolerant plant palette. These elements are shown on the "Garfield Avenue Landscape Concept" (Figures 12 through 18). The landscape plan proposes to retain existing large, mature trees where feasible. The planting design will incorporate various

[5] According to preliminary Willdan Engineering estimates, in a typical one hour storm event, the proposed stormwater treatment facilities at 29 existing catch basin locations along Garfield Avenue will treat approximately 3,045 cu. ft. or 22,778 gallons of stormwater and the proposed bio-retention areas along the parkway strip at Mendy Street will collect approximately 611 cu. ft. or 4,573 gallons of stormwater for groundwater recharge.

drought-tolerant ornamental plants such as agaves, aloe and ornamental grasses, mixed with a variety of drought-tolerant groundcover and perennials along the center median. New street lights and street trees along the parkway will provide additional enhancements and visual interest.

Overlay Repaving and Roadway Re-Striping

After completion of all roadway, utility and parkway improvements, the project will repave Garfield Avenue with an asphalt overlay between Meridian Drive/70th Street to Howery Street. This resurfacing will first grind the top 2.25 inches of AC and PCC and overlay with 2.25 inches of asphalt-concrete rubber hot mix (ARHM) pavement on the roadway surface. However, the existing concrete intersections at Rosecrans Avenue and Alondra Boulevard will be ground 3 inches and resurfaced with 3 inches of rubberized asphalt. The final component of the project will include re-striping Garfield Avenue with three travel lanes in each direction as shown in Figures 4 through 9.

Project Phasing and Construction Schedule

The Garfield Avenue capacity enhancements will be constructed in two (2) separate phases: the first phase consisting of the utility undergrounding work to be performed by Southern California Edison and the second phase of the project to construct the roadway and streetscape improvements in two segments. The first segment would involve construction of all improvements between the north city limit and Rosecrans Avenue followed by the remaining segment between Rosecrans Avenue and the south city limit. Both project phases are expected to be completed by December 2019.

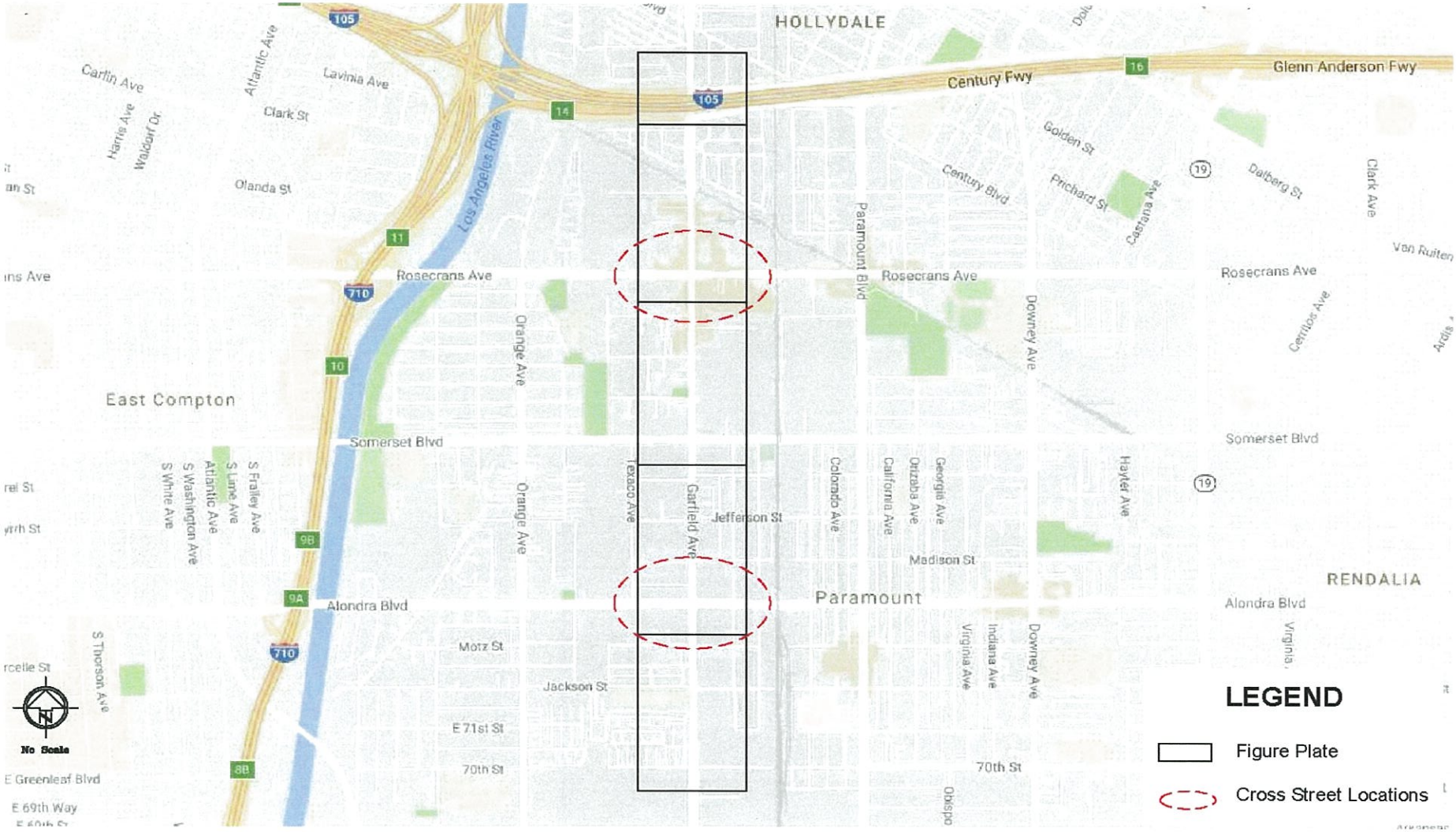


Figure 3
Key Map (for Figures

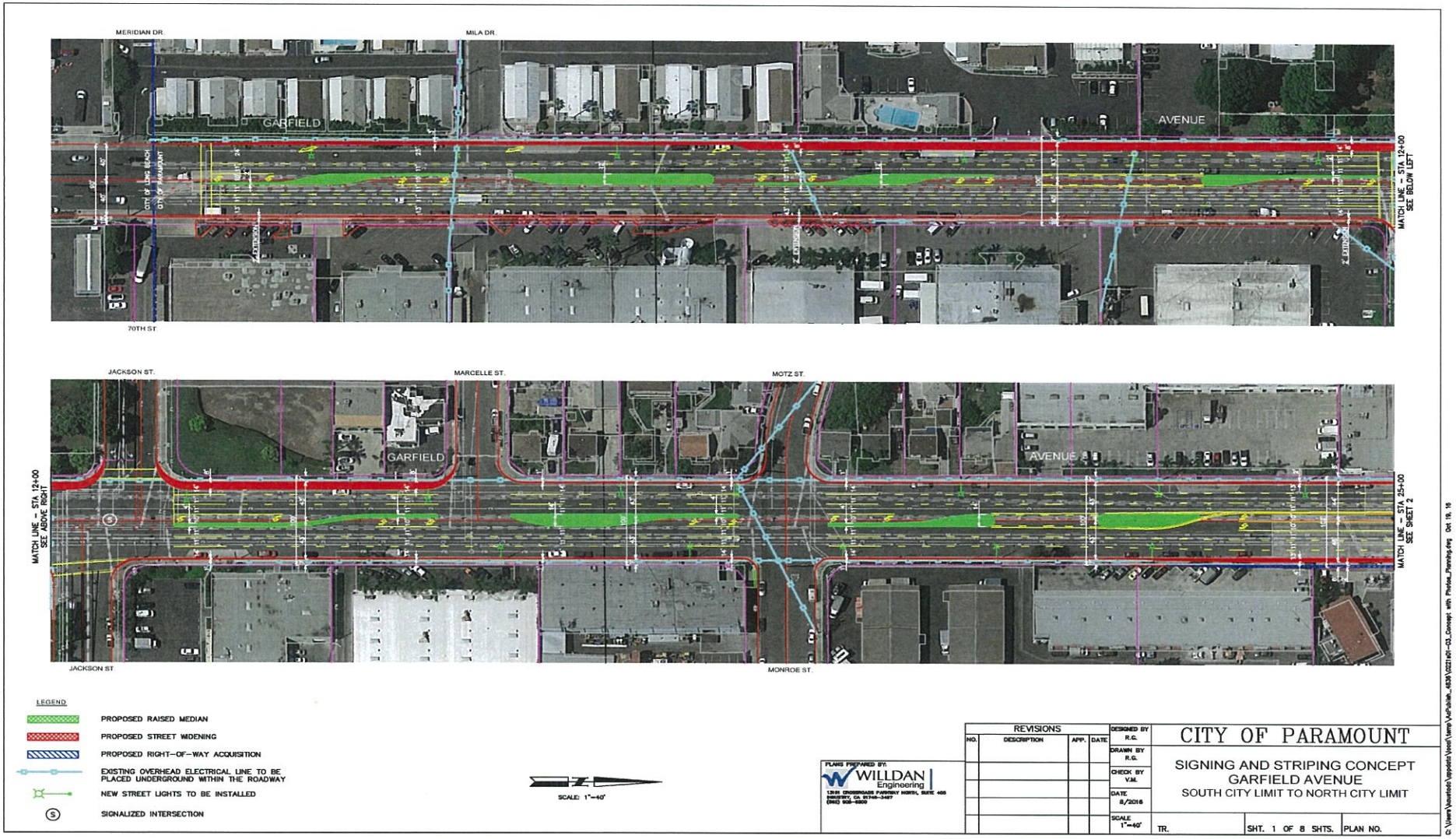


Figure 4

Proposed Street Improvement Plans

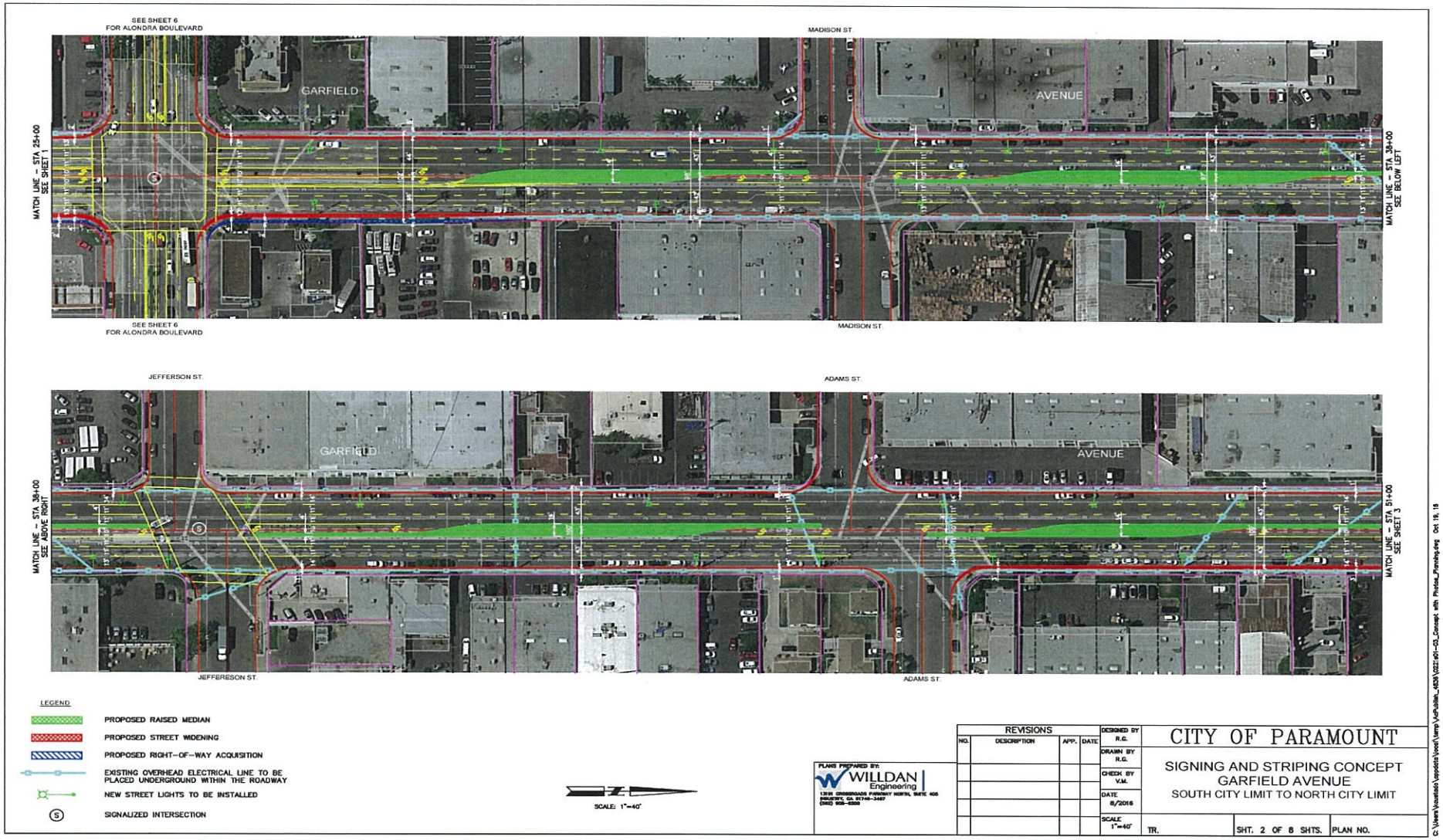


Figure 5
Proposed Street Improvement Plans

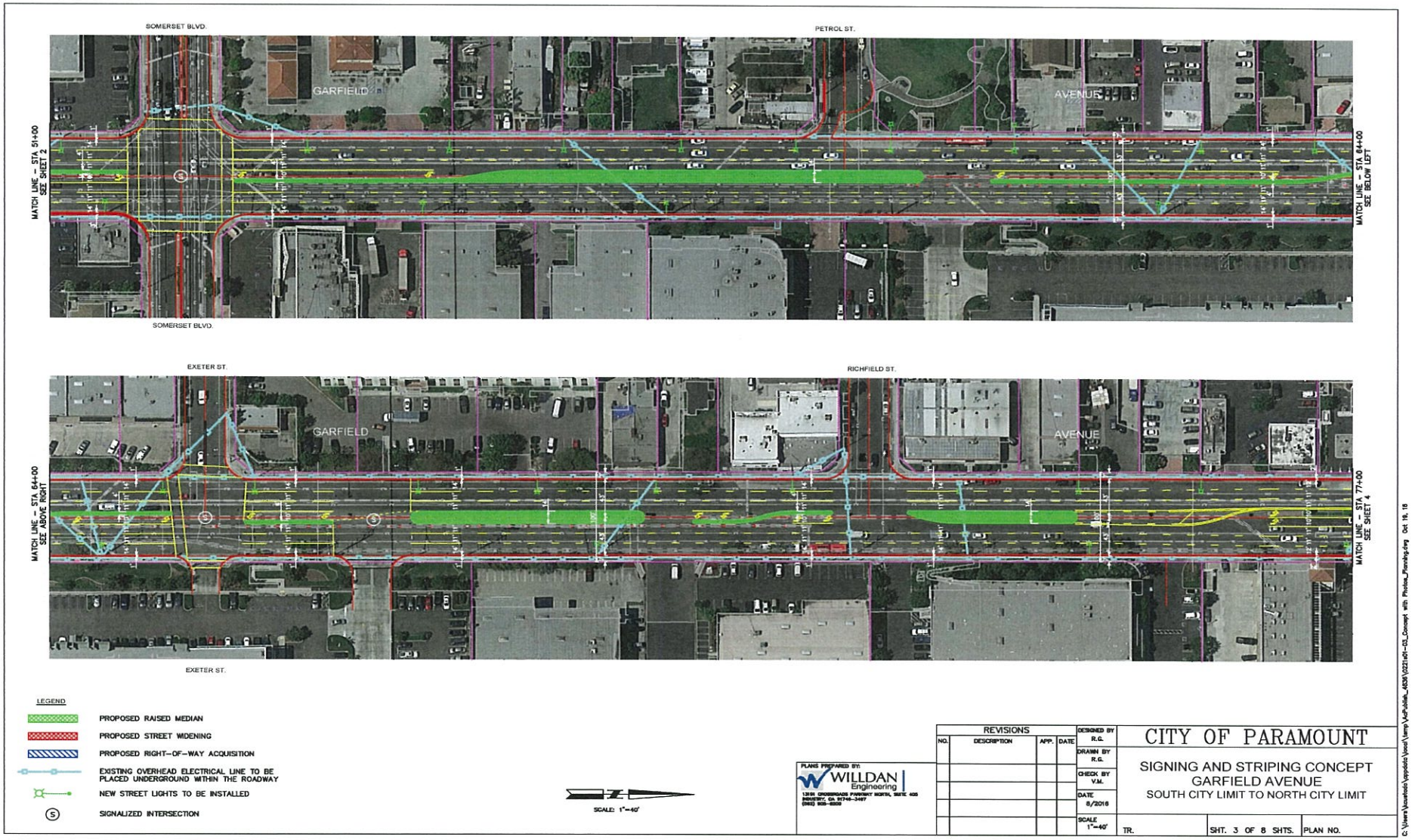


Figure 6
Proposed Street Improvement Plans

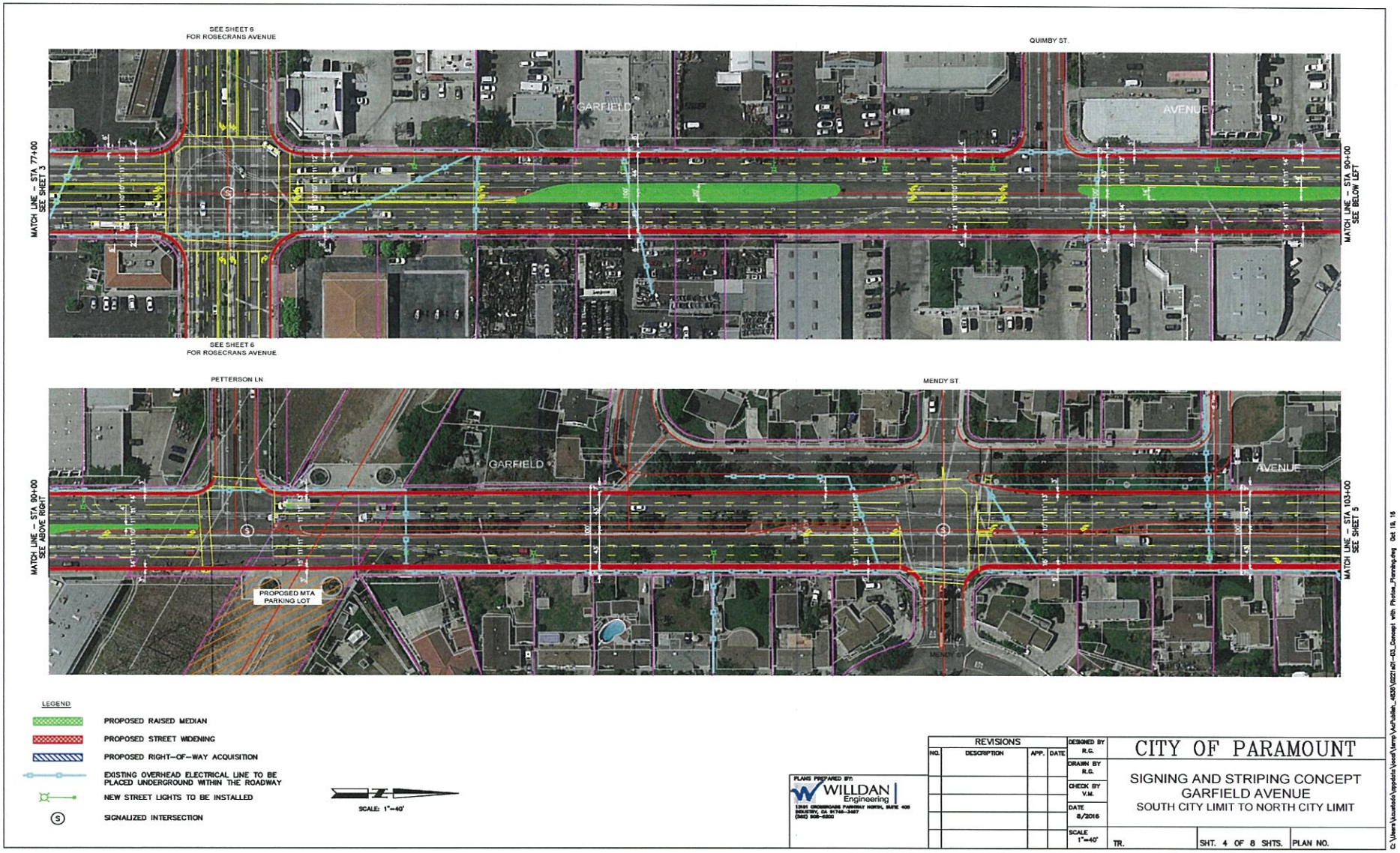


Figure 7
Proposed Street Improvement Plans

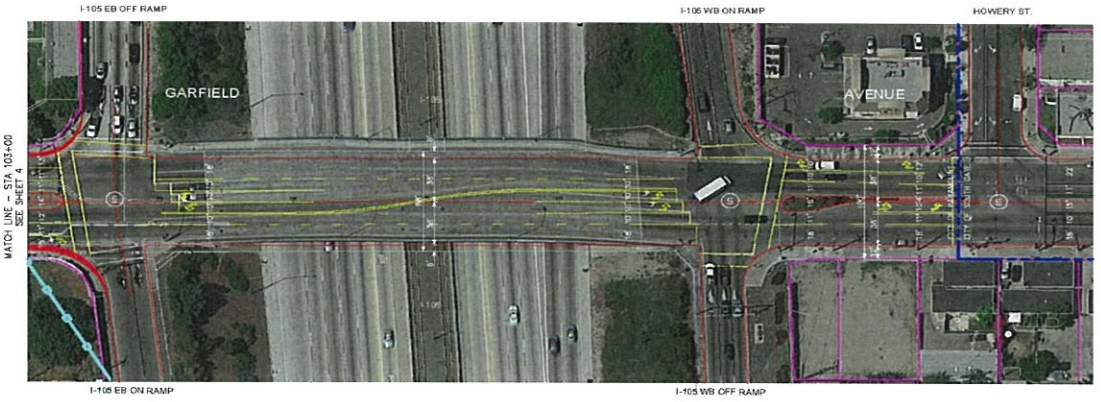


Figure 8
Proposed Street Improvement Plans

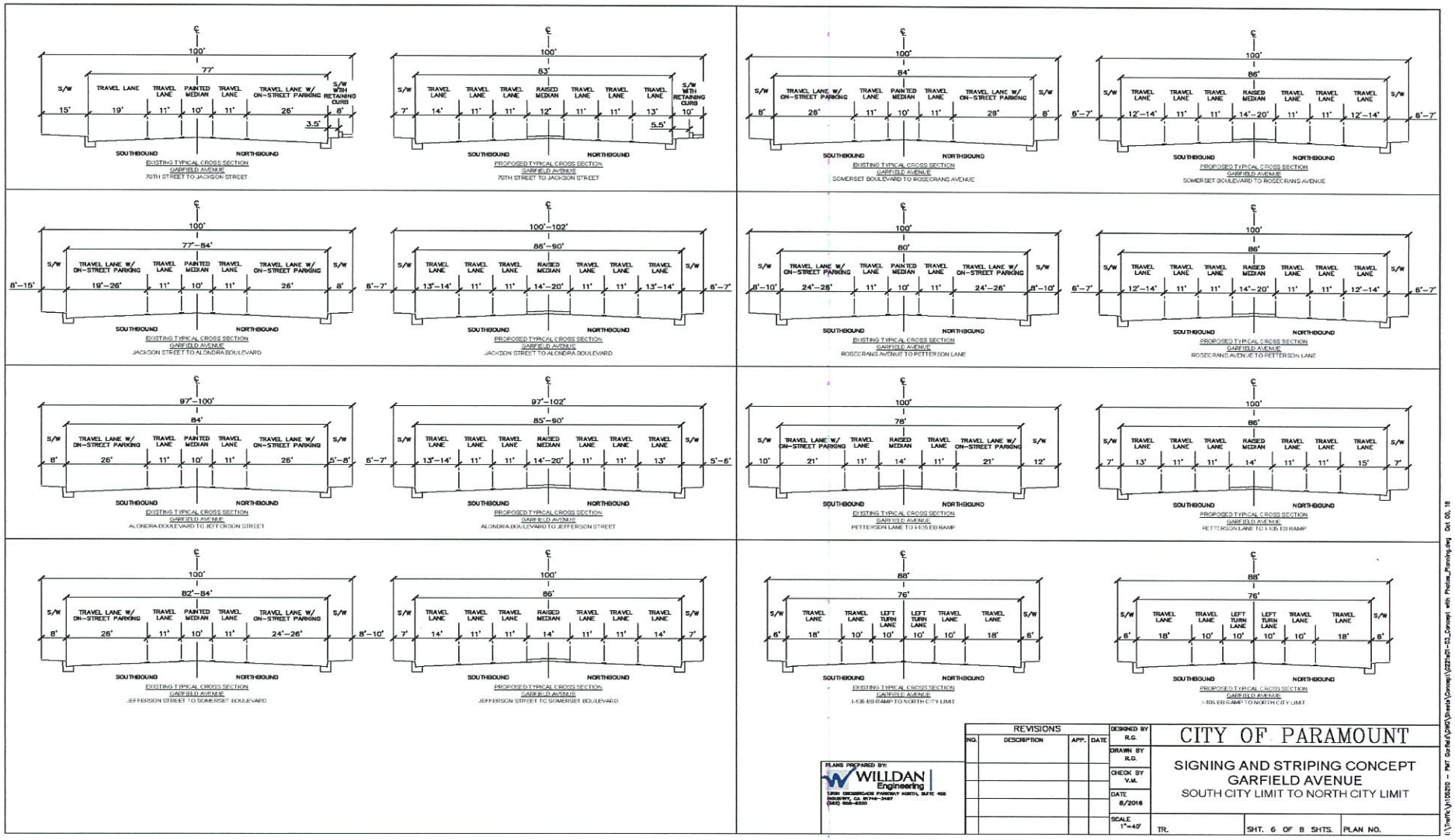


Figure 9
Existing and Proposed Roadway Sections

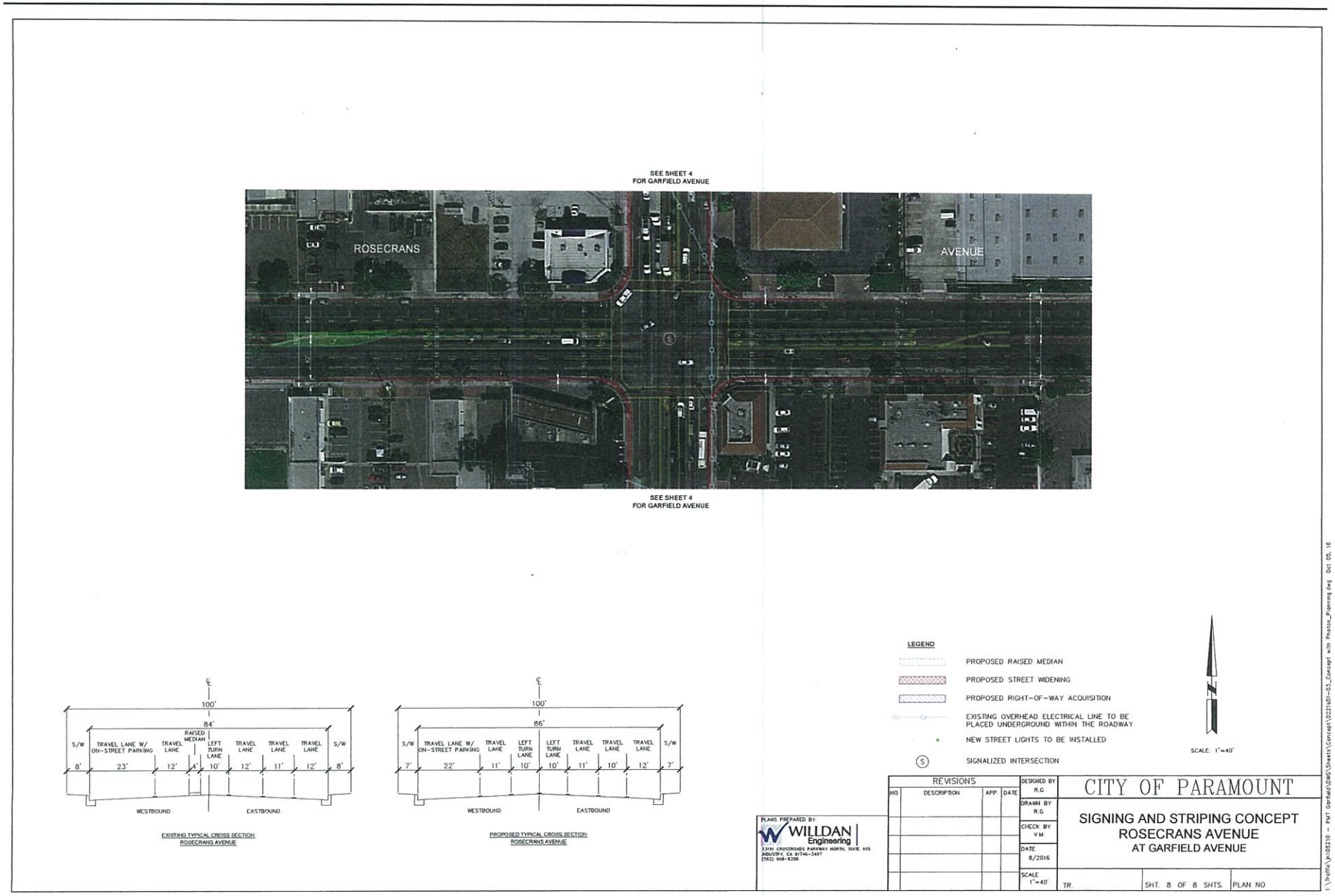


Figure 10

Street Improvement Plans – Rosecrans Avenue

Figure 11
Street Improvement Plans – Alondra Boulevard Intersection

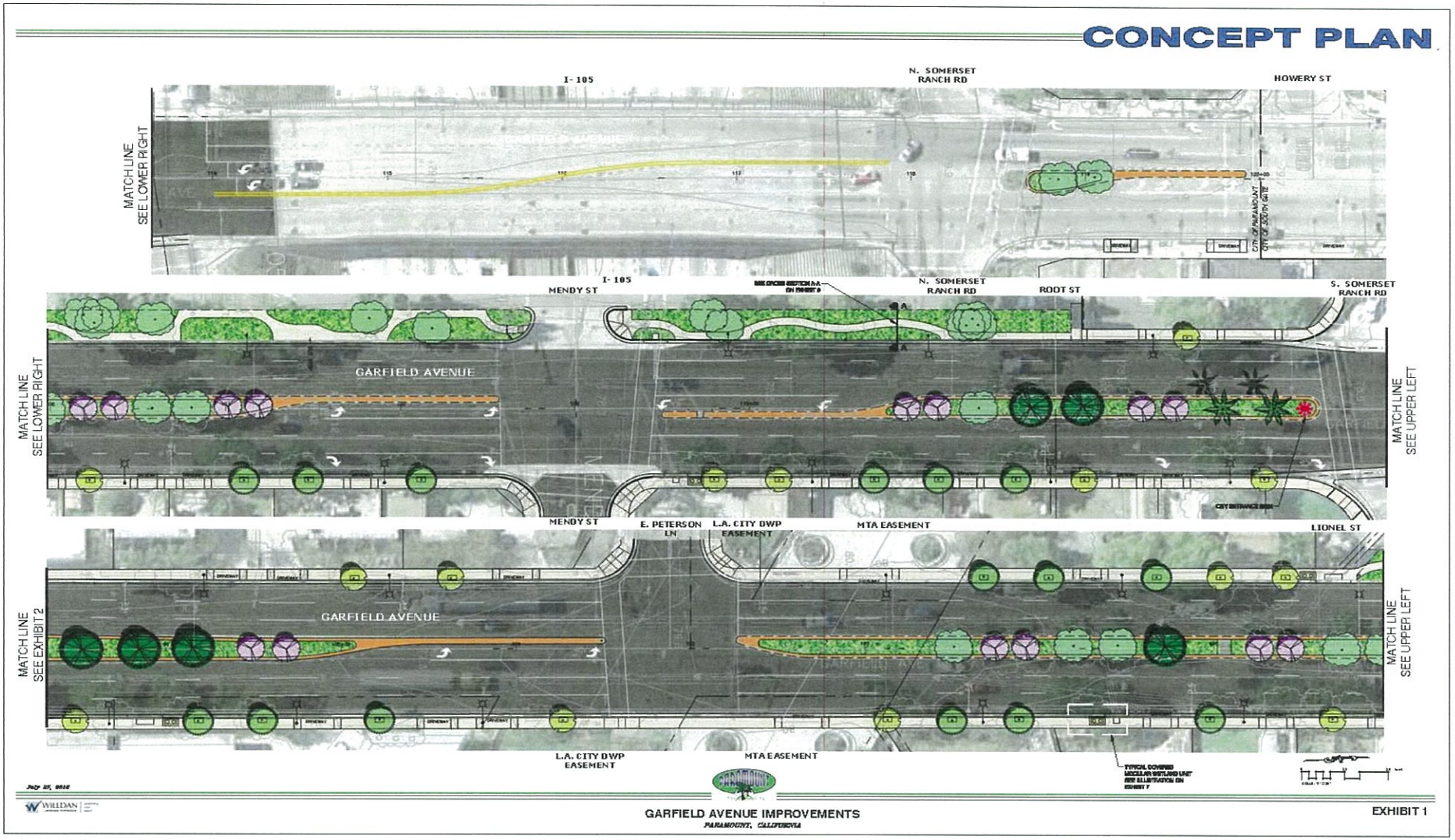


Figure 12
Concept Landscaping Plan (1 of 7)

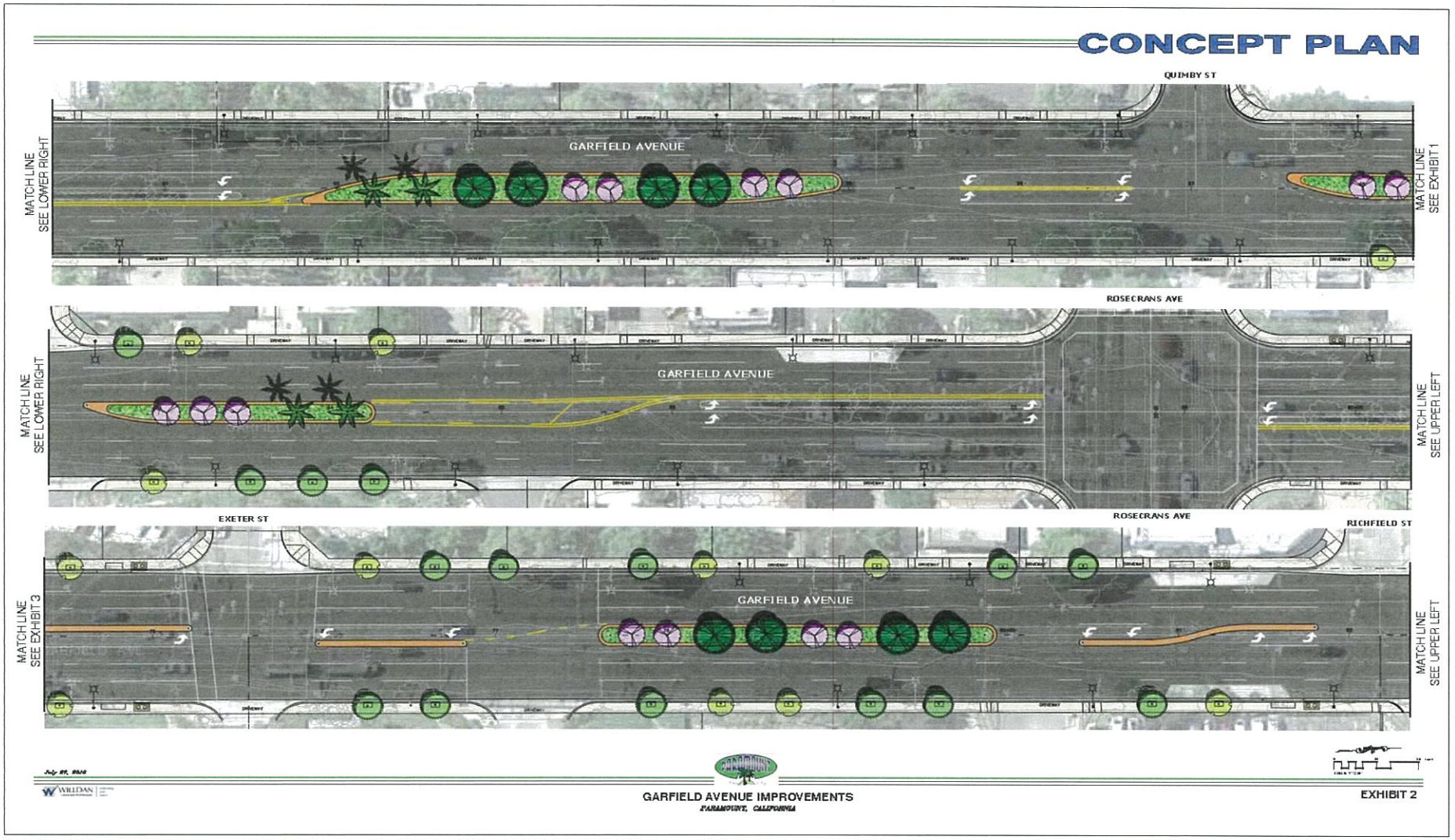


Figure 13
Concept Landscaping Plan (2 of 7)

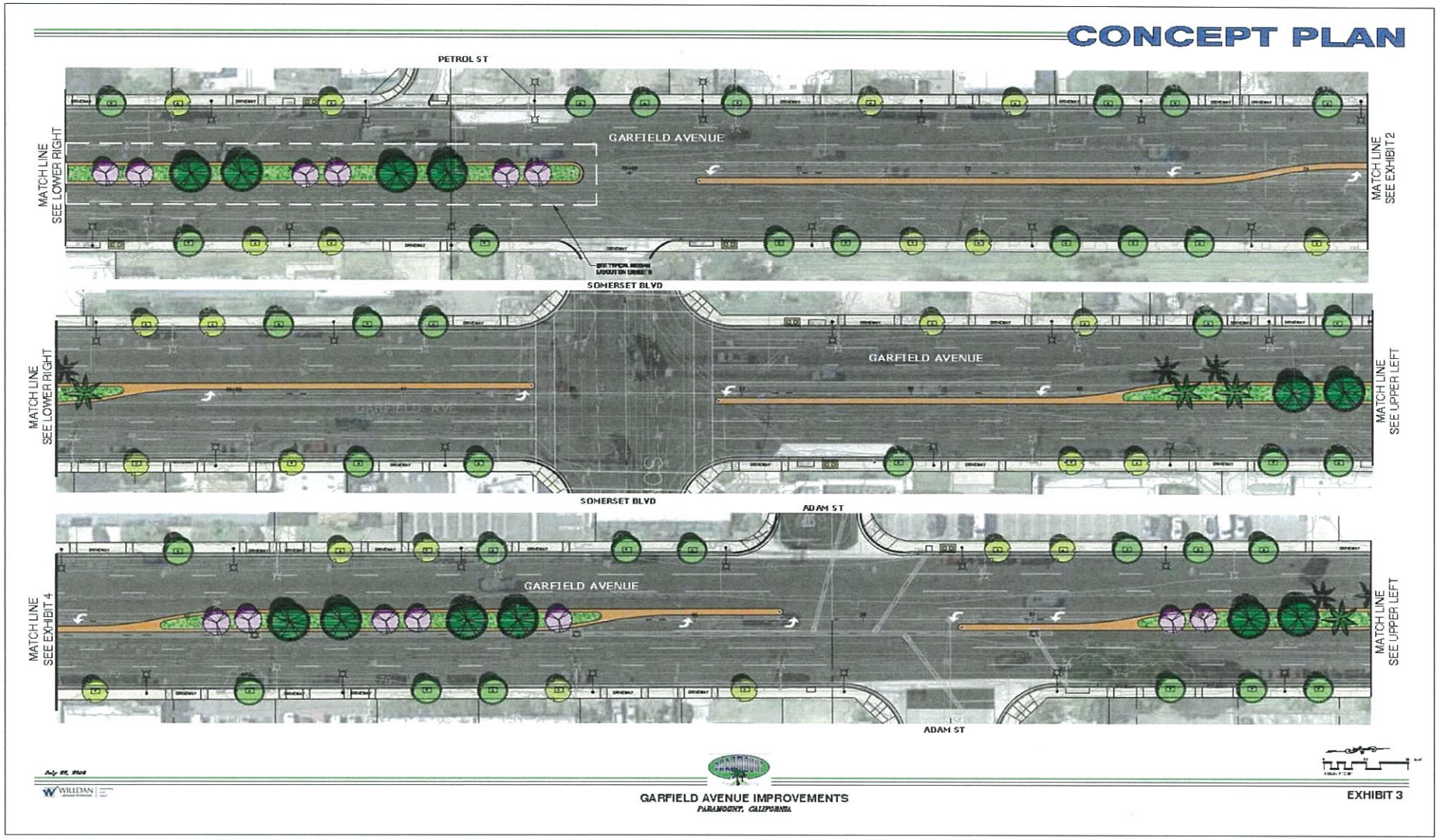


Figure 14
Concept Landscaping Plan (3 of 7)

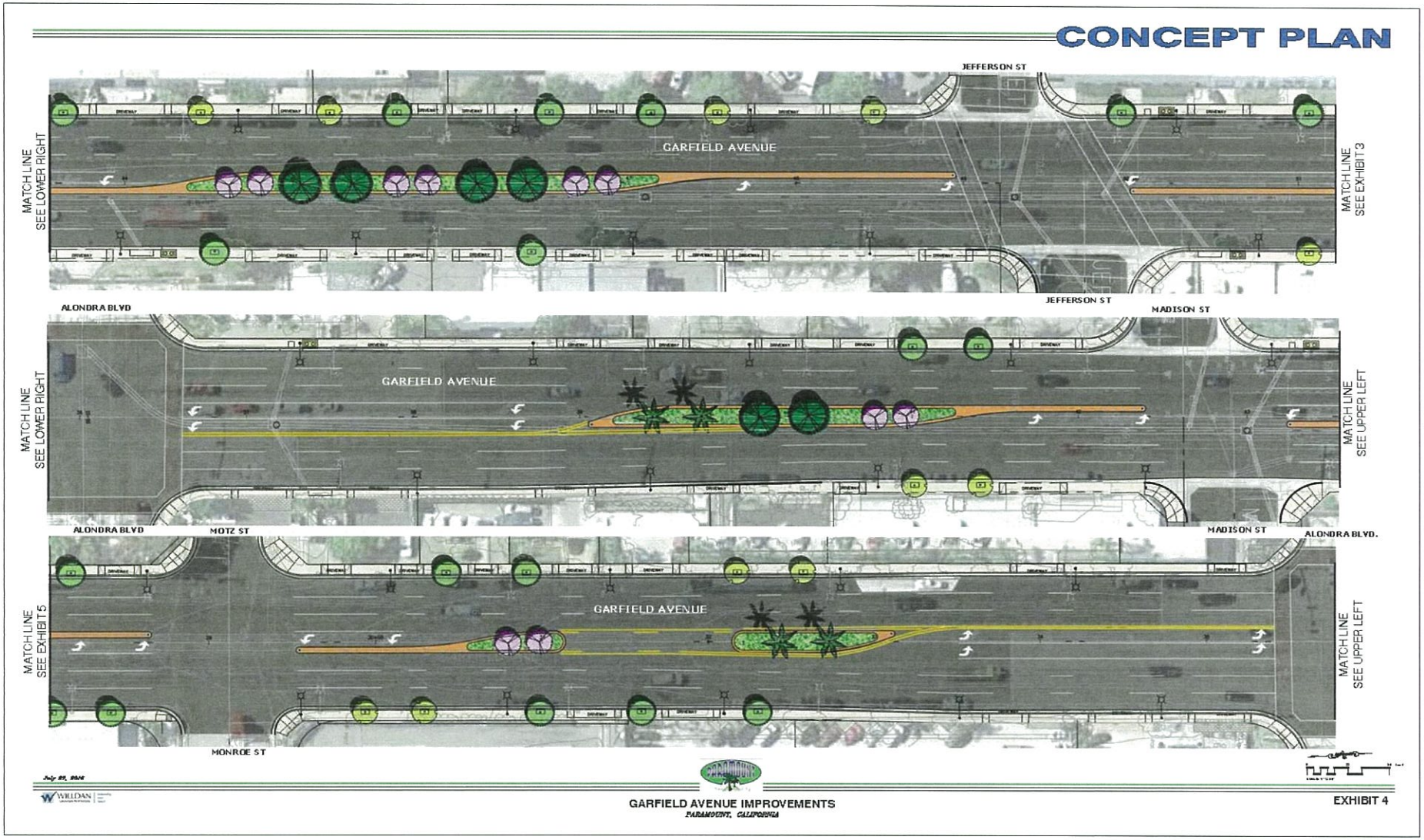


Figure 15
Concept Landscaping Plan (4 of 7)

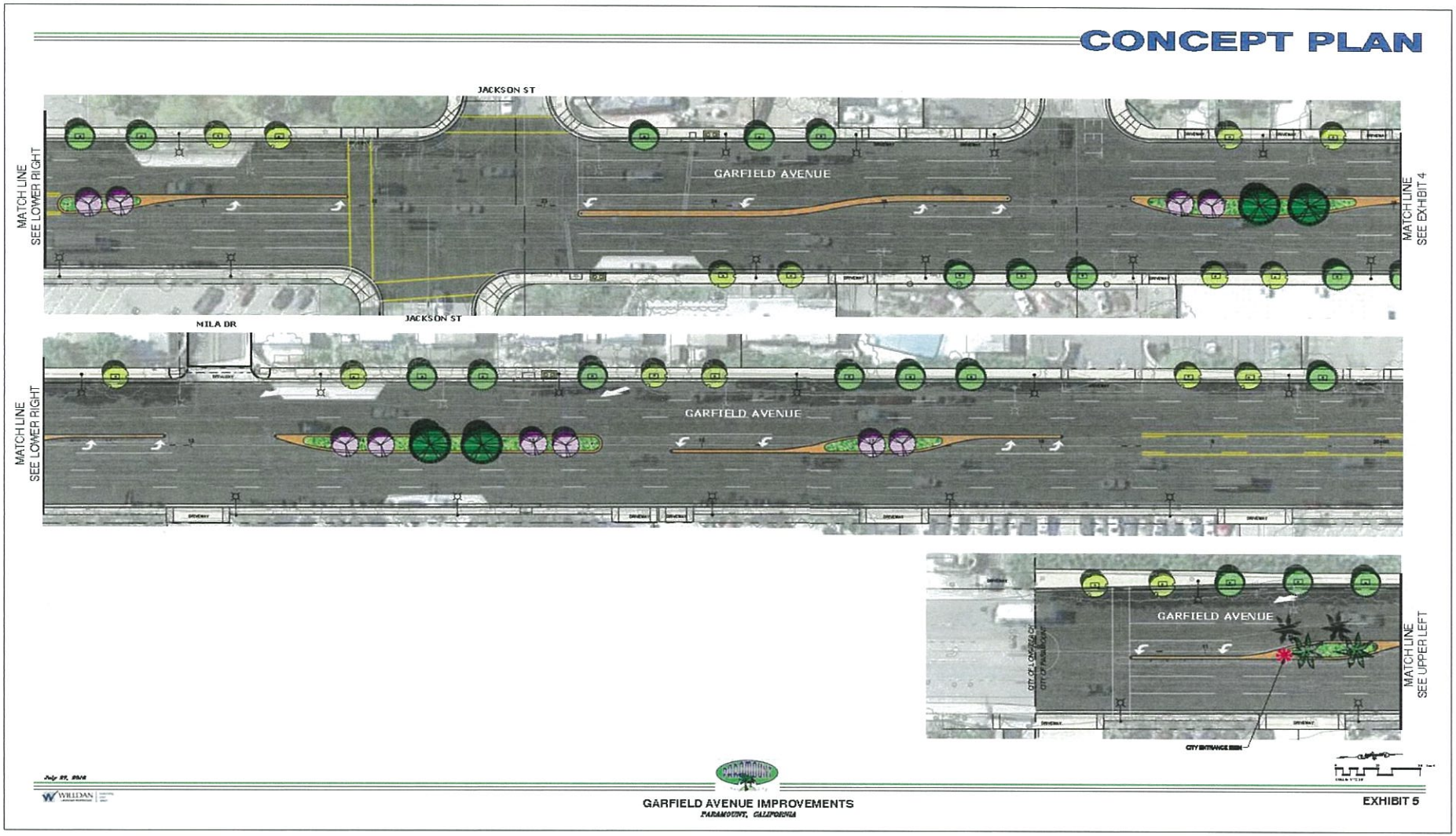


Figure 16
Concept Landscaping Plan (5 of 7)

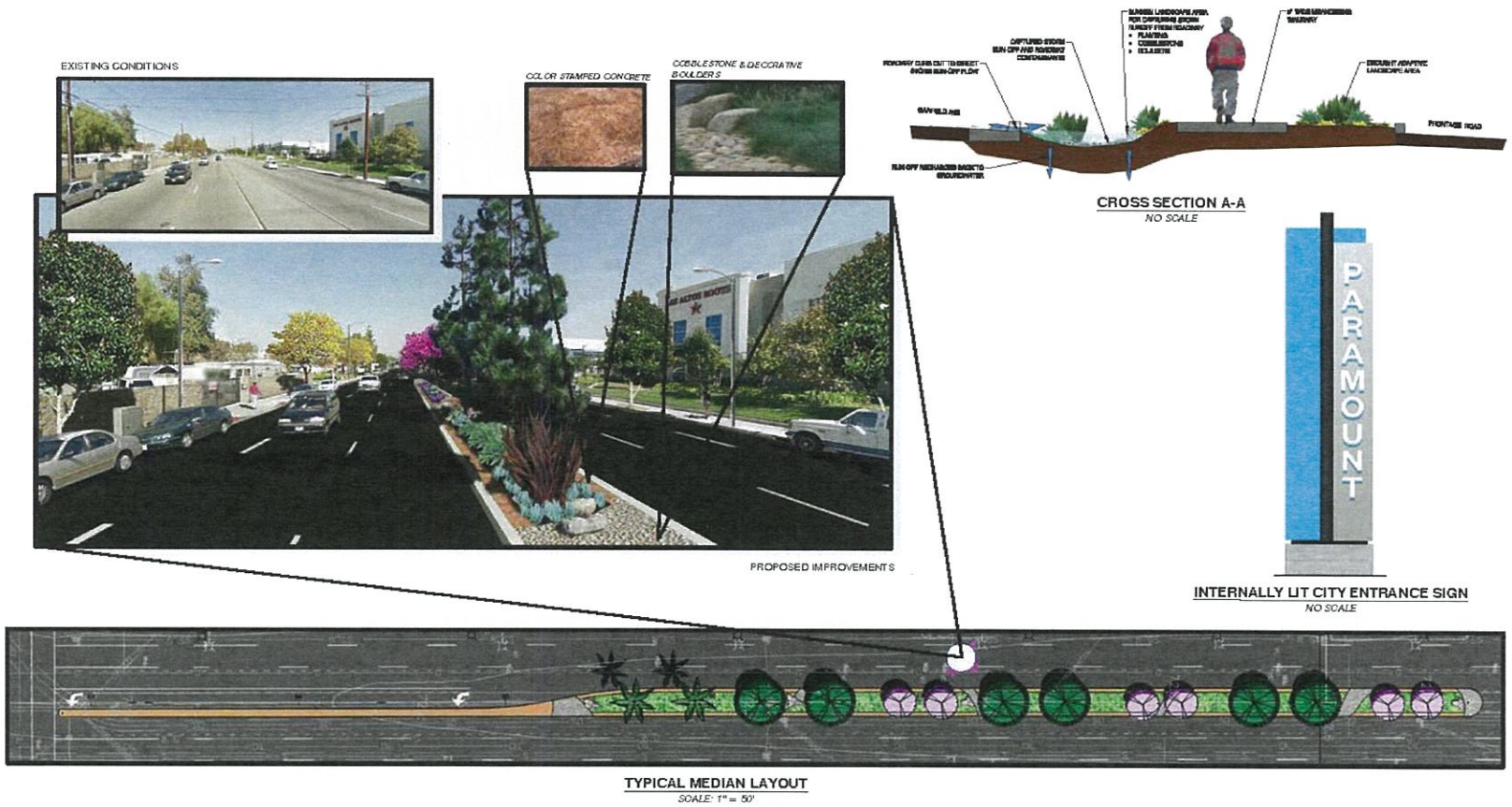


Figure 17
Concept Landscaping Plan (6 of 7)

PROPOSED LANDSCAPE MATERIALS

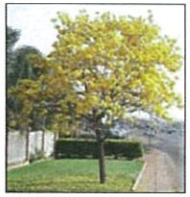
PROPOSED TREES

PHOENIX DACTYLIFERA
DATE PALM
HT: 70'
SP: 20'

PINUS CANARIENSIS
CANARY ISLAND PINE
HT: 60'
SP: 30'

CERCIS CANADENSIS 'FOREST PANSY'
FOREST PANSY EASTERN REDBUD
HT: 20'
SP: 20'

MAGNOLIA GRANDIFLORA
'LITTLE GEM'
SOUTHERN MAGNOLIA
HT: 20'
SP: 20'



TABEBUIA CHRYSOTRICHA
GOLDEN TRUMPET TREE
HT: 30'
SP: 20'

PROPOSED SHRUBS & GROUNDCOVERS

AGAVE ATTENUATA
'RAY OF LIGHT'
FOXTAIL AGAVE
HT: 3
SP: 3

AGAVE DESMETIANA
'VARIEGATA'
VARIEGATED SMOOTH AGAVE
HT: 2
SP: 4

AGAVE PARRYI PAR.
TRUNCATA
ARTICHOKE AGAVE
HT: 3
SP: 4'

ALOE 'BLUE ELF'
BLUE ELF ALOE
HT: 18'
SP: 24'

ALOE STRIATA
CORAL ALOE
HT: 18'
SP: 24'

PHORMIUM 'RUBRUM'
MAROON NEW ZEALAND FLAX
HT: 3
SP: 2

GAILARDIA X GRANDIFLORA
'GOBLIN'
BLANKET FLOWER
HT: 12"
SP: 12"

LEYMUS CONDENSATUS
'CANYON PRINCE'
CANYON PRINCE WILD RICE
HT: 2
SP: 2

CEANOTHUS GRISEUS
HORIZONTALIS
CARMEL CREEPER
HT: 2'
SP: 6'

NASSELLA TENUISSIMA
MEXICAN FEATHER GRASS
HT: 2'
SP: 2'

SENECIO CYLINDRICUS
NARROW LEAF CHALKSTICK
HT: 2'
SP: 5'

GENERAL NOTES

- THE MEDIAN LANDSCAPING WILL BE IRRIGATED WITH AN AUTOMATICALLY PROGRAMMED AND CONTROLLED BY A SOLAR POWERED OR 120V ELECTRICAL POWERED IRRIGATION CONTROLLER ASSEMBLY ACCOMPANIED BY A RAIN SENSOR. SUBTERRANEAN DRIP IRRIGATION SYSTEM WILL BE DESIGNED AND UTILIZED IN COMPLIANCE WITH THE LATEST STATE MANDATED MODEL WATER EFFICIENT LANDSCAPE ORDINANCES.
- ALL PROPOSED PLANTING SPECIES WERE SELECTED BASED ON THEIR LOW WATER USAGE, DROUGHT TOLERANT NATURE AS WELL AS THE LOW REQUIREMENT FOR MAINTENANCE AND THE ATTRACTIVENESS OF THEIR FORMS, FOLIAGE AND FLOWERS.
- ALL LANDSCAPE CONSTRUCTIONS SHALL COMPLY WITH THE CITY OF PARAMOUNT DESIGN GUIDELINES, CODES AND REGULATIONS.
- MEDIAN FINISH GRADE WILL BE INVERTED TO CAPTURE RAIN WATER WITHIN THE MEDIAN AND TO BE DISCHARGED BACK TO GROUNDWATER VIA SUMP DRAIN.

COVERED MODULAR WETLAND UNIT
(FILTERED STORM RUN-OFF BEFORE
DISCHARGING TO NEARBY CATCH BASIN)

July 27, 2016

WILLDAN

GARFIELD AVENUE IMPROVEMENTS
PARAMOUNT, CALIFORNIA

EXHIBIT 7

Figure 18
Concept Landscaping Plan (7 of 7)

Northerly view from Mendy Street intersection

Southerly view from Rosecrans Avenue intersection

Easterly view from Rosecrans Avenue intersection

Southerly view from Somerset Boulevard intersection

Figure 19
Existing Site Photographs along Garfield Avenue

Northerly view from Jefferson Street intersection

Northerly view from Alondra Boulevard intersection

Easterly view from Alondra Boulevard intersection

Northerly view from Jackson Street intersection

Figure 20
Existing Site Photographs along Garfield Avenue

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

The project is a City of Paramount project, which is being developed and coordinated with the Gateway Cities Council of Governments (GCCOG). Approvals are required from the following agencies:

Los Angeles County Metropolitan Transportation Authority (Metro)

- Financing

Gateway Cities Council of Governments (CVAG).

- I-710 Corridor Project Study
- Participation Agreements

11. References

The following are also referenced where appropriate in the Environmental Checklist Form:

1. City of Paramount, *Final General Plan*, August 7, 2007.
2. City of Paramount, *Final Environmental Impact Report – Paramount General Plan Update*, August 2007.
3. State of California and Los Angeles County Metropolitan Transportation Authority, *I-710 Corridor Project EIR/EIS*, June 2012.
4. Greenwood and Associates, *Garfield Avenue Improvements Project, Cultural Resources Inventory Report*, City of Paramount, June 2016.
5. Landrum and Brown, *Noise Assessment for: Garfield Avenue Capacity Enhancement Project,* City of Paramount, California, August 2016.
6. Landrum and Brown, *Air Quality Assessment for: Garfield Avenue Improvement Project*, City of Paramount, California, August 19, 2016.
7. Landrum and Brown, *Greenhouse Gas Assessment for: Garfield Avenue Improvement Project*, City of Paramount, California, August 19, 2016.
8. Willdan Engineering, *Garfield Avenue Capacity Enhancement Project Traffic Impact Analysis,* City of Paramount, California, March 4, 2016.

12. Consultation and coordination

The following individuals were consulted in the preparation of this document:

1. Bill Pagett, City Engineer, City of Paramount

13. Report preparers

The following consulting firms assisted the City of Paramount in the preparation of this Initial Study:

- Willdan Engineering
  13191 Crossroads Parkway North, Suite 405
  Industry, California 91746
  (562) 908-6200

  Salvador Lopez, Jr., Director of Planning Division
  Robert Sun, Principal Planner
  Christine Kudija, Senior Planner

- Willdan Engineering
  2401 E. Katella Avenue, Suite 300
  Anaheim, CA 92806
  (657) 223-8525

  Vanessa Munoz, PE, TE, PTOE

  Responsibility: **Traffic Impact Analysis and Parking Analysis**

- Landrum and Brown
  19700 Fairchild, Suite 230
  Irvine, CA 92618
  (949) 349-0671

  Matthew B. Jones, PE
  Ted Lindberg INCE Bd. Cert.

  Responsibility: **Air Quality, Greenhouse Gas and Noise Assessments**

- Greenwood and Associates
  725 Jacon Way
  Pacific Palisades, CA 90272

  Dana N. Slawson, M. Arch.
  John M. Foster, RPA

  Responsibility: **Cultural Resources Assessment**

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:

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	■ Cultural Resources	☐ Geology /Soils
☐ Greenhouse Gas Emissions	■ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	■ Noise
☐ Population / Housing	■ Public Services	☐ Recreation
■ Transportation / Traffic	■ Tribal Cultural Resources	☐ Utilities / Service Systems
☐ 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 address 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.

John Carver — Signature

8-7-17 — Date

John Carver — Printed Name

City of Paramount — For

EVALUATION OF ENVIRONMENTAL IMPACTS:

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 questions. 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. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "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. Lead agencies are encouraged to incorporate into the checklist 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. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. 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 significant.

ENVIRONMENTAL CHECKLIST:

I. AESTHETICS	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Explanation of Checklist Judgments:

I(a). **No Impact.** The City of Paramount General Plan identifies no scenic vistas in the immediate vicinity of the project site, and Garfield Avenue is not designated as a scenic highway. Moreover, the surrounding area is relatively flat and wholly urbanized with commercial, residential, industrial and institutional uses. The proposed project would not create above-ground structures that would obstruct views – rather, the project would remove overhead utility lines and supporting poles that interrupt the near viewshed. Accordingly, no impacts to a scenic vista, or to intermediate views along Garfield Avenue are anticipated.

I(b,c) **Less Than Significant.** The project area comprises the segment of Garfield Avenue from Howery Street to Meridian Drive-70th Street, a commercial corridor bordered by a mix of commercial, industrial, restaurants, and residential uses within an urban environment characterized mostly by low to mid-rise development. Except for Garfield Park, a 0.8-acre "mini-park" at the northwest corner of Garfield Avenue and Petrol Street, there are no formally designated scenic resources or historic buildings near the project site.[6] Garfield Avenue is not a state scenic highway.

The proposed project would disrupt the streetscape appearance along Garfield Avenue for more than a year. Street and parkway excavation for utility trenches and street widening, tree removal, and the presence of large construction equipment could be perceived as unsightly. However, the project would ultimately re-surface the street, replace and add to the existing landscaping, including adding raised landscaped medians where none currently exist. The project also proposes installing decorative light fixtures and banners to further enhance scenic values along this major corridor.

[6] City of Paramount, *Final Paramount General Plan*, August 2007, pp. 43, 46 (recreational open space areas contribute to scenic enjoyment).

During construction, standard City construction requirements would ensure that all work areas are kept clean and free of litter, and excess excavated material would be promptly transported off-site for disposal or recycling.[7]

Because the project, when complete, would improve Garfield Avenue's overall appearance, impacts associated with scenic resources and the project area's visual character are anticipated to be less than significant. No mitigation measures are required.

I(d). **Less Than Significant.** The proposed project would replace existing street lighting with new decorative lighting along Garfield Avenue. The amount and quality of light in the project area would not be expected to change substantially. As explained above, the project area is highly urbanized with low-rise commercial, industrial and residential development, and lacks important views or landmarks. Accordingly, impacts associated with light or glare would be anticipated to be less than significant.

[7] City of Paramount, Municipal Code, Chapter 38, *Streets and Sidewalks*, (2007), available at http://www.paramountcity.com/download.cfm?ID=86 (accessed July 29, 2016).

II. AGRICULTURE AND FORESTRY RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. 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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Explanation of Checklist Judgments:

II(a). **No Impact.** The project site is located along a heavily traveled regional arterial highway and is surrounded almost entirely by adjacent commercial and industrial uses with some single family residential uses near the City's north city limits. No agricultural uses or related activities currently occur on the site or within the surrounding area. Prime farmland, unique farmland, and farmland of statewide importance as defined in the

Farmland Protection Policy Act (FPPA) are lands identified by appropriate state or local government agencies as containing valuable farmland soils. Urban areas, such as the area in which this project is proposed, are excluded from FPPA as described in 7 CFR 9 Part 658. Therefore, the project site and surrounding areas are not considered unique or prime farmlands or farmlands of statewide importance.

II(b,e). **No Impact.** Since there are no agricultural crops, commercial timber stands, or prime, unique, or other farmlands of State or local importance in the vicinity of the project site, there is no conflict with the Williamson Act or any existing agricultural use. The project is located within the right-of-way of a regional arterial highway along an urbanized commercial corridor in Paramount.

II(c,d). **No Impact.** There is no forest land or timberland production in the City of Paramount. There would be no impact to forest land resulting from the project.

III. AIR QUALITY	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control 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?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Explanation of Checklist Judgments:

III(a) **No Impact.** The proposed utility undergrounding, street-widening and landscaping project would comply with the South Coast Air Quality Management District's (SCAQMD) (2012 Air Quality Management Plan (AQMP))[8] because as explained below and in the air quality technical report prepared for the project (Appendix B),[9] the project would not generate emissions that exceed the AQMP thresholds for various pollutants. The 2012 AQMP focuses on reducing fine particulate matter ($PM_{2.5}$), as generated by pollutants such as nitrogen oxides (NO_x), sulfur oxides (SO_x), volatile organic compounds (VOC), directly-emitted $PM_{2.5}$ (from diesel engines, etc.), and ammonia.[10] Measures to implement the plan include controlling point-source emissions (from power plants, industrial sources, etc.), combustion sources (fireplaces, restaurant charbroilers, open burning) and indirect sources (emissions related to harbor and port activities). Both stationary and mobile emission sources are regulated under the Plan.

[8] South Coast Air Quality Management District, 2012 Air Quality Management Plan (SCAQMD-AQMP), available at http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan (accessed August 22, 2016).
[9] Landrum & Brown, *Air Quality Assessment for Garfield Avenue Improvement Project, City of Paramount*, August 19, 2016 (see Appendix B).
[10] SCAQMD-AQMP, Chapter 4, *Control Strategy and Implementation*, p. 4-5.

Generally, a project would be considered compliant with the AQMP if its emissions did not exceed applicable thresholds, or if it generated no emissions at all. The proposed project would generate direct emissions only during the construction phase, from off-road diesel-powered equipment and workers' vehicles. As explained in Response III(b-d) below, all construction and operation emissions are predicted to remain well under the SCAQMD thresholds of significance. As explained in Section VII *Greenhouse Gas Emissions* below, greenhouse gas emissions are also not anticipated to exceed thresholds or otherwise to be significant. Accordingly, with both construction and operations emissions below thresholds, the proposed project would not conflict with the AQMP or affect its implementation.

III(b-d). Less than Significant Impact. The proposed project is not expected to result in a measurable long-term increase in air pollutant emissions, since – as further explained below - most of the project's emissions would be short-term and related to construction. Moreover, construction activities must comply with SCAQMD's Rule 403 to minimize fugitive dust emissions. Short-term emissions, diesel particulate emissions and long-term emissions are analyzed in detail in the air quality report prepared for the project, and are summarized below.

Short-term emissions: Air pollutants would be generated from off-road diesel-powered equipment, workers' vehicles, and fugitive dust from pavement and trench excavation. Such pollutants would include respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), ozone (O_3), carbon monoxide (CO), reactive organic gasses (ROG), nitrogen oxides (NOx), and sulfur dioxide (SO_2). These emissions would cease at the end of the construction phase.

The project's air quality technical report explains the SCAQMD regional pollutant thresholds, and describes in some detail the 2003 "Localized Significance Thresholds" (LSTs). These latter thresholds were developed to determine whether a project might significantly affect air quality close to the project, even if the project's emissions did not exceed regional thresholds.[11] Projects with on-site daily emissions below these thresholds are considered to have a less-than-significant effect on local air quality.

Tables 2 and 3 show the SCAQMD regional and local thresholds:

Table 2

SCAQMD Regional Pollutant Emission Thresholds of Significance (lbs./day)

	CO	VOC	NOx	PM_{10}	$PM_{2.5}$	SOx
Construction	550	75	100	150	55	150
Operation	550	55	55	150	55	150

[11] Landrum & Brown, pp. 21-22. Additional LST documentation is available at the SCAQMD website, http://aqmd.gov/ceqa/handbook/LST/LST.html, accessed on August 22, 2016.

Table 3

Localized Significance Thresholds of Significance (lbs./day)

	CO	NOx	PM_{10}	$PM_{2.5}$
Construction	1480.0	172.0	14.0	7.0
Operation	1480.0	172.0	4.0	2.0

Emissions during the primary phases of construction were calculated using the *California Emissions Estimator Model* software (CalEEMod, version 2013.2.2),[12] as modified for a road-construction project.[13] CalEEMod calculates total emissions resulting from each construction activity, on-site and off-site, using a comprehensive database of emissions produced by virtually all types of construction equipment; the database is periodically adjusted to reflect annual real-world engine-technology improvements. For this project, construction activities include four major components: (1) utility undergrounding, (2) median construction, (3) sidewalk/gutter rehabilitation, (4) pavement and re-striping. Each component was evaluated for the type of construction equipment required, how long each piece of equipment would be used, and the amount of excavation and material export/import required (see Appendix B, pp. 22-24, for component details). Construction emissions estimates were analyzed by construction phase and how emissions would be affected by various components occurring concurrently with others. Both regional and local/on-site emissions were evaluated.

Tables 4 – 7 below summarize construction emissions estimates.

Table 4

Total Construction Emissions by Activity

	Daily Emissions (lbs./day)					
Activity (Construction Year)	**CO**	**NO_x**	**VOC**	**PM_{10}**	**$PM_{2.5}$**	**SO_x**
Demolition (2017)	20.1	21.0	2.8	2.7	1.7	0.027
Demolition (2018)	19.3	18.9	2.5	2.2	1.4	0.027
Demolition (2019)	19.1	17.2	2.2	2.0	1.2	0.027
Construction (2017)	4.6	3.5	0.4	0.2	0.2	0.004
Construction (2018)	7.7	6.0	0.7	0.4	0.4	0.007
Construction (2019)	3.6	2.7	0.3	0.2	0.1	0.004
Paving (2019)	20.1	10.6	4.4	0.5	0.4	0.015
Painting (2019)	2.1	2.3	38.3	0.2	0.1	0.003
Significance Threshold	**550**	**100**	**75**	**150**	**55**	**150**

[12] See http://caleemod.com/ (accessed August 22, 2016).
[13] Landrum & Brown, pp. 22-23.

Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Landrum & Brown, Table 7

Table 5

Total Concurrent Construction Emissions

	Daily Emissions (lbs./day)					
Activity (Construction Year)	**CO**	**NO_x**	**VOC**	**PM_{10}**	**$PM_{2.5}$**	**SO_x**
Demolition and Construction (2017)	24.7	24.5	3.3	3.0	1.9	0.031
Demolition and Construction (2018)	27.0	24.9	3.2	2.6	1.8	0.034
Demolition, Construction, Paving, Painting (2018)	45.0	32.7	45.2	2.8	2.0	0.048
Significance Threshold	550	100	75	150	55	150
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Landrum & Brown, Table 8

Table 6

On-Site Construction Emissions by Construction Activity

	Daily Emissions (lbs./day)			
Activity (Construction Year)	**CO**	**NO_x**	**PM_{10}**	**$PM_{2.5}$**
Demolition (2017)	17.3	20.5	2.7	1.7
Demolition (2018)	17.1	18.5	2.2	1.4
Demolition (2019)	17.0	16.8	2.0	1.2
Construction (2017)	2.4	3.1	0.2	0.2
Construction (2018)	4.7	5.3	0.4	0.3
Construction (2019)	2.3	2.4	0.2	0.1
Paving (2019)	7.1	7.7	0.5	0.4
Painting (2019)	1.9	2.3	0.1	0.1
Local Significance Threshold	**1,480.0**	**172.0**	**14.0**	**7.0**
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Landrum & Brown, Table 9

Table 7

On-Site Emissions by Concurrent Construction Activities

	Daily Emissions (lbs./day)			
Activity	**CO**	**NO_x**	**PM_{10}**	**$PM_{2.5}$**
Demolition and Construction, (2017)	19.7	23.6	3.0	1.9
Demolition and Construction, (2018)	21.8	23.8	2.5	1.8
Demolition, Construction, Painting, Paving (2018)	28.3	29.1	2.7	1.9
Local Significance Threshold	**1,480.0**	**172.0**	**14.0**	**7.0**

Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Landrum & Brown, Table 10

Tables 4 – 7 show that the project would not exceed air pollutant thresholds during any phase of construction. Accordingly, short-term construction emissions would be less than significant.

Diesel Particulate Matter (DPM) emissions (cancer-causing emissions): In 1998, the California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines (DPM) as a Toxic Air Contaminant (TAC). Most of the heavy construction equipment utilized during construction would be diesel-fueled and thus would emit DPM. Impacts from toxic substances are related to cumulative exposure and are assessed over a 70-year period. Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer-causing substance over a 70-year lifetime.[14] Because of the relatively short duration of construction activities compared to a 70-year lifespan, diesel emissions resulting from the construction of the project are expected to result in a less-than-significant impact to people working or living in the vicinity of the project.

Long-term emissions: Long-term emissions along Garfield Avenue and around intersections would be generated by motor vehicles, landscape equipment, and maintenance striping and curb painting. Emissions are typically greater when traffic is congested and vehicles idle in long queues at signalized intersections. The proposed project, by adding lanes and improving the roadway and intersections' levels of service (LOS), would tend to decrease congestion and queuing times. Accordingly, long-term impacts would be less than significant.

III(e) **Less Than Significant Impact.** Project construction equipment and activities, including diesel exhaust emissions and paving operations, would generate odors. There may be situations where construction activity odors would be noticeable by persons at nearby uses, but these odors would not be unfamiliar or necessarily objectionable. In addition, these odors would be temporary and would dissipate rapidly from the source with an increase in distance. Long-term odors, which would be associated with operation of vehicles on the roadway, would be the same as for the existing conditions; accordingly, impacts would be less than significant.

[14] California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Guide to Health Risk Assessment,* available at http://oehha.ca.gov/risk-assessment/report-general-info/risk-assessment-layperson (accessed August 22, 2016).

IV. BIOLOGICAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.**	☐	☐	☐	☒
b) **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.**	☐	☐	☐	☒
c) **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**	☐	☐	☐	☒
d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**	☐	☐	☐	☒
e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**	☐	☐	☒	☐
f) **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**	☐	☐	☐	☒

Explanation of Checklist Judgments:

IV(a). **No Impact.** The proposed street-widening and utility undergrounding project along Garfield Avenue would not affect candidate, sensitive, or special status species because the project area is completely urbanized with commercial, industrial and residential development, and lacks habitat for such species. Accordingly, the

probability of their occurrence, even transient, is highly remote. No impacts to special-status species are anticipated.

IV(b-d) **No Impact.** The proposed project would not affect riparian habitat, wetlands or other sensitive natural community because the project area is wholly urbanized, and, as such, does not encompass such resources. The project would likewise not affect fish or wildlife movement, because no habitat exists to support fish or wildlife species. Accordingly, no impacts to wildlife, fish or their habitat, fish are anticipated.

IV(e). **Less than Significant Impact.** The proposed project would not conflict with local policies protecting biological resources, including trees, because the project area does not encompass areas where such resources (except street trees) exist. Paramount Municipal Code Chapter 38, *Streets and Sidewalks*, Article VIII, *Roadside Trees*, is intended to protect City-owned street trees, and establishes a permit process for trimming, removing and/or replacing them. The proposed project would unavoidably remove approximately 215 street trees, but would install approximately 341 replacement trees according to City specifications, and would add landscaping to both street parkways and medians, consistent with Paramount General Plan Resource Management Policy 6.[15] It is estimated that approximately 341 replacement trees will be installed along the parkway and median as part of the project improvements. Accordingly, no impacts associated with local policy conflicts are anticipated.

IV(f) **No Impact.** The proposed project would not conflict with any Habitat Conservation Plans, Natural Community Conservation Plans, or any similar plans, since there is none that encompass the project area. As noted in IV(a-d) above, the project area is wholly urbanized and supports no natural habitat. No associated impacts are anticipated.

[15] Resource Management Element Policy 6 states that the City will require "special design and landscaping treatments along major roadways." City of Paramount, *Final Paramount General Plan*, p. 7.

V. CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Explanation of Checklist Judgments:

V(a). **No Impact.** The proposed street-widening and utility undergrounding project along Garfield Avenue would not change any of the City of Paramount's remaining historical resources as none of these historical resources are located within the project study area. The Paramount General Plan identifies three significant cultural resources: The Hay Tree, Iceland, and the Paramount Library; none of these is in or near the project area.[16] Additionally, the project's Cultural Resources Inventory Report, which included a records search, windshield survey and limited pedestrian reconnaissance, indicated that there are currently no properties in the project area listed or eligible for listing as significant historical resources.[17] As such, no impacts would be anticipated.

V(b,d) **Less than Significant Impact with Mitigation.** The cultural resource inventory performed for the project found no evidence of archaeological resources, cemeteries or other evidence directly indicating the presence of human remains in the project area.[18] The report suggests that monitoring during construction for such resources is not necessary for this project, in light of the area's long history of urban development. However, it is always possible for deeply-buried cultural resources to be discovered during excavation and trenching for utility undergrounding. These resources can include Native American cultural materials (shells, animal bones, stone tools, or stone flakes), historic materials (trash deposits or scatters containing bottle glass, ceramics, metal items or structural remains), or human remains. Mitigation Measures V.b-1 and V.d-1 would require that work be temporarily stopped if such resources are found, that they be evaluated and monitored by a licensed archaeologist, and recovered as appropriate. However, as discussed in Response XVII.b, additional on-site archaeological monitoring will be required per Mitigation Measure XVII.b-1 for excavations or any earth-moving activities exceeding six feet below grade surface. With

[16] City of Paramount, *Final Paramount General Plan*, p. 47.
[17] Greenwood and Associates, Garfield Avenue Improvements Project, Paramount, California, Cultural Resources Inventory Report, June 2016, p. 15. (This report is incorporated into this analysis in its entirety as Appendix C).
[18] Id.

these mitigation measures, impacts from the proposed project are anticipated to be less than significant.

If subsurface deposits believed to be cultural or human in origin are discovered during excavation or trenching, then the City and designee (e.g. project contractor) shall perform one of the following mitigation measures:

Mitigation Measure V.b-1: The unanticipated exposing of archaeological resources has the potential to destroy or cause substantial damage to significant cultural resources. Should buried cultural resources be encountered during project-related construction activities, all ground-disturbing activity should be immediately suspended within a 100-foot radius of the find until a qualified professional archaeologist, retained by the City, is contacted to evaluate the significance of the find (per CEQA regulations). Examples of Native American cultural materials might include shell or bone; ground stone tools such as mortars, bowls, pestles, or manos; flaked stone tools such as projectile points or scrapers; stone flakes associated with tool manufacture. Historic materials may include trash deposits or scatters containing bottle glass, ceramics, metal items, or structural remains. If the archaeological resources are found to be potentially significant, impacts to the resources will be mitigated in a manner consistent with California Office of Historic Preservation (OHP) guidelines. Appropriate mitigation may include avoidance of the resources, testing, and/or data recovery. Ground disturbance in the area of suspended activity shall not recommence until authorized by the archaeologist.

Mitigation Measure V.d-1: If human remains are encountered, all ground-disturbing activities shall immediately be suspended within a 100-foot radius of the find, or a distance determined by a qualified professional archaeologist to be appropriate based on the potential for disturbance of additional remains. The Los Angeles County Coroner must be contacted. If the remains are of Native American origin, the most likely descendants of the deceased must be identified by the Native American Heritage Commission (NAHC). The City of Paramount will consult with the Native American most likely descendant(s) to identify a mutually acceptable strategy for treating, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. If the NAHC is unable to identify a most likely descendant; if the descendant fails to make a recommendation within 24 hours of being notified by the NAHC or the City; or if the descendant is not capable of reaching a mutually acceptable strategy through mediation by the NAHC, the Native American human remains and associated grave goods will be reburied with appropriate dignity on the proposed project site in a location not subject to further subsurface disturbance.

V(c). **No Impact.** The proposed project would not disturb a unique paleontological resource, site, or unique geological feature, because none exist within the project area. As described above, the project area is located on generally flat terrain and is wholly urbanized. No impacts to geologic or paleontological resources would be anticipated.

VI. GEOLOGY AND SOILS	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risk to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Explanation of Checklist Judgments:

VI(a). **No Impact.** The proposed roadway improvements and utility undergrounding activities would have no impact on or expose people or structures to substantial adverse effects as explained below:

i). The nearest active or potentially active fault system to the project is the Newport-Inglewood Fault which is located approximately five miles southwest of the project site.[19] Other more distant faults include the Northridge Fault Zone, Whittier-Elsinore Fault Zone, Elysian Park Fault Zone, and San Andreas Fault Zone. Although distant faults can impact the City with a powerful shock, it is more likely that any activity from the Newport-Inglewood Fault or the Whittier-Elsinore Fault will have a more destructive impact due to its close proximity. Nevertheless, based on current available geologic information, no active faults are known to exist on or in the immediate vicinity of the project site. The project site is not located within an Alquist-Priolo Fault Zone for surface fault rupture hazards. Because there are no known active faults located on the project site, the potential for fault rupture on the site is low.

ii). As is typical of all of southern California, the project site is located in a seismically active region and is potentially subject to severe ground shaking generated by high seismic activity. However, as discussed previously, ground shaking caused by severe seismic activity is considered to be low due to the distant locations of active faults and the absence of the seismic activity from local faults according to historical data and other documented evidence.

iii). There are no proposed structures included as part of the proposed improvements. It is not anticipated that the project will result in unstable earth surfaces or increase the exposure of people or property to geologic or seismic hazards as no fill or significant structure is proposed.

iv). The project is not located in an area susceptible to landslide or slope failure.

VI(b). **Less Than Significant Impact.** During project construction, the exposure of soils in open or excavated areas will temporarily increase the potential for soil erosion. Soil erosion could be caused either by water or wind, a situation which could be exacerbated during the rainy season (November 1 through April 1). Required compliance with the South Coast Air Quality Management District (SCAQMD) Rule 403 (Fugitive Dust) would reduce erosion due to wind to a less than significant level. Required compliance with the Best Management Practices (BMP) of the National Pollution Discharge Elimination System (NPDES) permit and implementation of the required Storm Water Pollution Prevention Plan would reduce erosion due to water to a less than significant level. Construction plans shall specify measures for controlling erosion at the project site.

VI(c). **Less Than Significant Impact.** See VI(a) and (b) above.

VI(d). **No Impact.** The project site is located in an area underlain by Hanford Association soils. These soils are characteristically a pale-brown, slightly acidic sandy loam which consists of deep, typically over 60 inches in thickness, well drained soils that form in moderately

[19] U.S. Geological Survey website: http://geohazards.usgs.gov/cfusion/qfault/show_report_AB.cfm?fault_id=127&section_id=a, accessed on August 31, 2016.

coarse textured alluvium.[20] As a result, these soils are well drained and considered to have low expansion potential.

The project is to provide intersection and roadway improvements within an existing built environment, where no structures are proposed and any potential impacts from expansive soils will have no impact.

VI(e). **No Impact.** The proposed project is a roadway and utility infrastructure improvement project. It does not include a septic component.

[20] United States Department of Agriculture, Natural Resources Conservation Service, Official Soil Series Descriptions, Available at: https://soilseries.sc.egov.usda.gov/OSD_Docs/H/HANFORD.html, accessed August 31, 2016.

VII. GREENHOUSE GAS EMISSIONS	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Background: "Greenhouse gases" (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as "global warming." These greenhouse gases contribute to an increase in the temperature of the earth by allowing incoming short wavelength visible sunlight to penetrate the atmosphere, while restricting outgoing terrestrial long-wavelength heat radiation from exiting the atmosphere. The principal greenhouse gases (GHGs) include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Collectively, GHGs are measured as carbon dioxide "equivalents" (CO_2eq); mass emissions of CO_2eq are typically expressed in metric tons (MT).

Fossil-fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second-largest contributors of GHG emissions with about one-fourth of total emissions. According to climate scientists, California and the rest of the developed world would have to cut emissions by 80 percent from today's levels to stabilize the amount of CO_2 in the atmosphere and prevent the most severe effects of global climate change.

California has passed several bills and the Governor has signed seven executive orders (EOs) regarding greenhouse gases. GHG statues and EOs include Assembly Bill (AB) 32, Senate Bill (SB) 1368, EO S-03-05, EO S-20-06, EO S-01-07, EO S-13-08, EO B-16-12, EO B-18-12, and EO B-30-15.[21] Of these, AB 32, the California Global Warming Solutions Act of 2006, mandates that California's GHG emissions be reduced to 1990 levels by 2020, and tasks the California Air Resources Board (CARB) with regulating GHG emissions as well as coordinating with other state agencies to implement AB 32's reduction goals. EO S-3-05 provides a more long-range goal and requires an 80 percent reduction of GHGs from 1990 levels by 2050. On a per-capita basis, that means reducing annual emissions of 14 MTs of CO_2 equivalent for every person in California down to approximately 10 MTs per person by 2020. Issued in 2015, EO-B-30-15 sets an increasingly-aggressive GHG-emissions target for 2030, 40 percent below 1990 levels.[22]

[21] See California Environmental Protection Agency, Climate Change Unit, *California Climate Change Executive Orders*, available at http://www.climatechange.ca.gov/state/executive_orders.html (accessed August 22, 2016).
[22] California Environmental Protection Agency, Air Resources Board, *The Governor's Climate Change Pillars: 2030 Greenhouse Gas Reduction Goals*, available at http://www.arb.ca.gov/cc/pillars/pillars.htm (accessed August 22, 2016).

The CARB's 2008 Climate Change Scoping Plan, as amended, explains that reducing GHG emissions to 1990 levels means cutting approximately 30 percent from business-as-usual emissions levels projected for 2020, or about 15 percent from today's levels. "Business as usual" generally describes a GHG emissions scenario that reflects the levels that would result if land development proceeded without implementing GHG-reduction measures. The Scoping Plan, and updates – the most recent in 2014 – set forth an array of strategies for reducing GHG emissions, categorized by economic sector. The 2015 EO cited previous additions to the Scoping Plan, setting forth five "pillars" for accomplishing GHG reduction, including (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farm and rangelands, forests and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy: *Safeguarding California*.[23] Both the Scoping Plan and the 2015 Pillars include policies and programs to be adopted by local agencies but do not set numeric "bright-line" GHG thresholds.

A recent California Supreme Court decision, *Center for Biological Diversity, et al. v. California Department of Fish and Wildlife* (2015) Cal 4th 204, rehg. den. Feb. 17, 2016, criticized the "business-as-usual" method of determining greenhouse gas impact significance. Specifically, the Court held that this method is not to be used to set a hypothetical environmental baseline, and then to compare a proposed project's emissions to that baseline. Further, the Court stated that agencies may determine whether a project is consistent with AB 32's goals by evaluating whether a project complies with relevant regulations or regulatory programs, including local Climate Action Plans, which are designed to reduce GHG emissions. Agencies may also set numeric thresholds similar to those established for other air pollutants.

The SCAQMD sets forth a specific GHG threshold only for industrial facilities (10,000 MT CO_2eq per year) and has not yet adopted specific GHG emission thresholds for GHG emissions for other sources. Ongoing efforts by the SCAQMD GHG Working Group propose two options for screening thresholds for residential and commercial projects. The first option would apply different thresholds to specific land uses: 3,500 MT CO_2eq/year for commercial projects, 1,400 MT CO_2eq/year for commercial projects, and 3,000 MT CO_2eq/year for mixed-use projects. The second option would apply the 3,000 MT CO_2eq/year threshold to all commercial/residential projects. These thresholds are based on capturing 90 percent of the emissions from projects and requiring them to comply with the higher tiers of the threshold (i.e., performance requirements or GHG reductions outside of the project) to avoid significant impacts. Lead agencies would be able to select either option.

The City of Paramount has not yet created a Climate Action Plan or has otherwise set CO_2eq thresholds.

In the absence of a specific threshold for road-construction projects, the greenhouse-gas technical report[24] prepared for the project uses the proposed mixed-use threshold, 3000 MT CO_2eq.

[23] California Environmental Protection Agency, Air Resources Board, *The Governor's Climate Change Pillars: 2030 Greenhouse Gas Reduction Goals*, available at http://www.arb.ca.gov/cc/pillars/pillars.htm#pillars (accessed August 24, 2016).

[24] Landrum & Brown, *Greenhouse Gas Assessment for Garfield Avenue Improvement Project, City of Paramount* (August 19, 2016) (see Appendix D).

Explanation of Checklist Judgments:

VII(a) Less Than Significant Impact: Because the project requires using diesel-powered construction equipment, it will generate GHGs. Appendix D includes the greenhouse-gas technical report prepared for the project. This report estimates emissions for construction and operational phases.

Construction Phase: Project construction would generate approximately 744.5 MTs of CO_2eq emissions from the use of construction equipment and from worker commute trips. The project's construction phase emissions were calculated using the California Emissions Estimator Model (CalEEMod), as adapted for a road-construction project (see the Air Quality section of this document and the technical report for background on CalEEMod, and also for detailed construction sequence descriptions). Table GHG-1 below shows the project's emissions, distributed by project phase and year. The resulting 744.5 MTs CO_2eq do not exceed 3500 MT CO_2eq; accordingly, construction impacts would be less than significant.

Operational Phase: Long-term emissions would result from project-generated vehicle trips. However, the proposed road-widening project, by itself, would not generate *new* vehicle trips, nor increase the overall number of motor vehicles on Firestone Boulevard. Accordingly, the project is not expected to result in significant new long-term greenhouse gas emissions. Impacts associated with greenhouse gas emissions are thus anticipated to be less than significant.

Table 8

Construction GHG Emissions

	Annual Emissions (MT/Year)			
Activity	**CO_2**	**CH_4**	**N_20**	**CO_2EQ**
Demolition (2017)	239.4	0.035	0.000	240.2
Demolition (2018)	179.2	0.025	0.000	179.7
Demolition (2019)	223.3	0.030	0.000	223.9
Construction (2017)	26.8	0.007	0.000	26.9
Construction (2018)	29.5	0.008	0.000	29.7
Construction (2019)	29.8	0.009	0.000	30.0
Paving (2019)	12.7	0.003	0.000	12.7
Painting (2019)	1.2	0.000	0.000	1.2
Total Emissions	**742.0**	**0.116**	**0.000**	**744.5**
Project Life Average Annual Construction Emissions*	**24.73**	**0.004**	**0.000**	**24.82**
		Screening Threshold:		**3,000**
		Exceeds Threshold?		**No**

*Based on 30 Year Project Life Per SCAQMD Significance Thresholds

VII(b) Less Than Significant Impact: The analysis presented above and in the project's GHG technical report shows that the net increase in GHG emissions from the project's construction activities is below the SCAQMD suggested screening level significance threshold of 3,000 metric tons per year. The project is consistent with the City of

Paramount General Plan (see Land Use section of this document). Accordingly, the project would not be expected to meaningfully contribute to GHG emissions causing global climate change or to interfere with California's ability to achieve its GHG-reduction goals. Impacts from conflicts with greenhouse-gas reduction plans, policies or regulations are thus anticipated to be less than significant.

VIII.	HAZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:					
a)	**Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**	☐	☐	☒	☐
b)	**Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**	☐	☐	☒	☐
c)	**Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**	☐	☐	☒	☐
d)	**Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**	☐	☒	☐	☐
e)	**For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**	☐	☐	☐	☒
f)	**For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**	☐	☐	☐	☒
g)	**Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**	☐	☐	☒	☐

VIII.	HAZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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?**	☐	☐	☐	☒

Explanation of Checklist Judgments:

VIII(a,b). **Less Than Significant Impact.** The proposed project would not create a significant hazard to the public associated with hazardous material transport, use, disposal, or release, because although some hazardous materials would be present during construction, mandatory adherence to existing regulations and controls would prevent significant public harm. The only source of hazardous materials that could be exposed during construction is vehicle/equipment fuels and fluids and road surfacing materials. Release or spillage of these fuels or materials during construction could lead to contamination of surrounding soils or water. Section 402 of the Clean Water Act (33CFR26 Section 1342) regulates the discharge of water pollutants through the National Pollutant Discharge Elimination System (NPDES). This permit requires all construction activities within the County, including the proposed project, to limit to the maximum extent feasible, discharges of water pollutants by using Best Management Practices (BMPs). The BMPs for this project, such as equipment maintenance and emergency procedures, would reduce the potential for accidental spills and reduce the harm from any spills that may occur. The project will not result in an increase in hazardous emissions or an increased presence of hazardous materials with the exception of possible short-term exposure to vehicle emissions during construction. Associated impacts are thus expected to be less than significant.

VIII(c). **Less Than Significant Impact.** There are no school facilities located along Garfield Avenue. Schools near the project are located within one-half mile which include Gaines Elementary School, Tanner Elementary School, Los Cerritos Elementary School, Zamboni Middle School, Jackson Middle School and Paramount Park Middle School. As stated above, any potential hazardous spill or release of hazardous substances would be limited during the construction phase of the project. Moreover, handling of hazardous materials resulting in spills or other hazards is unlikely due to mandatory safeguards for its transport, storage and application. Such hazardous substances like gasoline or other petroleum-based products that would be used during construction activities would be contained on-site in the event of accidental spill or release. Accordingly, impacts related to hazardous-material-release near schools are expected to be less than significant.

VIII(d). **Less Than Significant Impact With Mitigation Incorporation.** An environmental database search was performed to evaluate the potential existence of soil contamination caused by past and present land uses. A GeoTracker database search included adjacent and nearby properties within a 1/4-mile radius of the project. A review of the database search concluded that no sites were recorded within the project area but

several sites located outside the project was listed as having experienced substantial unauthorized releases of hazardous substances or other events with potentially adverse environmental effects. Of the twelve identified sites, nine sites were recorded as closure cases or pending closure where potential contaminants have undergone remedial action to comply with regulatory requirements and no longer posed substantial risk to the public. Six of these cases were former or existing service stations where contaminants were exposed to soil and possible groundwater from leaking underground storage tanks but have since completed its remediation at these sites. The remaining sites were the result of leaks or runoff from inadequate collection and storage facilities as part of its industrial processes and operations and have concluded cleanup efforts. At present, the three sites that remain as open cases are all gasoline stations and are further discussed below:

1. Gardy's Shell, 7511 Rosecrans Avenue. The address is located at the northeast corner of Garfield Avenue and Rosecrans Avenue. In 2002, the site was occupied by a former Shell service station whereupon removal of former underground storage tanks revealed concentrations of hydrocarbons, benzene and MTBE in samples from beneath the former tanks.[25] Both soil and groundwater were impacted. Currently, the location is operating as a 76-branded service station with four 20,000-gallon USTs at the site. Remediation at the site is ongoing.

2. Shell Service Station, 7512 East Alondra Boulevard. The address is located at the southeast corner of Garfield Avenue and Alondra Boulevard. The site has historically been used for retail gasoline sales. Leaking underneath fueling dispensers was discovered in 2002 during an upgrade to its underground fueling facility.[26] Testing of soil samples indicated concentrations of hydrocarbons as diesel tertiary petroleum hydrocarbon (TPH-D), TPH-G, MTBE, tertiary butyl alcohol (TGA), and tertiary amyl methyl ether (TAME). TPH-G, TBA, and MTBE was recorded in groundwater in 2003. In 2007, it was reported that site cleanup was underway. Recent site monitoring has indicated low hydrocarbon recovery for its current remediation activities, suggesting that no further remedial action is anticipated for soil. However, groundwater monitoring and sampling will continue as approved site remedial efforts have been completed.

3. Petro Bras (former Texaco), 7515 East Alondra Boulevard. The address is located at the northeast corner of Garfield Avenue and Alondra Boulevard. In 1995, there was a reported leak of ten gallons of diesel fuel that occurred as a result of mechanical failure.[27] Subsequent soil samples collected during dispenser upgrade activities in December 2002 detected concentrations of hydrocarbons, BTEX, MTBE, and TBA in soil at depths between 1.5 and 3 feet below ground surface. Currently, there are three 12,000-gallon gasoline USTs and one 12,000-gallon diesel UST maintained on site. Recent soil samples discovered the presence of TPH-G, BTEX, MTBE, TAME, and TBA at 15 feet below grade surface (bgs) or deeper. Similarly, concentrations of these contaminants were detected within groundwater investigations at depths of approximately 30 feet bgs.

[25] Wayne Perry, Inc., *Update to the Site Conceptual and Plume Travel Time Model*, July 15, 2016.
[26] Atlas Environmental Engineering, Inc., *Additional Site Assessment Work Plan LARWQCB Case #R-26318 Global I.D. #T0603751170*, June 13, 2016.
[27] ARTMN Inc., *Additional Site Investigation Report Case No. I-05588*, February 3, 2016.

Out of the three sites reported in the database to be open cases and located adjacent to the proposed project alignment, site No. 2 has completed soil remediation activities which have included excavation and removal of 390 tons of soil and currently pending closure. Both sites No. 1 and No. 3 are an environmental concern due to contamination of soil and groundwater. However, the risk of exposure during project activities at both sites would be minimal as the presence of contamination is located outside the project area, approximately 25 feet and 45 feet to the closest areas of excavation for sites No.1 and No. 3, respectively.[28,29] Moreover, any potential migration through groundwater would occur approximately at 15 to 20 feet bgs which is below the excavation depths of 7 feet required for project construction.

While the proposed project would result in an impact that is less than significant with regard to hazards and although not necessary to reduce impacts to a less than significant level, the following mitigation measures are recommended to ensure compliance with the regulations and to ensure that potential impacts remain less than significant.

Mitigation Measure VIII.d-1: During subsurface excavation activities, trenching, and grading, Cal/OSHA worker safety measures shall be implemented as required to preclude an exposure to unsafe levels of soil contaminants.

Mitigation Measure VIII.d-2: Any contaminated soil, groundwater and/or toxic materials encountered during excavation and grading shall be evaluated and excavated/disposed of, treated in-situ (in-place), or otherwise managed in accordance with applicable regulatory requirements. If contamination is discovered during excavation/grading activities, excavation/grading within such an area shall be temporarily halted and redirected around the area, if possible, until the appropriate evaluation and follow-up measures are implemented so as to render the area suitable for excavation/grading activities to resume.

Mitigation Measure VIII.d-3: Construction contracts shall include provisions requiring continuous compliance with all applicable federal, state, and local government regulations and conditions related to hazardous materials and wastes management.

VIII(e,f). **No Impact.** The project is not located within the vicinity of an airport. The nearest airport is the Compton/Woodley Airport located in the City of Compton, approximately 4 miles to the west. Los Angeles International Airport (LAX) is located approximately 12.5 miles west-northwest of the project. The site is not located in either the Clear Zone or

[28] For site No.1, the nearest soil vapor extraction (SVE) wells, SVE-9, show concentrations of benzene and hydrocarbons was detected at 5 and 10 feet in soil samples collected on October 17, 2014. Since those initial remedial efforts, a remediation compound was installed during the second and third quarters in 2015. On January 25, 2016, a SVE system was officially brought online and has operated continuously until shutdown on February 22, 2016.

[29] For site No. 3, soil borings locations at SB-8 and SB-11 detected low concentrations of benzene, MTBE and TBA at 5 and 10 feet based on soil samples collected on December 3, 2015. According to soil sampling results, the highest concentrations of hydrocarbons, BTEX, MTBE, TAME, and TBA were detected at depths of 15 to 20 feet bgs.

the Approach Safety Zone of the airport. Therefore, the project would not result in an airport-related safety hazard for people residing or working in the project area.

VIII(g). **Less Than Significant Impact.** Garfield Avenue is designated as an evacuation route in the City's General Plan. Typically, construction of the project will require closure of two travel lanes (one in each direction) during construction of the roadway improvements, which would still allow for emergency vehicle access through the area. Temporary traffic disruption will be minimized by maintaining traffic flow during construction and limiting all work to midweek, off-peak hours. The completed project would not be a generator of traffic and would not alter any traffic patterns. Therefore, the project would cause no significant impact to emergency response or evacuation plans.

VIII(h). **No Impact.** The proposed project would not expose significant numbers of people or structures to wildland fire risk, because the project area is located in an urban environment, and is not near fire-prone wildland. Thus, there are no impacts with respect to wildland fires.

IX.	HYDROLOGY AND WATER QUALITY	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:					
a)	**Violate any water quality standards or waste discharge requirements?**	☐	☐	☒	☐
b)	**Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**	☐	☐	☒	☐
c)	**Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?**	☐	☐	☒	☐
d)	**Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**	☐	☐	☒	☐
e)	**Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.**	☐	☐	☒	☐
f)	**Otherwise substantially degrade water quality?**	☐	☐	☒	☐
g)	**Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**	☐	☐	☐	☒

IX.	HYDROLOGY AND WATER QUALITY	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
h)	**Place within a 100-year flood hazard area structures which would impede or redirect flood flows?**	☐	☐	☐	☒
i)	**Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**	☐	☐	☒	☐
j)	**Inundation by seiche, tsunami, or mudflow?**	☐	☐	☐	☒

Explanation of Checklist Judgments:

IX(a). **Less Than Significant Impact.** The proposed street-widening and infrastructure improvements would not violate water quality standards or waste discharge requirements, because as explained in more detail below, all construction work would be required to incorporate water-quality-protection best management practices (BMPs) that would minimize construction and operation-related pollutant runoff. The proposed project would reconstruct 45 catch basins with new retractable trash screens, install trash screens on connector pipes, add 22 landscaped medians and parkway improvements, and would resurface the street. The landscaped medians would be designed so that no irrigation runoff would flow into the street.

All road construction (grading, scraping, watering for dust mitigation, placement of infrastructure, installation of concrete and asphalt paving, curbs and gutters or asphalt concrete dike, sidewalks, etc.) would be subject to federal and state regulations protecting water quality. Specifically, the federal Clean Water Act (CWA) assigns jurisdiction to federal, state, and local agencies over specific activities that could affect stream channels, wetlands, and other water bodies. Section 402(p) of the CWA sets forth the National Pollutant Discharge Elimination System (NPDES) storm water permitting program, administered by the California Regional Water Quality Control Board, Los Angeles Region (RWQCB) under delegation by the United States Environmental Protection Agency (U.S. EPA). Where projects would affect an area larger than one acre, the project proponent must prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), which details the BMPs for reducing or eliminating pollutant discharge from construction areas. Smaller projects, such as the present road-improvement project (encompassing 0.61 acre), still must incorporate BMPs.

BMPs for the project would include, but not be limited to:

1. Good housekeeping: conducting an inventory of products used, implementing proper storage & containment, and properly cleaning all leaks from equipment and vehicles;
2. Non-storm water management: properly washing vehicles in contained areas, cleaning streets and minimizing irrigation runoff;

3. Erosion control: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, permanent seeding;
4. Sediment control: straw wattles along drainage pathways and around storm drains;
5. Run-off and run-on controls: berms and run-off/on diversions;
6. Screens on catch basins and on connector pipes to prevent trash from entering waterways;
7. Inspection, maintenance and repair of BMPs to ensure continued efficacy.

By applying these and other BMPs, impacts are anticipated to be less than significant, and no supplementary mitigation measures would be required.

IX(b) **Less Than Significant Impact.** The proposed street-widening project would not deplete groundwater supplies or result in lowered ground water tables because as explained further below, the project would not result in substantial water demand during construction or operation, and would not significantly increase impermeable surface area. The project will provide infrastructure improvements (i.e., street widening, paving, sidewalk, curb and gutter, 22 landscaped medians etc.) along Garfield Avenue, replacing currently impermeable sidewalk surfaces with street pavement. The project would incrementally add permeable areas where new median landscaping would be installed, potentially creating areas for stormwater infiltration.

The proposed intersection improvements would not be expected to deplete groundwater supplies because construction activities (concrete mixing, water application for dust control, etc.) would use limited amounts of water. The proposed landscaping associated with the project would both replace existing landscaping and add new plant material; all new plants would be varieties selected to require minimal irrigation. Given the project's overall low water consumption, impacts with respect to groundwater supply are anticipated to be less than significant, and no additional mitigation measures are required.

IX(c, d). **Less Than Significant Impact.** The proposed project would not substantially change the existing drainage pattern of the area, causing erosion or flooding, simply because the proposed street improvements would minimally alter the existing street geometry, and incrementally add street and gutter capacity for directing and channeling storm water flows. Although street-surface drainage patterns might change slightly with the introduction of 22 raised landscaped medians, such changes are not expected to rise to a level of significance, since the medians are already located at the roadway's high point would not cause significant changes to existing surface flows. The project would not be expected to cause erosion or siltation off-site. Although utility underground would require trenching and excavation, the project area is relatively flat, covered with impermeable surfaces, and is not susceptible to surface erosion. The BMPs applied in Response IX(a) above would minimize the amount of sediment carried from the site into sub-surface storm drains. Any excess excavated material would be removed from the project area. Likewise, the project would not be expected to contribute to surface flooding, because the existing storm drainage system, including any new catchbasins required as part of the project, is designed to accommodate excess stormwater flows.

Moreover, the City does not lie within a FEMA-designated flood hazard area.[30] Accordingly, impacts with respect to erosion, siltation and flooding are anticipated to be less than significant, and no additional mitigation measures are required.

IX(e) **Less Than Significant Impact**. The proposed project would not contribute substantial amounts of runoff water exceeding storm water drainage system capacity, because the planned street improvements is designed to be consistent with the City's General Plan, which evaluated surface runoff and drainage capacity. Moreover, the proposed project would not substantially increase the amount of polluted runoff because BMPs described in (a) above would be in place to reduce pollution from runoff water. Impacts associated with storm water infrastructure capacity and polluted runoff are anticipated to be less than significant, and no additional mitigation measures are required.

IX(f). **Less Than Significant Impact**. The proposed project would not otherwise substantially degrade water quality, primarily because the BMPs described in (a) above would minimize runoff water contamination. Impacts associated with water quality are anticipated to be less than significant, and no additional mitigation measures are required.

IX(g,h). **No Impact.** The proposed project would not construct housing or other structures, thus would not directly subject housing or structures to flood hazards.

IX(i). **Less than Significant Impact. Levee Failure:** The proposed project, by itself, would not expose people or structures to a significant risk of loss, injury or death resulting from levee failure, because the project would not appreciably change the land use in the project area, i.e., the level of exposure to flood risk from levee failure would not change from the risk that currently exists.

The Los Angeles River flows north to south approximately one-half to 1.2 miles east of Garfield Avenue; the Rio Hondo, a tributary of the Los Angeles River, runs from northeast to southwest north of the project. Both rivers are confined by engineered concrete channels; the confluence of the Los Angeles River and the Rio Hondo lies approximately three miles north-northwest of the project. The river and its tributaries are managed by the Los Angeles County Department of Public Works for flood control and water conservation in the Los Angeles River watershed, including the levee system. The Federal Emergency Management Agency (FEMA) routinely collects information from levee owners and maps flood risks, providing necessary information to both the levee owner and the public about the degree of flood protection that the levees provide.

The FEMA Flood Insurance Rate Map (FIRM) No. 06037C1820F shows the project area in Zone X, within an area protected by provisionally-accredited levees.[31,32] Areas in Zone X are considered to have a 1-percent annual chance of flooding. Given this remote risk level, impacts to life and property resulting from levee failure are expected to be less than significant.

---

[30] City of Paramount, *City of Paramount General Plan, Final Environmental Impact Report* (August 2007), p. 12.
[31] Federal Emergency Management Agency, FEMA Flood Map Service Center, Search Results for Paramount, City of, available at http://msc.fema.gov/portal/advanceSearch#searchresultsanchor (accessed August 8, 2016).
[32] Federal Emergency Management Agency, *Provisionally Accredited Levees*, available at http://www.fema.gov/media-library-data/20130726-1531-20490-1102/provisionally_accredited_levees.pdf (accessed August 10, 2016).

Dam Failure: The project's northern boundary is approximately ten miles south of the Garvey Reservoir in the City of Monterey Park. This reservoir, constructed and owned by the Metropolitan Water District of Southern California, is designed to hold 1,500 acre-feet of water, retained by earthen fill dams on its north and south sides. The Paramount General Plan EIR indicates that portions of Paramount lie within this reservoir's inundation area, and notes that floodwaters resulting from a catastrophic dam failure could reach the City approximately 15 minutes after dam failure. However, the EIR does not include an inundation map that shows floodwater extent or depth.[33]

The City of Monterey Park General Plan notes that although the dam facility was overhauled in 1999 to address seepage and structural integrity, catastrophic failure could still flood properties to the north and south, with an average flood depth of five feet. Floodwater is predicted to continue approximately one-mile south toward the Pomona Freeway (California State Route 60). Water would then spread laterally along the approximately 20-foot high freeway embankment and flow through freeway undercrossings,[34] as well as into storm drain inlets connected to the Los Angeles River and the Rio Hondo.

Figure 21 shows Garvey Reservoir's location with respect to the project area; Figure 22 shows the potential inundation area within the City of Monterey Park, north of the Pomona Freeway – this map does not show water depth, only areal extent. At the freeway, waters could extend from Ferdinand Avenue on the west to Fulton Avenue on the east, flowing under the freeway at North Garfield and Wilcox Avenues.

The dam elevation is approximately 555 feet above mean sea level (msl), the North Garfield Avenue undercrossing at the Pomona Freeway lies at 254 feet above msl, and the northerly project boundary is approximately 80 feet above msl. The south embankment of the Pomona Freeway is approximately eight miles (44,880 feet) north of the project site. The resulting average grade between the intersection of Garfield Avenue/Pomona Freeway and the northerly project boundary on Garfield is approximately 0.39%, using the formula:

$$\frac{\text{Rise}}{\text{Run}} \times 100 = \%\ \text{Grade}$$

$$\frac{254' - 80'}{44{,}880'} \times 100 = \mathbf{0.39\%}\ \text{Grade}$$

To illustrate the "steepness" of a 0.39% grade, "accessible routes" – a.k.a. "wheelchair ramps" – are constructed at a slope of one foot of rise per 12 feet of run, or eight percent.[35] By comparison, the 0.39% slope described above would rise or descend at a very gradual one foot of rise per 258 feet of run.

---

[33] City of Paramount, *Paramount General Plan Update, Final Environmental Impact Report* (August 2007), p. 62.

[34] City of Monterey Park, *2020 General Plan, Safety and Community Services Element, Flood and Dam Inundation Hazards*, Figure SCS-4 (reproduced below), available at http://www.montereypark.ca.gov/475/Flood-Dam-Inundation-Hazards (accessed August 9, 2016). The Metropolitan Water District was contacted to obtain but did not respond prior to publication of this document.

[35] *See* 2013 California Building Code, Chapter 11B, *Accessibility to Public Buildings, Public Accommodations, Commercial Buildings and Public Housing*, available at http://codes.iccsafe.org/app/book/content/2015_

Given this relatively shallow gradient that exists between the Pomona Freeway's effective barrier and the project area, combined with the eight-mile distance from the freeway, it is reasonable to conclude that the floodwater force from the Garvey Reservoir would likely be dissipated before reaching the project area. Accordingly, impacts resulting from dam failure are expected to be less than significant.

IX(j). **No Impact.** The proposed project would not directly expose people or structures to inundation by seiche (destructive standing waves in inland bodies of water) or tsunami, because there are no large bodies of water near the project to generate such effects, and the Garvey Reservoir is capped with concrete. Barring catastrophic failure of the dams, as described above, no wave formation would be expected to occur. Moreover, the project would not expose people or structures to mudflow, since there are no open slopes near the project site with mudflow-generating capabilities. As such, no impacts are expected resulting from tsunami, seiche or mudflow.

CALIFORNIA/2013%20CALIFORNIA%20BUILDING%20CODE%20VOL%201,%20SUPPLEMENT%20JULY%202015/Chapter%2011B%20-%20Accessibility%20to%20Public%20Buildings.pdf (accessed August 12, 2016).

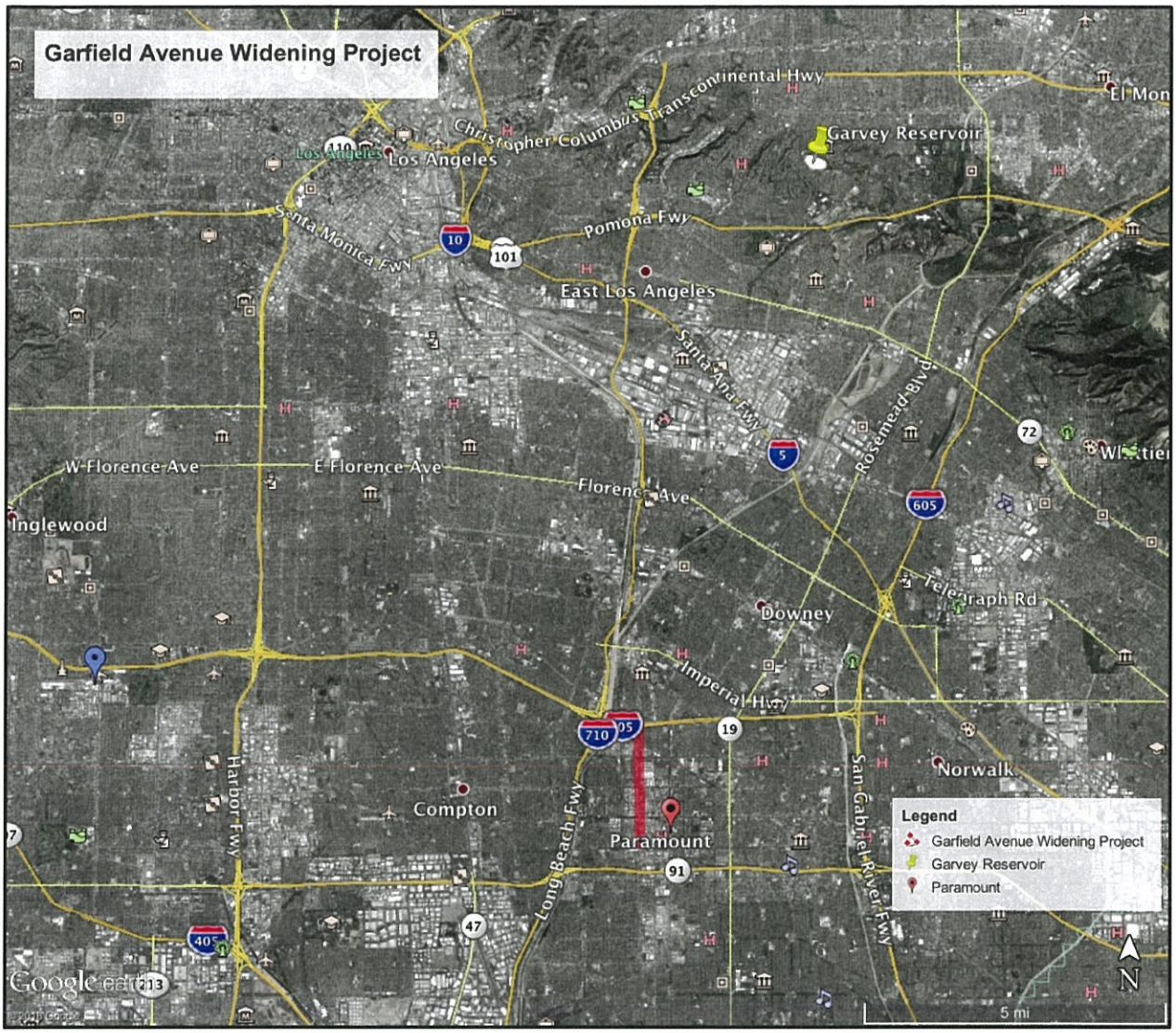


Figure 21

Relationship of Garvey Reservoir to Project Area

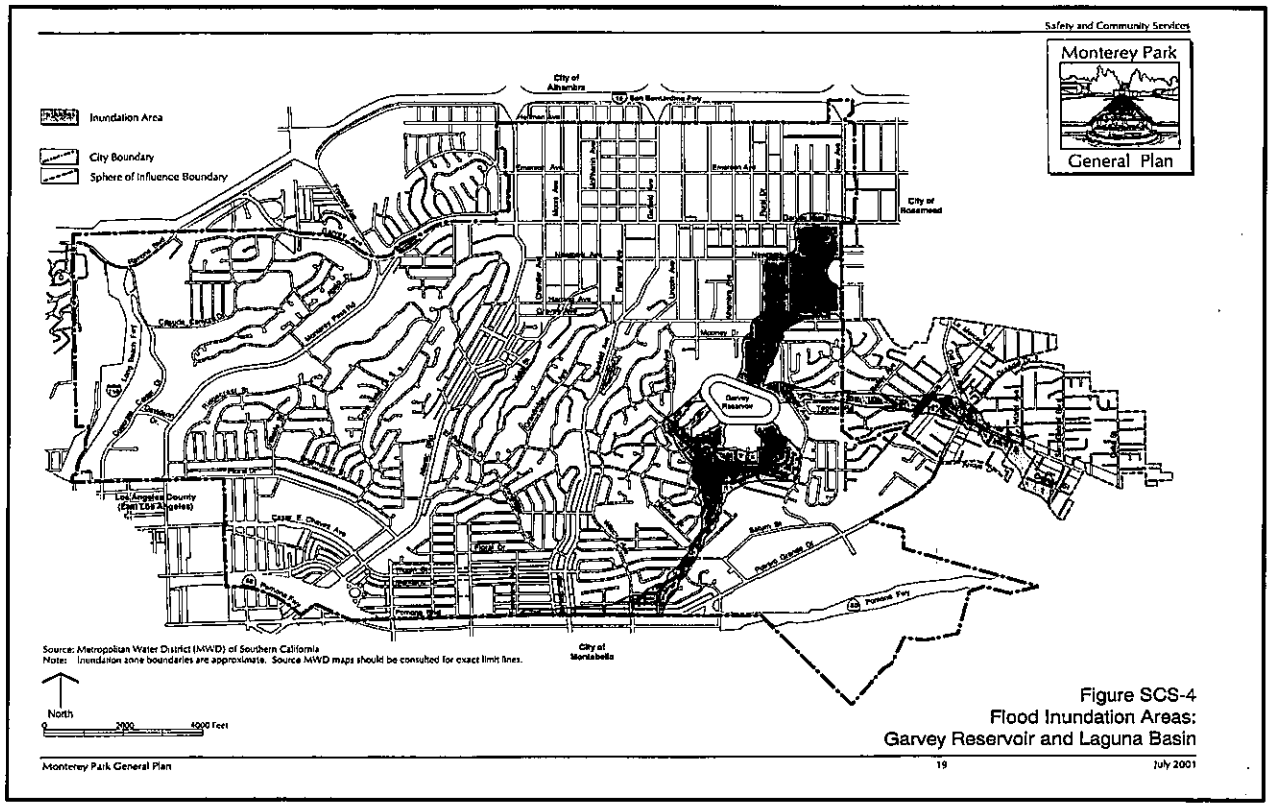


Figure 22

Garvey Reservoir Inundation Areas within City of Monterey Park

X. LAND USE AND PLANNING	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) **Physically divide an established community?**	☐	☐	☐	☒
b) **Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**	☐	☐	☐	☒
c) **Conflict with any applicable habitat conservation plan or natural community conservation plan?**	☐	☐	☐	☒

Explanation of Checklist Judgments:

X(a). **No Impact.** As noted in the Project Description above, the proposed project would enhance roadway capacity along a major arterial street in an urban area along a heavily-traveled commercial corridor. A mix of industrial, commercial-retail and limited residential uses line the street; most uses on the east side of Garfield Avenue are industrial and all residential uses lie on the west and north. The project would not introduce a barricade or other impediment that would divide an established community. Rather, the project would introduce streetscape elements that are intended, in part, to enhance the character of the street and create an identity along this regional corridor, as well as to surrounding neighborhoods and its commercial-industrial core. Accordingly, no impacts are anticipated.

X(b). **No Impact.** The proposed project is consistent with the Transportation Element of the City of Paramount General Plan. This Element designates Garfield Avenue as a Major Arterial, programmed for regional, sub-regional and intra-city travel service.[36] As such, Garfield Avenue is intended to have three travel lanes in each direction, with medians, and up to 84 feet of paving within a 100-foot right-of-way. The proposed project would improve Garfield Avenue between the north and south City limits to six travel lanes from its existing four lane configuration, and would include decorative and functional streetscape improvements. The project is both consistent with the desired Major Arterial design, and with Transportation Element Policy 3:

> *Transportation Element Policy 3.* The City of Paramount will continue to develop and enhance the existing streets and intersections in the City.

Accordingly, because the project is consistent with both General Plan design criteria for major arterials and with General Plan policy for street improvements, no conflicts with applicable land use plans exist, and no related impacts are anticipated.

[36] City of Paramount, *City of Paramount General Plan, Transportation Element*, August 2007, p. 34.

X(c). **No Impact.** The proposed project is not located within Los Angeles County's Significant Ecological Areas or other habitat conservation areas. Accordingly, no conflicts with such habitat or natural community conservation plans are anticipated.

XI MINERAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Explanation of Checklist Judgments:

XI(a,b). **No Impact.** According to the City of Paramount General Plan, the City has no unique geologic features nor any valued natural resources. In addition, the project study area is urbanized and is developed with retail, residential and industrial uses and is surrounded by similar uses. The project study area and surrounding areas are not recognized as sources of important mineral resources. Therefore, no impact would occur.

XII. NOISE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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?**	☐	☒	☐	☐
b) **Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?**	☐	☐	☒	☐
c) **A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**	☐	☐	☐	☒
d) **A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**	☐	☐	☒	☐
e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**	☐	☐	☐	☒
f) **For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**	☐	☐	☐	☒

Explanation of Checklist Judgments:

XII(a). **Less Than Significant With Mitigation Incorporation.** The following analysis of noise impacts is based on the Noise Assessment for: Firestone Boulevard Regional Corridor Capacity Enhancement Project (herein referred to as the "Noise Study"), prepared by Landrum and Brown, Inc., dated August 24, 2016 (Appendix E). This noise study evaluates the potential noise impacts at noise-sensitive land uses resulting from construction and operation of the project.

Measurement of Sound

Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dB higher than another is judged to be twice

as loud; a sound 20 dB higher is perceived to be four times as loud; and so forth. Everyday sounds normally range from 30 dB (very quiet) to 100 dB (very loud).

Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Community noise levels are measured in terms of the "A-weighted decibel," abbreviated dBA.

Sound levels decrease as a function of distance from the source as a result of wave divergence, atmospheric absorption and ground attenuation. As the sound wave form travels away from the source, the sound energy is dispersed over a greater area, thereby dispersing the sound power of the wave. Atmospheric absorption also influences the levels that are received by the observer. The greater the distance traveled, the greater the influence and the resultant fluctuations. The degree of absorption is a function of the frequency of the sound as well as the humidity and temperature of the air. Turbulence and gradients of wind, and temperature also play a significant role in determining the degree of attenuation. Intervening topography can also have a substantial effect on the effective perceived noise levels. Table 9 provides examples of various noises and their typical A-weighted noise level.

Table 9 - Typical A-Weighted Noise Levels

SOUND LEVELS AND LOUDNESS OF ILLUSTRATIVE NOISES
IN INDOOR AND OUTDOOR ENVIRONMENTS
Numbers in Parentheses are the A-Scale Weighted Sound Levels for that Noise Event

dB(A)	OVER-ALL LEVEL	COMMUNITY (Outdoor)	HOME OR INDUSTRY	LOUDNESS Human Judgement of Different Sound Levels
120		Military Jet Aircraft Take-Off With After-Burner From Aircraft Carrier @ 50 Ft. (130)	Oxygen Torch (121)	120 dB(A) 32 Times as Loud
110	UNCOMFORTABLY LOUD	Concord Takeoff (113)*	Riveting Machine (110) Rock-N-Roll Band (108-114)	110 dB(A) 16 Times as Loud
100		Boeing 747-200 Takeoff (101)*		100 dB(A) 8 Times as Loud
90	VERY LOUD	Power Mower (96) DC-10-30 Takeoff (96)* Motorcycle @25 Ft. (90)	Newspaper Press (97)	90 dB(A) 4 Times as Loud
80		Car Wash @ 20 Ft. (89) Boeing 727 w/ Hushkit Takeoff (86)* Diesel Truck, 40 MPH @ 50 Ft. (84) Diesel Train, 45 MPH @ 100 Ft. (83) High Urban Ambient Sound (80)	Food Blender (88) Milling Machine (85) Garbage Disposal (80)	80 dB(A) 2 Times as Loud
70	MODERATELY LOUD	Passenger Car, 65 MPH @ 25 Ft. (77) Freeway @ 50 Ft. From Pavement Edge, 10:00 AM (76 ± 6) Boeing 757 Takeoff (76)*	Living Room Music (76) TV-Audio, Vacuum Cleaner	70 dB(A)
60		Propeller Airplane Takeoff (67)* Air Conditioning Unit @ 100 Ft. (60)	Cash Register @ 10 Ft. (65-70) Electric Typewriter @ 10 Ft. (64) Dishwasher (Rinse) @ 10 Ft. (60) Conversation (60)	60 dB(A) 1/2 as Loud
50	QUIET	Large Transformers @ 100 Ft. (50)		50 dB(A) 1/4 as Loud
40		Bird Calls (44) Lower Limit Urban Ambient Sound (40)		40 dB(A) 1/8 as Loud
20	JUST AUDIBLE	(dB(A) Scale Interrupted) Desert at Night		
10	THRESHOLD OF HEARING			

*Aircraft takeoff noise measured 6,500 meters from beginning of takeoff roll

SOURCE: Leo L. Beranek "Noise And Vibration Control," 1971
*Aircraft Levels From FAA Advisory Circular AC-36-3G

Noise metrics can be divided into two categories: single event and cumulative. Single-event metrics describe the noise levels from an individual event such as an aircraft fly-over or perhaps a heavy equipment pass-by. Cumulative metrics average the total noise over a specific time period, which is typically 1 or 24-hours for community noise problems. For this type of analysis, cumulative noise metrics is typically used.

Several rating scales have been developed for measurement of community noise. These account for: (1) the parameters of noise that have been shown to contribute to the effects of noise on man, (2) the variety of noises found in the environment, (3) the variations in noise levels that occur as a person moves through the environment, and (4) the variations associated with the time of day. They are designed to account for the known health effects of noise on people described previously. Based on these effects, the observation has been made that the potential for a noise to impact people is dependent on the total acoustical energy content of the noise. A number of noise scales have been developed to account for this observation. The two most predominate noise scales are the: Equivalent Noise Level (LEQ) and the Community Noise Equivalent Level (CNEL). These scales are described in the following paragraphs along with the Ldn and L(%) scales that are also used for community noise assessment.

LEQ is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. LEQ is the "energy" average noise level during the time period of the sample. LEQ can be measured for any time period, but is typically measured for 1 hour. This 1-hour noise level can also be referred to as the Hourly Noise Level (HNL), the energy average of all the events and background noise levels that occur during that time period.

CNEL, Community Noise Equivalent Level, is the predominant rating scale now in use in California for land use compatibility assessment. The CNEL scale represents a time weighted 24-hour average noise level based on the A-weighted decibel. Time weighted refers to the fact that noise that occurs during certain sensitive time periods is penalized. The evening time period (7 p.m. to 10 p.m.) penalizes noises by 5 dBA, while nighttime (10 p.m. to 7 a.m.) noises are penalized by 10 dBA. These time periods and penalties were selected to reflect people's increased sensitivity to noise during these time periods. A CNEL noise level may be reported as a "CNEL of 60 dBA," "60 dBA CNEL," or simply "60 CNEL."

Guidelines for the Determination of Significance

Noise impacts are commonly assessed into two parts; short-term (temporary) and long-term. Short-Term impacts are those associated with noise generated by construction activities required to implement the project. Long-Term impacts are the impacts caused by the long-term operation of the proposed project. Impacts are also divided between those from on-site activities and those from off-site activities. Impacts from off-site activities are those arising from additional road noise generated by traffic increases resulting from the project.

Impacts from on-site activities, short-term and long-term are measured against the City of South Gate Noise Ordinance criteria. Construction or on-site operational activities that violate the provisions of the Noise Ordinance will result in a significant noise impact.

An off-site traffic noise impact occurs when there is a discernable increase in traffic noise

AND the resulting noise level exceeds an established noise standard. In community noise assessment, changes in noise levels greater than 3 dB are often identified as substantial, while changes less than 1 dB will not be discernible to local residents. In the range of 1 to 3 dB, residents who are very sensitive to noise may perceive a slight change. In laboratory testing situations, humans are able to detect noise level changes of slightly less than 1 dB. This is based on a direct immediate comparison of two sound levels. In a community noise situation, however, noise exposures are over a long period, and changes in noise levels occur over years, rather than the immediate comparison made in a laboratory situation. Therefore, the level at which changes in community noise levels become discernible is likely to be some value greater than 1 dB, and 3 dB is the most commonly accepted discernable difference. A 5 dB change is generally recognized as a clearly discernable difference.

Because traffic noise levels at sensitive uses likely approach or exceed the 65 CNEL standard, a 1.0 dB increase due to the project will be used as the increase threshold for project. The project will result in a significant noise impact when it causes a permanent increase in ambient noise levels of 1.0 dB and the resulting noise level exceeds the applicable exterior standard at a noise sensitive use.

A cumulative significant noise impact will occur if there is a 3.0 dB increase over existing conditions and the resulting noise level exceeds the applicable exterior standard at a sensitive use. The project will have considerably contributed to a significant cumulative impact if it contributes 1 dB or more to the cumulative noise level increase.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) was enacted in 1970 and requires that all known environmental effects of a project be analyzed, including environmental noise impacts. Under CEQA, a project would have a potentially significant impact if the project would expose people to noise levels in excess of standards established in the local general plan or noise ordinance, or if the project would substantially increase the ambient noise levels in the project vicinity above levels existing without the project. If a project has a potentially significant impact, mitigation measures must be considered. If mitigation measures to reduce the impact to less than significant are not feasible because of economic, social, environmental, legal, or other conditions, the most feasible mitigation measures must be considered.

The State CEQA Guidelines do not provide a definition for what constitutes a 'substantial' increase in noise. For purposes of the project, thresholds of significance were developed for this noise analysis based upon CEQA standards, the Land Use Compatibility Criteria depicted below, and the characteristics of human response to noise. The most sensitive individuals can detect a change in noise level of approximately 3 dBA while a change of 5 dBA is readily noticeable to most people.

Therefore a significant noise impact would result if the project would exceed these thresholds:

- Expose exterior locations to unacceptable noise levels of greater than 65 dBA CNEL at residential uses and greater than 70 dBA CNEL at commercial locations.

- Result in an increase of more than 3dBA or more above ambient noise levels for locations already exposed to unacceptable noise levels or 5 dBA or more for locations exposed to acceptable noise levels.

California State Building Code

The State of California's 2013 Green Building Code (California Code of Regulations, Title 24, Part 11) specifies an interior noise standard for non-residential uses exposed to exterior noise levels from transportation noise sources (aircraft, roadway or rail) exceeding 65 CNEL or a one-hour Leq of 65 dBA or greater. The standard specifies minimum outdoor-indoor-transmission-class (OITC) ratings for exterior walls or a performance standard of a one-hour interior noise level of 50 dBA Leq(H). Prior State Building Codes also contained interior noise standards for residential buildings but these have been omitted from in the most recent updates to the code.

Local Regulations and Standards

The City of Paramount noise criteria are presented in the Noise Element of the City's General Plan and Municipal Code. The Noise Element presents the City's goals and policies for minimizing impacts and establishes noise standards for various land uses. The Noise Ordinance regulates noise generated on private property from impacting adjacent properties. State and federal laws prohibit the City from regulating transportation noise sources and the noise ordinance is not applicable to motor vehicles traveling on public rights of way.

The City of Paramount's Noise Element provides the City's primary tool to ensure integrated planning for compatibility between land uses and outdoor noise as noted in Table 10. The City's Noise Element has established the City's residential maximum exterior noise standards at 65 dBA and the maximum desirable noise level at 55 dBA.

From the City's update of its General Plan in 2007, the Noise Element was incorporated as part of their Health and Safety Element. the Health and Safety Element provides the City's primary tool to ensure integrated planning for compatibility between land uses and outdoor noise. Noise levels may be significantly reduced by employing relatively simple design measures, such as the use of sound walls, extra insulation, double-paned windows, etc. The following policies are applicable to the project and underscore the City's continued efforts to control noise exposure through land use planning and building design.

- *Health and Safety Element Policy 32.* The City of Paramount will cooperate with State and Federal agencies so as to minimize transportation related noise.
- *Health and Safety Element Policy 33.* The City of Paramount will ensure that the design and improvement of future master planned roadway links in the City are accomplished in a manner that minimizes noise impacts on adjacent noise sensitive land uses.
- *Health and Safety Element Policy 38.* The City of Paramount will consider the effects of truck mix, speed limits, and ultimate motor vehicle volumes on noise levels adjacent to master planned roadways when improvements to the circulation system are planned.

Table 10

City of Paramount Noise and Land Use Compatibility Matrix

Land Use	Maximum Desirable Noise Level	Maximum Acceptable Noise Level
Low Density Residential	55 dBA	65 dBA
Medium Density Residential	60 dBA	65 dBA
High Density Residential	65 dBA	70 dBA
Schools	60 dBA	70 dBA
Office/Commercial	65 dBA	75 dBA
Industrial	70 dBA	75 dBA

Noise generated by construction activities associated with the project is one of the primary potential impacts to the project. The analyses contained in this report assess the potential noise impacts from construction of the project as well as the impacts due to changes in traffic noise levels affected by the project.

The City's Noise Ordinance is defined in Chapter 45 "Noise," which identifies criteria and standards related to noise. Section 45-4, "Noise Performance Standards" includes the actual noise level limits for the various land use types by time of day. The standards are listed in Table 11 and are the maximum (Lmax) noise level standards on the dBA scale.

Table 11

Noise Performance Standards by Noise Zone

Noise Zone	Day (Lmax) 6:00 a.m. to 10:00 p.m.	Night (Lmax) 10:00 p.m. to 6:00 a.m.
Industrial & Commercial	82	77
R1 and R2	62	57
R3 and R4	67	62

The aforementioned standards apply to residential zones R1 – R4 and to industrial and commercial land uses. The daytime hours are defined as being from 6:00 a.m. to 10:00 p.m. and the nighttime period is defined from 10:00 p.m. to 6:00 a.m. the following day.

The ordinance lists only the maximum noise level which may be generated by any activity during a given period of the day. It does not include any time duration restrictions to the generation of noise levels which are less than those levels listed within the standard.

The stated purpose of the City's Noise Ordinance in Section 45-6 is as follows:

> "*It shall be unlawful for any person from any location within the city, including commercial, agricultural and industrial zoned property, to create, maintain, cause or allow to be created or maintained, any noise or sound upon any property within the city, which exceeds the noise standards as specified in section 45-4 as measured in accordance with procedures specified in section 45-5, unless the noise or sound source or sound is specifically exempted in this chapter.*" (Ord. No. 317)

The ordinance also exempts certain noise sources and activities from being subject to the Noise Ordinance standards. Construction noise is covered in Section 45-7(d) which states the following:

> "*Construction equipment or work including but not limited to the operation, use or employment of pile drivers, hammers, saws, steam shovels, pneumatic hammers, drills, derricks, steam or electric hoists, motorized mechanical equipment or other similar construction equipment.*
>
> *(1) Exemption: Construction, repair or remodeling equipment and devices and other related construction noise sources shall be exempted from the provisions of this chapter provided a permit for such construction, repair or remodeling shall have been obtained for such construction, repair or remodeling from the building department of the city and the construction, repair or remodeling does not take place between the hours of 8:00 P.M. and 7:00 A.M.*
>
> *(2) Exemption: Any construction, repair or remodeling necessary as defined as emergency work, machinery or vehicles.*" (Ord. No. 317)

Construction noise is exempted from the Noise Ordinance so long as the construction activities take place between the hours of 7:00 a.m. and 8:00 p.m. The City of Paramount Noise Ordinance does not restrict the days of the week on which construction activities can take place.

Existing Noise Levels

Noise measurements were performed in order to document the existing aural environment and noise levels currently experienced on and around the project site. Short-term, 15-minute, noise measurements were performed at the fifteen locations and described in Table 12. The noise measurements at Sites 1 through 9 were performed between the hours of 9:00 a.m. and 3:00 p.m. on Friday, August 12, 2016, and the measurements at Sites 10 through 15 were performed between 10:00 a.m. and 1:00 p.m. on Monday, August 15, 2016.

The primary source of noise in project area is traffic noise from vehicles on Garfield

Avenue. Traffic on the Century Freeway (I-105) and on local streets also contributes to the noise environment and the general din of traffic noise throughout the area defines the background noise levels. Noise is also generated by businesses (e.g. Paramount Resource Recycling Center, Hoffman Plastic Compounds) and individual activities in the area. The noise measurement locations were selected to document the existing noise levels and environment at the sensitive land uses located along the project.

Noise measurements performed at all receiver locations shows that the Leq noise level at all fifteen measurements exceeded the City of Paramount Noise Ordinance of 67 dBA Lmax for R3 and R4 daytime residential land uses. In fact, the background L90 noise level exceeded the Noise Ordinance standard of 62 dBA Lmax for R1 and R2 daytime residential land uses level at measurement Sites 1, 2, 4, 5, and 15. The sources of noise during each measurement period are primarily traffic related including associated activities with commercial use for several adjacent residences. As noted, control of traffic related sources by municipal noise ordinances is precluded by state and federal law.

There are few noise sensitive uses along Garfield Avenue which include several residences, a mini-park, a church and an elementary school in the project study area. By providing additional travel lanes and increasing the capacity of Garfield Avenue during peak travel hours, any advantages for traffic to cut through residential areas is removed which leads to a reduction in traffic on roadways with more sensitive uses.

Short Term Construction Impacts

The primary noise generation activities for each component are identified, including those major activities that have been identified to generate noise levels substantially higher than traffic levels. The project has five major construction components; (1) utility undergrounding, (2) median construction, (3) sidewalk/gutter rehabilitation, (4) overlay repaving and (5) roadway re-striping. A discussion of the highest noise generating activities of each component of the project are provided below

Table 12

Ambient Noise Measurement Sites

Site	Location
1	13716 Garfield Avenue, in front of residence
2	13822 Garfield Avenue, in front of residence
3	13849 Garfield Avenue, in front of residence on frontage road along Garfield
4	Off of sidewalk, on stone paving near a city planter adjacent to Garfield Avenue and the unused railway right-of-way
5	14517 Garfield Avenue, in front of residence, near commercial property line
6	14717 Garfield Avenue, in front of residence
7	At Garfield Park, adjacent to front building face of church to the north
8	At Garfield Park, near the playground at the west end of the park
9	14919 Garfield Avenue, in front of residence
10	15308 Garfield Avenue, in front of residence
11	15333 Garfield Avenue, in front of residence, near commercial property line
12	16121 Garfield Avenue, in front of the residence
13	7343 Jackson Street, in front of residence
14	Along Jackson Street, on sidewalk, between wrought iron fence and tree, adjacent to Wesley Gains Elementary School
15	Near the entrance to Golden State Mobile Park (Mila Drive)

Utility Undergrounding: The undergrounding work will consist of digging six feet deep and two feet wide trenches on both sides of the street, mostly within future parkway areas. Conduit will be placed in the trench and encased in concrete per Edison Undergrounding Structures Standards. The trench will then be backfilled with appropriately-compacted soil/fill materials. The existing overhead utility poles will be removed when the project is complete.

Median Construction: The proposed project will construct raised landscaped medians along Garfield Avenue extending from just north of 70th Street to Petterson Lane. These medians would range in widths of 12, 14 and 20 feet. The three primary construction activities associated with the medians include: (1) excavating the existing roadway; (2) constructing raised concrete curbs; and (3) landscaping of the medians.

Excavation of the existing roadway will involve concrete/asphalt sawing, the use of jack-hammers or hoe-rams (a tractor mounted impact hammer), and the use of a

loader/backhoe and to excavate materials and load them into a dump truck. The use of concrete/asphalt saws and jack-hammers/hoe-rams will be the loudest activities during median construction. These activities will temporarily generate noise levels that exceed existing traffic noise levels. The use of loader/backhoes and dump trucks will generate noise levels similar to existing traffic noise levels.

The construction of the concrete curbs and median hardscape may be performed by hand work through the construction of forms and pouring of concrete from concrete trucks. Alternately, equipment is available that will form and lay the concrete curbs with a supply of concrete from a concrete truck. In either case, the noise generated by these activities will be similar to the noise generated by traffic on Garfield Avenue.

The final median construction activity, landscaping, will primarily be completed with hand work but a bobcat and/or loader/backhoe may be needed for larger tasks. The noise generated by these activities will be similar to the noise generated by traffic on Garfield Avenue.

Sidewalk/Gutter Rehabilitation: The project will repair, replace, and modify curbs, driveways and sidewalks. This work will increase accessibility, and improve drainage conditions. The total project length is approximately 11,035 feet. Between 80% and 90% of the sidewalk and gutter will need to be removed and replaced for the project. Generally, this will remove the gutter and approximately a five-foot width of sidewalk but in some areas as much as ten feet of sidewalk will need to be removed. On average approximately six feet of sidewalk will be removed for the project.

There will be two primary construction activities; (1) excavation of the existing gutter/sidewalk, (2) construction of concrete gutter/sidewalks. As with the project components discussed above, excavation of existing gutter and sidewalk will involve the use of concrete/asphalt saws and jackhammers/hoe-rams and generate the highest levels of noise. Because this work will occur on the edges of the roadway it will occur closest to the existing land uses located along the roadway. However, other than the concrete sawing and jackhammering, any other heavy equipment used would operate within the roadway. Construction of the gutters and sidewalks would either be performed through hand work constructing forms and the pouring of concrete from concrete trucks. Gutters/curbs may be constructed using equipment that forms and lays the gutter/curbs. In either case, the noise generated by these activities will be similar to the noise generated by traffic on Garfield Avenue.

Overlay Repaving and Roadway Re-Striping: After completion of all roadway, utility and parkway improvements, the project will repave Garfield Avenue with an asphalt overlay between Meridian Drive/70th Street to Howery Street. This resurfacing will first grind the top two inches of AC and PCC and overlay with two inches of asphalt-concrete (AC) pavement on the roadway surface. The final component of the project will include re-striping Garfield Avenue with three travel lanes in each direction as shown in Figures 2A through 2E.

Prior to the repaving, a machine known as an asphaltic mill will "shave" the top of an asphalt surface down to enable the new asphalt to match existing asphalt, curb and gutter, sidewalks, or concrete pads. As the asphaltic mill grinds the top of the asphalt surface, it generates relatively high levels of noise, substantially greater than typical traffic noise levels. Paving equipment will be used to lay the asphalt overlay with dump

trucks delivering the asphalt and rollers will be used to flatten and compact the overlay. The noise generated during these activities is similar to existing traffic noise levels.

Roadway Re-Striping: The final construction activity will be the restriping of the road as shown in Figures 4 through 9 . The restriping will be performed using a road striping truck. The noise generated by the road striping truck is not substantially louder than existing traffic on Garfield Avenue.

Based on the scope of construction activities and equipment required for use, jackhammers, hoe rams and saws would generate some of the highest noise levels during the initial phases of construction. Jackhammers generate noise levels between 76 and 99 dBA at 50 feet and most typically generate a noise level of approximately 88 dBA. Hoe-rams generate similar noise levels. Saws are shown to generate noise levels between 67 dBA and 96 dBA at 50 feet and most generally generate a noise level of approximately 76 dBA. However, this is representative of all saws used in construction. The saws used to cut asphalt and concrete are large and quite noisy, generating noise levels similar to jackhammer/hoe rams noise levels. While the noise levels generated by jackhammers and concrete saws are quite high, they only generate noise when they are operating which are intermittent and only operate in one location for a limited amount of time. As discussed above, the City's Noise Ordinance allows for higher levels of noise to be generated for short periods of time.

During excavation and later phases of construction, noise levels generated by a loader/backhoe and an asphaltic milling machine or "scraper" is representative of the loudest noise that would be generated by all other construction activities associated with the project. The scraper generates a pass-by noise level of approximately 100 dBA at a distance of 50 feet, about 12 dB louder than a typical jackhammer/hoe-ram. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three or four minutes at lower power settings.

The noise analysis shows that construction activities could generate noise levels ranging from 71 to 102 dBA for equipment operating nearest the sidewalk. However, noise produced by construction equipment would be reduced over distance at a rate of about 6 dBA per doubling of distance. The worst case composite noise level at several residences during construction would be 102 dBA at a distance of 10 feet (nearest sidewalk location) from an active construction area.

According to Section 45-7(d)(1) of the Noise Ordinance, noise from construction activities is exempt if it takes place between 7:00 a.m. and 8:00 p.m. Construction contracts for the project will be allowed by the City and will require compliance with this section of the Noise Ordinance. To reduce the potential impacts from construction, contractors are required to implement noise reduction measures during construction. Noise would be reduced because construction would be conducted in accordance with applicable local noise standards. Construction noise would be short-term, intermittent, and overshadowed by local traffic noise. Therefore, daytime construction will not result in a significant noise impact. Further, implementing the following mitigation would minimize the temporary noise impacts from construction:

Mitigation Measure XII.a-1: Control of Construction Hours – All noise generating construction activities shall be limited to the allowable hours of 7:00 a.m. and 6:00 p.m. Monday through Friday, and between 9:00 a.m. and 6:00 p.m. on Saturdays and Sundays. As long as the project construction occurs within these hours, it will be in compliance with the Noise Ordinance.

Long Term Operational Impacts

Potential long-term noise operational impacts associated with the proposed project are solely from traffic noise. Traffic noise was evaluated for future (2035) no build and future (2035) build. Please refer to the *Noise Assessment* (Landrum and Brown 2016) for details on the modeling analysis. Of the 39 modeled locations, no receptor locations would experience a substantial increase over their corresponding existing modeled noise levels as increases in noise levels from Existing to future Build range from 0.3 to 1.1 dB and would not have a noticeable increase in noise levels. Further, no sensitive receptors would experience an increase greater than 3 dB over existing conditions and be exposed to traffic noise levels exceeding the City's standards. Therefore, a less than significant impact would occur.

XII(b). **Less Than Significant Impact.** The Municipal Code does not address ground-borne vibration. Short term, construction related activities are the most common source of groundborne noise that could affect occupants of neighboring uses throughout the project study area. The Federal Transit Administration (FTA) uses a peak particle velocity (PPV) of 0.2 inch per second as the vibration damage threshold of fragile buildings and a PPV of 0.12 inch per second for extremely fragile historic buildings.[37]

The project would be constructed using heavy construction equipment (e.g. bulldozer, loaded trucks) that would generate a limited amount of ground-borne vibration during construction activities at short distances away (i.e., within 50 feet) from the source. Based on the vibration data by the FTA, typical vibration velocities from the operation of a large bulldozer would be approximately 0.089 inches per second PPV at 25 feet from the source of activity. Several residences located between Petterson Lane and the I-105 Freeway ramps and between the intersections of Jackson Street and Alondra Boulevard, which are approximately 15 to 25 feet from the project construction area, would be exposed to vibration velocities of 0.089 inches per second PPV. As this value is below the 0.2 inches per second PPV significance criteria (potential building damage for older residential building), vibration impacts associated with construction would be less than significant at these residences. As such, while the construction of the proposed project would generate localized vibration, impacts would be less than significant. Traffic operation of the street following the proposed improvements would not measurably change relative to existing conditions and therefore no operational vibration impact would occur.

XII(c). **No Impact.** The proposed project would improve the service capacity along Garfield Avenue to meet current and future transportation demands and improve safety within the project study area. Given that Garfield Avenue is an established regional arterial street, the proposed project would not introduce new stationary and/or mobile noise

[37] U.S. Department of Transportation, Federal Transit Administration, Transit Noise and Vibration Impact Assessment, 2006

sources upon its operation as discussed above in Response XII(a), and therefore would not change the ambient noise environment in the project area. Therefore, no impact would occur.

XII(d). **Less Than Significant Impact.** The primary source of temporary or periodic noise associated with the proposed project is from construction activity and maintenance work. Construction noise typically involves the loudest common urban noise events associated with demolition, grading, construction, large diesel engines, truck deliveries and hauling. Both the General Plan and Municipal Code limit construction activities to specific times and days of the week and during those specified times, construction activity is subject to the noise standards provided in the Code. Considering the short-term nature of construction and the provisions of the City's Noise Ordinance, the temporary and periodic increase in noise levels due to construction which would result from the proposed project would be less than significant.

XII(e). **No Impact.** The project area is not located within an airport land use plan or within two miles of a public airport or public use airport. Therefore, construction or operation of the Project would not expose people to excessive airport related noise levels. Therefore, no impact would occur.

XII(f). **No Impact.** There are no private airstrips within the City that would expose people working or residing in the City to excessive noise levels. Therefore, no impact would occur.

XIII. POPULATION AND HOUSING	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Explanation of Checklist Judgments:

XIII(a). **No Impact.** As discussed, the project involves roadway and utility infrastructure improvements. This action would not directly increase the population or housing in the City. The proposed project improvements are intended to improve existing and future traffic operations along the roadway corridor of Garfield Avenue and enhance the

character of this regional corridor with proposed utility undergrounding and streetscape improvements along the medians and parkways. Therefore, no impact would occur.

XIII(b-c). **No Impact.** As discussed, the project involves various infrastructure improvements. No residences are located within or along the project alignment that would result in the loss of any residential units. Therefore, the project would not displace any residents and would have no associated impact.

XIV. PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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?				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☒	☐	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☐	☒

Explanation of Checklist Judgments:

XIV(a). **Less Than Significant Impact.** The City of Paramount, along with other Gateway Cities located in the southeast region of Los Angeles County, has been experiencing growth in recent years due to rising economic activity from construction and an improvement in the regional economy. As a result, heavier traffic volumes are expected along major transportation corridors, including Garfield Avenue. However, the proposed roadway and streetscape improvements planned for Garfield Avenue to accommodate the projected increases in traffic volumes will not affect fire protection services in Paramount. As the project will require relocation of existing curb and gutter throughout the project alignment, approximately 39 existing fire hydrants will be relocated to accommodate the proposed street improvements. No other existing fire protection facilities within the project study area would be impacted by the project. In addition, the proposed project is an infrastructure improvement and would not result in the intensification of land use where additional demand for fire protection facilities may result. Alternatively, the project would likely result in more efficient response times to provide fire protection services due to improved traffic flow during peak hours. Although existing fire hydrants will be relocated as a result of the project, the number and operation of the relocated hydrants will be unaffected resulting in less than significant impacts to overall fire protection facilities and services.

XIV(b). **No Impact.** Similarly, as discussed, the proposed project improvements are intended to accommodate future traffic volumes and will not affect police protection services in Paramount. The project study area does not include existing police protection facilities that would be affected by the project. Additionally, the proposed Project would not

increase the intensity of surrounding land use that would require additional demand for police protection services. Instead, the project will likely result in a net improvement to traffic flow which would result in reduced response times and more effective delivery of police protection services. Therefore, no impacts would occur.

XIV(c). **Less Than Significant With Mitigation Incorporation.** Project implementation would not result in and the creation of land uses that would generate students. However, the proposed project may result in short term construction-related impacts to Wesley Gaines Elementary School located at the southwest corner of Garfield Avenue and Jackson Street. As construction activities for the project may restrict access along Garfield Avenue, vehicular access via an existing driveway to the school would be restricted on a periodic basis pending project construction activities along Garfield Avenue. As similarly described in Response X(a), all properties affected by project construction along Garfield Avenue will be notified in advance regarding potential impacts to their properties including vehicular and pedestrian access during construction. With the application of ***Mitigation Measure XIV(c)*** to notify and coordinate efforts with affected property owners, any potential impacts to restrict access on a temporary basis is considered to be less than significant.

> ***Mitigation Measure XIV(c):*** Prior to each construction phase, the City of Paramount shall send written notice to all property addresses and property owners along the affected area of Garfield Avenue, and to all emergency service providers for that area of the City, indicating construction start and end dates, total project duration, and a description of construction phase activities. This information shall be prominently posted on the City's website home page, and updated throughout construction.

XIV(d). **Less Than Significant Impact.** Although the project would not introduce any new population that would create additional demands on existing or planned park facilities, proposed construction for the utility undergrounding would temporarily impact access and use of Garfield Park. With the park's close proximity to the proposed utility undergrounding, Garfield Park may be closed or, at the minimum, limit access to the park along Garfield Avenue during pole removal and undergrounding activities. Given the short-term nature of restricted park access and use during construction, impacts in this regard are concluded to be less than significant.

XIV(e). **No Impact.** No libraries, community centers, or other community facilities are located within the project study area. As a roadway improvement and utility undergrounding project, there is no forseeable demand for additional public services or facilities that will be required. The proposed project is a non-residential use that would not involve the addition of any housing units that would increase population. Therefore, no additional demand for libraries or other public facilities would result, and no impact would occur.

XV. RECREATION	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Explanation of Checklist Judgments:

XV(a). **Less Than Significant Impact.** There are five parks located within a one-half mile radius of the project site. They are Village Park, Spane Community Park, Salud Community Park, Garfield Park, and Meadows Park. Garfield Park, classified as a mini-park at approximately 0.8 acre, is the smallest and closest park to the project area, located at the northwest corner of Garfield Avenue and Petrol Street.

The proposed project would not 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. However, as discussed in Response XIV(d)., short term construction related impacts may occur due to the proximity of Garfield Park to proposed construction activities which would temporarily limit or restrict access to the park during the first phase of construction. Temporary closure of the park may be anticipated during the removal of poles and overhead utilities. Otherwise, park access and use will remain open to the public throughout project construction with only periodic closures or partial park closure to accommodate pole removal along the parkway of Garfield Avenue. Therefore, impacts to parks would be less than significant.

XV(b). **No Impact.** The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. Thus, no impacts are anticipated and no mitigation is required.

XVI. TRANSPORTATION/TRAFFIC	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☒	☐	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

Explanation of Checklist Judgments:

XVI(a). **Less Than Significant Impact.** The proposed project would not conflict with transportation or circulation plans or policies, since it would improve Garfield Avenue to the design standards for a Major Arterial in the City of Paramount, consistent with the Paramount 2007 General Plan Transportation Element (Transportation Element), Policy 3, "The City of Paramount will continue to develop and enhance the existing streets and

intersections in the City." The Transportation Element classifies Garfield Avenue as a Major Arterial and designated truck route, designed to provide regional, sub-regional, and intra-city service, with three travel lanes in each direction.[38] Garfield Avenue presently has two lanes in each direction, without raised medians along most of the project area. With the project, Garfield Avenue would support three lanes in each direction and new left-turn lanes at Garfield's intersections with Rosecrans Avenue and Alondra Boulevard. The new travel lanes would be available only during peak hours, providing on-street parking during off-peak periods.

The Transportation Element describes the City's approach to evaluating its circulation system, using a combination of qualitative "levels of service" (LOS) and quantitative "volume-to-capacity" (v/c) ratios to understand how well the roadway system serves the community.[39] The LOS scale ranges from A through F, with LOS A representing "free-flow" traffic conditions, and LOS F describing severe congestion; the v/c ratio describes an roadway segment or intersection's design capacity in terms of traffic volumes. Traffic "volumes" essentially mean the number of vehicles using a roadway or intersection in a defined period, and "design capacity" means how many vehicles a road or intersection is designed to accommodate. The v/c ratio essentially compares the facility's design capacity to the number of vehicles that use the facility under existing and future conditions, showing whether the design capacity would be exceeded. A v/c ratio of 0.9 or more represents an LOS E to F; the Transportation Element states that a project would cause a significant impact if it would increase the volume-to-capacity (v/c) ratio of roadway segments or intersections functioning at levels-of-service D by 0.20 or more, and at LOS E or F by 0.10 or more.[40]

The traffic study prepared for the project[41] evaluated existing and proposed traffic conditions along Garfield Avenue, including detailed examination of nine signalized intersections' capacities, as well as the I-105 eastbound off-ramps. Table below summarizes the anticipated changes in levels of service for the nine intersections following project completion.[42] Specifically, the intersection of Rosecrans Avenue at Garfield Avenue would function at an unacceptable level of service "E" (LOS E) and a v/c of 0.923 by 2019 without the project; by 2035 (General Plan "Build-out" year), both that intersection and Garfield and Somerset would function at LOS E, with v/c ratios of 0.941 and 0.904, respectively. With the project, both intersections would function at an acceptable LOS C in 2019, with v/c ratios of 0.788 and 0.790. By 2035, both intersections would still function at an acceptable LOS D, with v/c ratios of 0.802 and 0.805. Other intersections would experience similar performance improvements, with 10 of 19 intersections functioning at LOS A in 2035.

Because both LOS and v/c ratios improve for the worst-performing intersections, the project would not cause General Plan significance thresholds to be exceeded. Accordingly, conflicts with the Transportation Element polices for intersection

[38] City of Paramount, *Final Paramount General Plan* (August, 2007), pp. 35-36.
[39] Id., p. 37. Tables 3-2 and 3-3 show LOS definitions and traffic impact analysis significance thresholds.
[40] Id.
[41] Willdan Engineering, *Garfield Avenue Capacity Enhancement Project Traffic Impact Analysis* (August 29, 2016) (Appendix F).
[42] Id., Table 3. See *Final Paramount General Plan*, pp. 37-38, for description and illustration of levels of service (LOS).

effectiveness would not be expected, and associated impacts would be less than significant.

The traffic impact analysis did not evaluate specific roadway segments between intersections for LOS or v/c. However, because the project will add travel lanes to provide additional roadway capacity at peak periods, it is reasonable to assume that LOS and v/c would not deteriorate below existing conditions.[43] Accordingly, conflicts with the Transportation Element polices for roadway function would not be expected, and associated impacts would be less than significant.

Finally, no conflicts with City policies related to alternative transportation are anticipated. Transportation Element Policies 9 – 11 generally set forth the City's support of alternative transportation, specifically "ongoing efforts to improve connections with other regional transit facilities and services" (Policy 11). The Long Beach and Metro transit lines serve various portions of Garfield Avenue. The proposed project would not alter or eliminate transit routes and would not change transit stops, although specific bus stop locations might temporarily change during construction. Any effects on transit would end following project completion. Accordingly, impacts associated with alternative transportation policy or operation would be less than significant.

[43] Willdan, p. 13.

Table 13

Summary of Intersection Level of Service Analysis & Significant Impact Analysis

Intersection			Existing Conditions (2015)				Existing Plus Project Conditions (2015)[1]				*Project Impact Under Existing Conditions*[2]		Opening Year (2019) Without Project Conditions				Opening Year (2019) Plus Project Conditions[1]				*Project Impact Under Opening Year Conditons*[3]		Build-out Year (2035) Without Project Conditions				Build-out Year (2035) Plus Project Conditions[1]				*Project Impact Under Build-out Year Conditons*[4]	
	Garfield Ave @	Peak Hour	V/C Ratio	ICU LOS[6]	Delay (secs)	HCM LOS[5]	V/C Ratio	ICU LOS[6]	Delay (secs)	HCM LOS[6]	Change in Ratio or Delay	Significant Impact?[5]	V/C Ratio	ICU LOS[6]	Delay (secs)	HCM LOS[6]	V/C Ratio	ICU LOS[6]	Delay (secs)	HCM LOS[6]	Change in Ratio or Delay	Significant Impact?[5]	V/C Ratio	ICU LOS[6]	Delay (secs)	HCM LOS[6]	V/C Ratio	ICU LOS[6]	Delay (secs)	HCM LOS[6]	Change in Ratio or Delay	Significant Impact?[5]
1	Jackson St	AM	0.546	A	-	-	0.460	A	-	-	-0.1	NO	0.563	A	-	-	0.474	A	-	-	-0.1	NO	0.573	A	-	-	0.482	A	-	-	-0.1	NO
		PM	0.505	A	-	-	0.425	A	-	-	-0.1	NO	0.521	A	-	-	0.437	A	-	-	-0.1	NO	0.530	A	-	-	0.444	A	-	-	-0.1	NO
2	Alondra Blvd	AM	0.812	D	-	-	0.659	B	-	-	-0.2	NO	0.841	D	-	-	0.682	B	-	-	-0.2	NO	0.856	D	-	-	0.693	B	-	-	-0.2	NO
		PM	0.848	D	-	-	0.693	B	-	-	-0.2	NO	0.878	D	-	-	0.716	C	-	-	-0.2	NO	0.894	D	-	-	0.729	C	-	-	-0.2	NO
3	Jefferson St	AM	0.472	A	-	-	0.388	A	-	-	-0.1	NO	0.487	A	--	--	0.398	A	-	-	-0.1	NO	0.494	A	--	--	0.405	A	-	-	-0.1	NO
		PM	0.458	A	-	-	0.380	A	-	-	-0.1	NO	0.471	A	-	-	0.390	A	-	-	-0.1	NO	0.479	A	-	-	0.396	A	-	-	-0.1	NO
4	Somerset Blvd	AM	0.858	D	-	-	0.764	C	-	-	-0.1	NO	0.888	D	-	-	0.790	C	-	-	-0.1	NO	0.904	E	-	-	0.805	D	-	-	-0.1	NO
		PM	0.771	C	-	-	0.710	C	-	-	-0.1	NO	0.797	C	-	-	0.734	C	-	-	-0.1	NO	0.811	D	-	-	0.747	C	-	-	-0.1	NO
5	Exeter St	AM	0.553	A	-	-	0.440	A	-	-	-0.1	NO	0.571	A	-	-	0.454	A	-	-	-0.1	NO	0.580	A	-	-	0.460	A	-	-	-0.1	NO
		PM	0.415	A	-	-	0.342	A	-	-	-0.1	NO	0.428	A	-	-	0.352	A	-	-	-0.1	NO	0.434	A	-	-	0.356	A	-	-	-0.1	NO
6	Rosecrans Ave	AM	0.892	D	-	-	0.762	C	-	-	-0.1	NO	0.923	E	-	-	0.788	C	-	-	-0.1	NO	0.941	E	-	-	0.802	D	-	-	-0.1	NO
		PM	0.793	C	-	-	0.637	B	-	-	-0.2	NO	0.821	D	-	-	0.658	B	-	-	-0.2	NO	0.836	D	-	-	0.670	B	-	-	-0.2	NO
7	Petterson Ln	AM	0.573	A	-	-	0.426	A	-	-	-0.1	NO	0.592	A	-	-	0.439	A	-	-	-0.2	NO	0.602	B	-	-	0.446	A	-	-	-0.2	NO
		PM	0.499	A	-	-	0.386	A	-	-	-0.1	NO	0.515	A	-	-	0.398	A	-	-	-0.1	NO	0.523	A	-	-	0.404	A	-	-	-0.1	NO
8	Mendy St	AM	0.649	B	-	-	0.506	A	-	-	-0.1	NO	0.671	B	-	-	0.522	A	-	-	-0.1	NO	0.683	B	-	-	0.531	A	-	-	-0.2	NO
		PM	0.576	A	-	-	0.457	A	-	-	-0.1	NO	0.595	A	-	-	0.471	A	-	-	-0.1	NO	0.606	B	-	-	0.480	A	-	-	-0.1	NO
9	I-105 EB Ramps	AM	-	-	32.1	C	-	-	32.1	C	0.0	NO	-	-	35.5	D	-	-	35.5	D	0.0	NO	-	-	37.5	D	-	-	37.5	D	0.0	NO
		PM	-	-	37.4	D	-	-	37.4	D	0.0	NO	-	-	42.4	D	-	-	42.4	D	0.0	NO	-	-	45.4	D	-	-	45.4	D	0.0	NO

[1] Project Assumptions:
- The proposed raised median would have the same openings and distance as the existing conditions.
- The 3rd travel lane would be provided by removing on-street parking.

[2] Project Impact under Existing Conditions = Impact of project traffic volumes, compared to baseline conditions of existing traffic volumes and existing intersection geometry.

[3] Project Impact under Opening Year Conditions = Impact of project traffic volumes, compared to baseline conditions of ambient growth added to existing traffic volumes.

[4] Project Impact under Build-out Year Conditions = Impact of project traffic volumes, compared to baseline conditions of Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan (RTP) projected growth (including major project in year 2035 network) added to existing traffic volumes.

[5] Significant Impact determined based on the County's Congestion Management Program, which says that a maximum of LOS D should be maintained at signalized intersections.

[6] ICU method used for intersection #1 - #8, and HCM 2010 method used for intersection #9.

XVI(b). **No Impact.** The proposed project is not anticipated to conflict with the Los Angeles County Congestion Management Program (CMP), because as explained in XV(a) above, the improvements to Garfield Avenue would enhance its capacity and ease congestion through at least 2035; moreover, Garfield Avenue and the intersections within the project are not part of the CMP system.[44]

XVI(c). **No Impact.** The proposed project would not affect air traffic patterns, since it is a roadway/intersection improvement project and does not involve aircraft movement.

XVI(d). **No Impact.** The proposed project does not include design features that would increase hazards. Rather, project improvements would accommodate additional left turn lanes at major intersections, upgraded signalized intersections, and a raised, landscaped median strip. The project TIA evaluated the project area's roadway segments and intersections, determining that the collision rate at several intersections typically exceeded the average statewide collision rate for signalized intersections in urban areas.[45] The TIA indicates that project improvements would likely reduce the number of collisions, particularly by channeling left-turning vehicles at intersections, and adding the raised median strip, which would reduce mid-block collisions from unrestricted left-turn movements. Accordingly, overall hazards in the project area would be reduced, and no significant impacts associated with unsafe design features would be expected.

XVI(e) **Less than Significant Impact with Mitigation Incorporated**. The proposed project would not result in inadequate emergency access because it would not permanently close Garfield Avenue during construction, and upon project completion, Garfield Avenue would accommodate increased travel capacity. Greater roadway capacity would tend to improve access both for emergency vehicles and for local evacuation requirements. Emergency services' response time might be temporarily impaired during construction by equipment blocking portions of the roadway; however, other north-south arterial streets nearby (Paramount Avenue, Downey Avenue, Lakewood Boulevard) would provide alternative access to areas north and south of the project area. However, because the project will take several years to complete, mitigation requiring specific notice of project timing to local emergency service providers and to property owners/occupants in the project area would reduce impacts associated with impaired response time and blocked evacuation routes. As discussed previously in Response XIV(c), ***Mitigation Measure XIV.c*** sets forth this requirement. With this mitigation, service providers and property owners and tenants would be given sufficient information for emergency preparedness. Resulting impacts would thus be less than significant.

XVI(f). **Less than Significant Impact.** As noted in XV(a) above, the proposed project is not expected to conflict with alternative transportation policies, plans or programs. The City of Paramount adopted a Joint Bicycle Master Plan with the City of Bellflower in 2016, but did not designate Garfield Avenue as a bicycle route. The Plan identifies a north/south bicycle route through the Edison right-of-way, but that route would not be substantially affected by the project. While temporary relocation of transit stops may be necessary during construction, transit would not otherwise be affected. Pedestrian circulation and access would likewise be affected by construction, but would not be completely blocked

[44] Los Angeles County Metropolitan Transportation Authority, *2010 Congestion Management Program for Los Angeles County*, Exhibits 2-3 and 2-4, pp. 13-14, available at http://media.metro.net/docs/cmp_final_2010.pdf (accessed August 30, 2016).
[45] Willdan, p. 9.

or otherwise significantly impacted, as pedestrians would ultimately be able to choose alternative routes and/or surfaces on which to walk. Finally, the proposed utility undergrounding will likely create more usable space on public sidewalks, increasing pedestrian circulation opportunities and improving safety. Accordingly, impacts to alternative transportation programs/policies or facilities would be temporary and end after the project is completed, and as such, are anticipated to be less than significant.

XVII. TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☒	☐
b) A resource determined by the lead agency, in its direction and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Explanation of Checklist Judgments:

XVII(a). **Less Than Significant Impact.** As discussed in Response V.a, above, the Cultural Resources Inventory Report conducted a records search and site reconnaissance survey, and determined that no properties in the project area were identified as listed or eligible for listing as significant historical resources. Further, the project does not appear to conflict with adopted plans and goals of the County of Los Angeles and the City of Paramount. As such, the potential effects of the proposed project on the properties is considered less than significant and will not result in adverse change to historical resources of cultural value to a California Native American tribe.

XVII(b). **Less Than Significant Impact With Mitigation Incorporation.** As the project site has been subject to past subsurface disturbance associated with roadway and infrastructure improvements over the years, including adjacent land use development along Garfield Avenue, it is unlikely that undisturbed archaeological resources exist on the project site. Additionally, a search of archaeological records conducted for the project indicated that there are no recorded archaeological sites located within, or in proximity to, the project study area. A review of historical maps and other archival materials also indicates that the likelihood of encountering buried historic or prehistoric archaeological deposits within the project footprint is low.

In accordance with Assembly Bill 52 (AB 52), a notification letter was sent to the local Native American Tribe (Gabrieleno Band of Mission Indians) on January 30, 2017 requesting consultation in regards to the project. Additional Native American groups were also later contacted based upon correspondence from the Native American Heritage Commission of other tribes associated within the region that may be potentially impacted by the project. Following these initial outreach efforts as documented in Appendix C and G, the City received only a response via email from the Gabrieleno tribal representative, Mr. Andrew Salas, dated February 9, 2017 which acknowledged the potential to disturb tribal cultural resources within the area. Despite general ground disturbance up to six feet or less for project implementation, appropriate mitigations, including archaeological monitoring, shall be in place in the event that tribal cultural resources or human remains are discovered or any earth-moving activities exceeding six feet below grade.[46] [47] As such, these mitigations would provide adequate safeguards to protect tribal cultural resources during excavation activities.

Although the project area is almost completely paved, there remains some potential for deeply buried archaeological deposits lying beneath the levels disturbed by street, sidewalk, and utility construction.[48] Thus, in response to Mr. Salas request for Native American on-site monitors during any ground disturbing activities as part of project implementation, the City will require the project to incorporate appropriate mitigation measures that will include an archaeological monitoring program for deeper excavations (six feet or more below grade) that will be performed by a licensed archaeologist on-site during such earthmoving activities. In the event that Native American resources are identified during such earthmoving activities, a Native American Monitor of Gabrielino descent will be added for the remainder of the monitoring program. Thus, the following mitigation measure will be incorporated into the Initial Study/Mitigated Negative Declaration and implemented as part of the project's Mitigation Monitoring and Reporting Program:

Mitigation Measure XVII.b-1

a) *The City shall conduct an archaeological monitoring program during such earthmoving involving excavations into younger Quaternary Alluvial deposits (at six feet or more below grade);*

b) *The archaeological monitoring program shall be conducted in a manner consistent with archaeological standards and, in this case, conducted on a full-time or part-time basis, at the discretion of the Lead Agency;*

[46] Email correspondence from the Mr. Andrew Salas from the Gabrieleno Band of Mission Indians, dated February 9, 2017. A copy of the email correspondence received from Mr. Salas is included in Appendix G.

[47] A copy of the letter sent to the local NA tribe, Mr. Salas from the Gabrieleno Band of Mission Indians is included in Appendix H.

[48] Based on geotechnical studies performed near the project area, Native American resources, if present, would only be encountered in shallow alluvium that underlie existing artificial fill consisting of hard to very hard sandy lean clays starting at a depth of approximately 6 feet or deeper.

c) *Should evidence of archaeological resources be uncovered, the archaeological monitoring program shall continue on a full-time basis until it is determined no more younger alluvium is being impacted;*

d) *If evidence of Native American resources is identified, a Native American Monitor or Gabrielino descent shall be added to the remainder of the monitoring program;*

e) *If, at any time, evidence of human remains is uncovered, the County Coroner must be notified immediately and permitted to examine the find in situ. If the remains are determined to be of Native American descent, the Native American Heritage Commission shall be contacted and the Most Likely Descendent (MLD) named. In consultation with the MLD, City, Coroner, and archaeological consultant, the disposition of the remains will be determined.*

As noted in Response V.a., compliance with ***Mitigation Measures V.b-1 and V.d-1*** related to accidental discovery of tribal cultural resources and ***Mitigation Measure XVII.b-1*** for archaeological monitoring for deeper excavations greater than six feet, as noted below, would reduce potentially significant impacts to a less than significant level.

XVIII. UTILITIES AND SERVICE SYSTEMS	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) **Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**	☐	☐	☒	☐
b) **Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**	☐	☐	☒	☐
c) **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**	☐	☐	☐	☒
d) **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**	☐	☐	☐	☒
e) **Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**	☐	☐	☒	☐
f) **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**	☐	☐	☒	☐
g) **Comply with federal, state, and local statutes and regulations related to solid waste?**	☐	☐	☒	☐

Explanation of Checklist Judgments:

XVIII(a). **Less Than Significant Impact.** The proposed project would construct roadway and streetscape improvements and perform undergrounding of overhead utilities, which would not contribute wastewater to the sanitary sewer system. Increases in pervious surfaces will occur, thereby reducing run-off to the local storm drainage system. The increase in pervious area is due to the addition of raised landscaped medians that would increase pervious surfaces approximately 25,100 square feet (0.58 acre). Positive site drainage and control mitigation measures completed in compliance with City ordinances and conditions of project construction are expected to control runoff and ensure surface water

quality. Due to the current lack of surface groundwater, site runoff is not expected to exceed the capacity of the storm drains serving the site. Therefore, the project would have a less than significant impact on wastewater treatment.

XVIII(b). **Less Than Significant Impact.** The proposed project would not result in the construction of new or expanded water or wastewater treatment facilities. The proposed project is a roadway and utility infrastructure improvement project that would not generate sanitary sewer flows. However, the proposed project would constitute a minor source of stormwater and non-stormwater runoff, and would utilize only minor amounts of water for the center medians. In particular, the median will include an inverted design that will prevent outflow runoffs as well as utilize low to medium water efficient trees, shrubs and groundcover to reduce overall water use. Finally, the proposed project would result in construction of irrigation facilities using reclaimed water to service the center medians, such as water meters, water valves, and backflow preventers. However, such improvements are minor in scope that do not require heavy equipment and can be constructed as part of the median improvements. Therefore, the impacts related to water infrastructure would be less than significant.

XVIII(c). **No Impact.** As stated above in response XVII(a), the pervious surfaces of the project study area would increase by 0.58 acre to accommodate the proposed median improvements. The proposed project would construct standard roadway improvements including curbs and gutters that will involve the reconstruction of 45 catch basins. No other expansion of stormwater drainage facilities is anticipated as a result of the project. Therefore, the project would have no impact on stormwater drainage facilities.

XVIII(d). **No Impact**. The Metropolitan Water District (MWD) provides potable and recycled water service to the project study area. Water available to MWD comes from groundwater, desalination, recycled water (or reclaimed water) and supplemental imported water from the State Water Project and the Colorado River.[49] The proposed project would not use potable water during project construction and operation. Although the proposed would install new landscaped medians, the irrigation system would be designed to use recycled water and be water efficient based on the selection of drought tolerant species of landscape trees, shrubs and groundcover. In addition, the proposed project would increase pervious areas by 0.58 acre, thereby increasing groundwater infiltration within the project study area. Thus, the proposed project would have sufficient water supplies available to serve the proposed project from existing entitlements and resources, and no new or expanded entitlements would be needed. Therefore, no impacts would occur.

XVIII(e). **Less Than Significant Impact.** See response XVII(b), above.

XVIII(f). **Less Than Significant Impact.** Construction at the project site is anticipated to result in the removal of roadway asphalt, concrete, curb and gutter, and other existing roadway improvements in order to accommodate the roadway and utility improvements. This will create the requirement for solid waste removal, however, the construction contractor will be responsible for reduction, reuse (where possible) and removal of solid waste from the site. The Los Angeles Sanitation District indicates that its Mesquite Regional Landfill in Imperial County has capacity for 20,000 tons per day for the next 100 years; non-

[49] http://www.mwdh2o.com/AboutYourWater/Sources%20Of%20Supply/Local-Supplies/Pages/default.aspx, website accessed on August 30, 2016.

recyclable waste is accepted by local transfer stations and transported by rail.[50] Additionally, there are at least 36 facilities in Los Angeles County that accept concrete and asphalt waste for reprocessing.[51] Accordingly, with existing landfill capacity and with efforts to recycle asphalt and concrete waste, associated impacts to landfill facilities are expected to be less than significant.

XVIII(g). **Less Than Significant Impact.** Disposal of waste materials generated during construction will comply with all local, state, and federal requirements for integrated waste management (e.g., recycling, green waste) and solid waste disposal. As stated above in Response XVII(f), the amount of solid waste generated from the project will not exceed the standards or capacity of local disposal facilities. Therefore, a less than significant impact would occur.

[50] Los Angeles County Sanitation Districts, *Solid Waste Facilities*, available at http://www.lacsd.org/solidwaste/swfacilities/default.asp (accessed September 8, 2016).
[51] CalRecycle, *Facility Information Toolbox, Detailed Facility Search*, available at http://www.calrecycle.ca.gov/FacIT/Facility/Search.aspx#LIST (accessed September 8, 2016).

XIX	MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Does the project:					
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?**	☐	☐	☐	☒
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.)**	☐	☐	☒	☐
c)	**Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**	☐	☐	☒	☐

Explanation of Checklist Judgments:

XIX(a) **No Impact.** There are no sensitive fish or wildlife habitat areas in the vicinity of the proposed project. The project is also located within an area of low biological resource value since the surrounding area is considered urbanized and highly disturbed with little to no native vegetation to support any sensitive species. Therefore, no degradation of the environment or any adverse impacts to any sensitive species or cultural resources are anticipated as a result of the project.

XIX(b). **Less Than Significant Impact.** Cumulative impacts are limited to the construction activities (e.g., noise, dust, temporary drainage, traffic detours and temporary access, etc.) for these infrastructure improvements, and would be minimized by avoiding simultaneous construction of each component (i.e., street, sidewalk, utilities, etc.) of this project. Coordination within the separate components of this project and with other current and future infrastructure projects within proximity of each other will be necessary to avoid undue inconvenience to the general public and affected businesses. Since the project is intended to improve traffic operations and safety along Garfield Avenue and

at key intersections and not contribute to an existing capacity demand, no cumulative impacts are anticipated.

XIX(c). **Less Than Significant Impact.** Any potentially adverse effects on human beings associated with the project will be limited to project construction. Short-term exposure to potential noise, air and water pollution associated with heavy construction vehicles may be expected. However, implementation of mitigation measures during the construction phase will minimize the potential adverse impacts associated with project construction to a less than significant impact. Appropriate measures and management practices such as limiting construction periods, providing structural mitigations, and coordination with affected businesses and other service agencies will be employed during construction as necessary. Otherwise, the project will not have any long-term adverse impacts on human beings but will instead enhance traffic operations and safety along Garfield Avenue and at key intersections. Based on the analysis in this Initial Study, and with application of the incorporated mitigation measures, the project will not present substantial adverse effects on human beings.

MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the Paramount Garfield Avenue Capacity Enhancement Project in compliance with Section 21081.6 of the Public Resources Code and Section 15097 of the CEQA Guidelines, which is required for all projects where an Environmental Impact Report or Mitigated Negative Declaration (MND) has been prepared. Section 21081.6 of the Public Resources Code states: "...the [lead] agency shall adopt a reporting or monitoring program from the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment...[and the program] shall be designed to ensure compliance during project implementation." The primary purpose of this MMRP is to ensure that the mitigation measures identified in the MND are implemented, thereby minimizing identified environmental effects. The City of Paramount is the Lead Agency for the proposed project.

The MMRP for the proposed project will be in place through all phases of project implementation. The Community Development Department shall be responsible for administering the MMRP activities to its staff, other City departments (e.g., Los Angeles County Fire Department), consultants, and/or contractors. The Community Development Department will also ensure that mitigation monitoring is documented through reports and that deficiencies are promptly corrected. The designated environmental monitor (e.g., City building inspector, project contractor, certified professionals, etc., depending on the provisions specified below) will track and document compliance with mitigation measures, note any problems that may result, and take appropriate action to remedy problems. The MMRP lists mitigation measures according to the same numbering system contained in the MND sections. Each mitigation measure is categorized by topic, with an accompanying discussion of the following:

- The implementation phase of the project during which the mitigation measure should be monitored (i.e., Operation, Construction, or Pre-construction activities);
- The responsible enforcement authority for monitoring implementation of mitigation measure(s) (i.e., City building inspector, certified professional, etc.); and
- The reporting procedure used to verify compliance (i.e., issuance of permit, report on monitoring activities, etc.).

Mitigation Measure	Period of Implementation	Monitoring Responsibility	Reporting Procedure
Mitigation Measure V.b-1: The unanticipated exposing of archaeological resources has the potential to destroy or cause substantial damage to significant cultural resources. Should buried cultural resources be encountered during project-related construction activities, all ground-disturbing activity should be immediately suspended within a 100-foot radius of the find until a qualified professional archaeologist, retained by the City, is contacted to evaluate the significance of the find (per CEQA regulations). Examples of Native American cultural materials might include shell or bone; ground stone tools such as mortars, bowls, pestles, or manos; flaked stone tools such as projectile points or scrapers; stone flakes associated with tool manufacture. Historic materials may include trash deposits or scatters containing bottle glass, ceramics, metal items, or structural remains. If the archaeological resources are found to be potentially significant, impacts to the resources will be mitigated in a manner consistent with California Office of Historic Preservation (OHP) guidelines. Appropriate mitigation may include avoidance of the resources, testing, and/or data recovery. Ground disturbance in the area of suspended activity shall not recommence until authorized by the archaeologist.	Excavation/Construction	City's Community Development Department and qualified archaeologist, if necessary Native American monitor required in the event that Native American resources are uncovered during excavation/construction activities.	Any archeological and/or cultural artifacts, if uncovered, shall be documented and avoidance of the area of the find, testing, data recovery, reburial, archival review and/or transfer to the appropriate museum or educational institution, or other appropriate actions shall be undertaken at the discretion of the qualified archaeologist and/or Native American monitor.
Mitigation Measure V.d-1: If human remains are encountered, all ground-disturbing activities shall immediately be suspended within a 100-foot radius of the find, or a distance determined by a qualified professional archaeologist to be appropriate based on the potential for disturbance of additional remains. The Los Angeles County Coroner must be contacted. If the remains are of Native American origin, the most likely descendants of the deceased must be identified by the Native American Heritage Commission (NAHC). The City of Paramount will consult with the Native American most likely descendant(s) to identify a mutually acceptable strategy for treating, with appropriate dignity, the human remains and any associated grave goods as provided	Excavation/Construction	City's Community Development Department, qualified archaeologist, Los Angeles County Coroner, and NAHC (if necessary)	Halt work in the immediate area if any human remains are encountered during ground disturbing activities and contact a qualified archaeologist and the County coroner.

Mitigation Measure	Period of Implementation	Monitoring Responsibility	Reporting Procedure
in PRC Section 5097.98. If the NAHC is unable to identify a most likely descendant; if the descendant fails to make a recommendation within 24 hours of being notified by the NAHC or the City; or if the descendant is not capable of reaching a mutually acceptable strategy through mediation by the NAHC, the Native American human remains and associated grave goods will be reburied with appropriate dignity on the proposed project site in a location not subject to further subsurface disturbance.			
n Measure VIII.d-1: During subsurface excavation activities, trenching, and grading, Cal/OSHA worker safety measures shall be implemented as required to preclude an exposure to unsafe levels of soil contaminants.	Excavation/Construction	City's Community Development Department and Los Angeles County Fire Department	Halt work in the immediate area if any contaminated soil, groundwater and/or toxic materials are encountered during ground disturbing activities and contact the Los Angeles County Fire Department.
n Measure VIII.d-2: Any contaminated soil, groundwater and/or toxic materials encountered during excavation and grading shall be evaluated and excavated/disposed of, treated in-situ (in-place), or otherwise managed in accordance with applicable regulatory requirements. If contamination is discovered during excavation/grading activities, excavation/grading within such an area shall be temporarily halted and redirected around the area, if possible, until the appropriate evaluation and follow-up measures are implemented so as to render the area suitable for excavation/grading activities to resume.	Excavation/Construction	City's Community Development Department and Los Angeles County Fire Department	Halt work in the immediate area if any contaminated soil, groundwater and/or toxic materials are encountered during ground disturbing activities and contact the Los Angeles County Fire Department.

Mitigation Measure	Period of Implementation	Monitoring Responsibility	Reporting Procedure
n Measure VIII.d-3: Construction contracts shall include provisions requiring continuous compliance with all applicable federal, state, and local government regulations and conditions related to hazardous materials and wastes management.	Pre-Construction, Excavation/Construction	City's Community Development Department and Los Angeles County Fire Department	Plan Check Notes, Reports, Surveys and Field Inspections
n Measure XII.a-1: Control of Construction Hours – All noise generating construction activities shall be limited to the allowable hours of 7:00 a.m. and 6:00 p.m. Monday through Friday, and between 9:00 a.m. and 6:00 p.m. on Saturdays and Sundays. As long as the project construction occurs within these hours, it will be in compliance with the Noise Ordinance.	Excavation/Construction	City's Community Development Department	Plan Check Notes, Reports, Surveys and Field Inspections
Mitigation Measure XIV(c): Prior to each construction phase, the City of Paramount shall send written notice to all property addresses and property owners along the affected area of Garfield Avenue, and to all emergency service providers for that area of the City, indicating construction start and end dates, total project duration, and a description of construction phase activities. This information shall be prominently posted on the City's website home page, and updated throughout construction.	Pre-Construction, Excavation/Construction	City's Community Development Department, Los Angeles County Sheriff's Department, Los Angeles County Fire Department and local water purveyors	Plan Check Notes, Reports, Surveys and Field Inspections Contact local water purveyors and Los Angeles County Fire Department, Battalion Headquarters prior to planned road closures and hydrant relocations.
Mitigation Measure XVII.b-1 *(for archaeological monitoring for deeper excavations greater than six feet)* a) The City shall conduct an archaeological monitoring program during such earthmoving involving excavations into younger Quaternary Alluvial deposits (at six feet or more below grade); b) The archaeological monitoring program shall be conducted in a manner consistent with archaeological standards and, in	Excavation/Construction	City's Community Development Department and qualified archaeologist Native American monitor required in the event that Native American resources are uncovered during	Any archeological and/or cultural artifacts, if uncovered, shall be documented and avoidance of the area of the find, testing, data recovery, reburial, archival review and/or transfer to the

Mitigation Measure	Period of Implementation	Monitoring Responsibility	Reporting Procedure
this case, conducted on a full-time or part-time basis, at the discretion of the Lead Agency; c) Should evidence of archaeological resources be uncovered, the archaeological monitoring program shall continue on a full-time basis until it is determined no more younger alluvium is being impacted; d) If evidence of Native American resources is identified, a Native American Monitor or Gabrielino descent shall be added to the remainder of the monitoring program; e) If, at any time, evidence of human remains is uncovered, the County Coroner must be notified immediately and permitted to examine the find in situ. If the remains are determined to be of Native American descent, the Native American Heritage Commission shall be contacted and the Most Likely Descendent (MLD) named. In consultation with the MLD, City, Coroner, and archaeological consultant, the disposition of the remains will be determined.		excavation/construction activities.	appropriate museum or educational institution, or other appropriate actions shall be undertaken at the discretion of the qualified archaeologist and/or Native American monitor.