

- E.3 Hearing to consider an 85-unit residential townhome development (Integral Communities) on an approximately 4.28 acre site (APN: 901-0195-039) on the northeast corner of Cedar Boulevard and Mowry School Road: (1) resolution making certain findings and approving an Initial Study/Mitigated Negative Declaration for the Cedar Townhomes project; (2) resolution approving a General Plan Amendment to change the land use designation from CC (Community Commercial) to HR (High Density Residential); (3) Introduction of an ordinance amending Title 17 (Zoning) of the Newark Municipal Code and Section 17.44.010 “Zoning Map” by rezoning all that real property shown on Vesting Tentative Tract Map 8166 and approving a rezoning from CC (Community Commercial) to R-1,500 (High Density Residential – 1,500); (4) resolution making findings supporting the use of an alternative means of compliance with the Inclusionary Housing Ordinance and authorizing the Mayor to sign the attached Affordable Housing Implementation Agreement; (5) resolution authorizing the Mayor to sign a Community Financing Agreement with Newark Atrium Project Owner, LLC (6) resolution approving Tentative Tract Map 8166; and (7) By motion, approving an Architectural and Site Plan Review – from Assistant City Manager Grindall.**
- (RESOLUTIONS-5)(INTRODUCTION OF AN ORDINANCE)(MOTION)**

Background/Discussion – Integral Communities, Inc. has submitted an application for the development of 85 townhomes on a vacant lot located at 39850 and 39888 Cedar Boulevard (northeast corner of Cedar Boulevard and Mowry School Road). Attached is Exhibit A, pages 1 to 33.

The 4.28+/- acre site has a CC (Community Commercial) zoning and General Plan land use designation. Approval of the project would require an amendment to both designations to accommodate the residential use. It is proposed to rezone the site to R-1,500 (High Density Residential – 1,500) and change the General Plan land use designation to HR (High Density Residential). Surrounding land uses include a 2.5 acre condominium complex across the street on Cedar Boulevard (Murieta condos), the Towne Place Suites to the north, the Balentine Park office complex to the east, and the Balentine Plaza shopping center to the south. In 2007, City Council approved a retail/office complex at this site but the project was never built.

Project Description

The proposed project includes the construction of eleven three and four-story buildings, with each building containing between seven to eleven units. Dwellings would front onto both Cedar Boulevard and Mowry School Road, while the remainder of the units along the perimeter would be sited near the property line of the adjoining Balentine Park office complex. Five rows of dwellings would be centrally constructed on the interior of the site in an approximate east-west direction.

Vehicular access to the project site would be via the existing office complex driveway off of Mowry School Road. A series of private drives would provide on-site access and would serve to each homes’ two-car garage. Approximately three-fourths of the dwellings would have side-by-side garages, while the remaining homes would have tandem garages. A children’s tot-lot is proposed in the southeast corner of the site.

The attached townhomes would consist of two to four bedrooms, varying with five different plan types. Three and four-story dwellings would be constructed and would range from 1,486 to 2,114 square feet of living space in size. A total of ten four-story dwellings accommodating a game room and balcony on the top floor are proposed. Building elevations would reflect a Spanish design, incorporating architectural elements such as arches, balconies, ornamental iron work, an off-white and tan color exterior and terracotta roof tiles. Additional decorative features include awnings, wood trellises and stone veneer on the ground elevations.

Neighborhood Meeting

The developer held a neighborhood meeting on April 16, 2014 at the Newark Hilton Hotel. Notices of the meeting were sent to 363 property owners within a 300-foot radius of the project site, including to the Murieta condominium complex across from the project site. Thirteen members of the public attended the meeting, including various residents of the condo complex. During the meeting, the public raised questions about the project, including parking, access to the site, timing of the project, and pricing of the proposed homes. The developer explained project specifics for an approximate 45-minute meeting duration and in the end, solicited contact information from those who wished to receive future project information.

Affordable Housing

Chapter 17.18 of the Newark Municipal Code (NMC) mandates that all housing developments of five units or more make available a minimum of 15% of the total number of units to very low, low and moderate income households. Of the fifteen percent affordable units required, nine percent are to be set aside for moderate income households which earn 110% or less of the median income while six percent are to be reserved for lower income households earning 80% or less of the median income. A total of thirteen affordable units would be required to comply with the ordinance. However, the NMC also allows developers to meet the affordable housing requirement through other forms of compliance, such as land dedication, payment of in-lieu fees, or an alternative housing program. In this case, the developer proposes to meet the affordable housing requirement by providing the affordable units off-site as an alternative method of compliance. The affordable units would be provided at the SHH project site located within the Dumbarton TOD that was approved by City Council on April 24, 2014 and is also being developed by Integral Communities. In lieu of providing the required fifteen percent affordable units, the developer would provide ten percent, or nine units, for lower income households that earn 60% or less of the median income. Although fewer units would be provided, staff supports the alternative proposal as the lower income bracket would benefit persons in greater need of affordable housing.

Community Financing Agreement

The aforementioned land use changes from commercial to residential necessary to implement the project would reduce the opportunity for the development of a hotel on the property, which would potentially provide transient occupancy taxes. Staff is nevertheless in support of the project, as the property has been vacant for various years and is not considered to be a prime commercial site. Furthermore, the applicant and the City have agreed on a financial contribution

payable to the City to ameliorate the reduction of potential transient occupancy taxes, in the amount of \$20,000 per dwelling unit.

Environmental Analysis

An Initial Study/Mitigated Negative Declaration was prepared for this project in order to identify any potential environmental impacts that would result in implementing the project. The environmental factors analyzed were aesthetics, agricultural resources, air quality, biological and cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation and circulation and utilities. The environmental study concluded that the proposed project would not have a significant adverse impact on overall environmental quality, including biological resources with adherence to the mitigation measures listed in the Initial Study. The project site is vacant and is located in an urban, developed area. Although a pond is located on the project site, the environmental analysis indicates that no wetlands have been identified and the site does not contain significant mature trees that could provide nesting habitat to birds. Additional traffic as a result of the project would have an effect on local streets and regional streets; however the impacts can be reduced to a less-than-significant level with adherence to mitigation measures. The analysis also indicates that increased air pollutant emissions would also result in a less-than-significant impact to the environment.

The review period for the IS/MND ended on April 17, 2014. Staff did not receive any letters from the public.

Update – At its meeting of May 27, 2014, the Newark Planning Commission: 1) approved Resolution 1876 making certain findings and recommending City Council approval of E-14-6, an Initial Study/Mitigated Negative Declaration; (2) approved Resolution 1877 recommending City Council approval of GP-14-7, a General Plan Amendment to change the land use designation from CC (Community Commercial) to HR (High Density Residential); (3) approved Resolution 1878 recommending City Council approval of RZ-14-8, a rezoning from CC (Community Commercial) to R-1,500 (High Density Residential – 1,500); (4) approved Resolution 1879 making findings supporting the use of an alternative means of compliance with the Inclusionary Housing Ordinance and recommending the City Council approve an Affordable Housing Implementation Agreement.

On May 27, 2014 the Newark Planning Commission also by Motion:

(5) recommended City Council approval of TTM-14-11, Tentative Tract Map 8166; and (6) recommended City Council approval of ASR-14-9, an Architectural and Site Plan Review, with Exhibit A, pages 1 to 33, to construct a 85-unit residential townhome development (Integral Communities) on an approximately 4.3 acre site (APN: 901-0195-039) on the northeast corner of Cedar Boulevard and Mowry School Road.

Attachments

Action – It is recommended that the City Council, by motion:

- (1) Adopt a resolution making certain findings and adopting an Initial Study/Mitigated Negative Declaration for the Cedar Townhomes project;
- (2) Adopt a resolution approving an amendment to the Land Use Element of the General Plan to change land use designation from CC (Community Commercial) To HR (High Density Residential);
- (3) Introduce an ordinance amending Title 17 (Zoning) of the Newark Municipal Code and Section 17.44.010 "Zoning Map" by rezoning all that real property shown on Vesting Tentative Tract Map 8166 from CC (Community Commercial) to R-1,500 (High Density Residential – 1,500);
- (4) Adopt a Resolution approving an alternative means of compliance with the Inclusionary Housing Ordinance for the Cedar Townhomes Project; making findings related to the use of an Alternative Means Of Compliance; and authorizing the Mayor to sign the Affordable Housing Obligation Satisfaction Agreement;
- (5) Adopt a resolution authorizing the Mayor to sign a Community Financing Agreement with Newark Atrium Project Owner, LLC;
- (6) Adopt a resolution approving Vesting Tentative Tract Map 8166; and
- (7) By motion, approve ASR-14-9, an Architectural and Site Plan Review, with Exhibit A pages 1 to 33.

(1) Adopt a resolution making certain findings and adopting an Initial Study/Mitigated Negative Declaration for the Cedar Townhomes project;

RESOLUTION NO.

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
NEWARK MAKING CERTAIN FINDINGS AND ADOPTING
AN INITIAL STUDY/MITIGATED NEGATIVE
DECLARATION FOR THE CEDAR TOWNHOMES PROJECT

WHEREAS, the Cedar Townhomes Atrium Project (“Project”), consists of the construction of 85 townhome dwelling units on approximately 4.28 acres (APN 901-0195-039); and

WHEREAS, the entitlements requested include Tentative Tract Map 8166 (TTM-14-11), a general plan amendment, rezoning; and

WHEREAS, pursuant to the requirements of the California Environmental Quality Act (CEQA), a project level Initial Study and Mitigated Negative Declaration has been prepared for the Project, pursuant to Section 15070 *et seq.* of the CEQA Guidelines, to analyze and mitigate the Project’s potentially significant environmental impacts; and

WHEREAS, through this study, it has been determined that the Project’s potentially significant environmental impacts specifically relate to impacts associated with light or glare, air quality, biological resources, cultural resources, water quality, noise, and traffic; and

WHEREAS, these potentially significant impacts can be mitigated to less than significant as shown in Section 18 of the Initial Study/Mitigated Negative Declaration, and;

WHEREAS, a 20-day public review period for the Notice of Availability of the IS/MND was established beginning on March 28, 2014 and ending on April 17, 2014. Copies of the notice were transmitted, along with copies of the IS/MND, to local agencies concerned with the Project. The notice was posted with the Office of the Alameda County Clerk on March 28, 2014; and

WHEREAS, as of the date of this resolution, June 12, 2014, no comment letters have been received; and

WHEREAS, on May 27, 2014, the Planning Commission of the City of Newark conducted a duly noticed public hearing to consider the Initial Study and Mitigated Negative Declaration of environmental impact for the proposed Project, considered all public testimony, written and oral, presented at the public hearing; and received and considered the written information and recommendation of the staff report for the May 27, 2014 meeting related to the proposed Project, and;

WHEREAS, the Planning Commission of the City of Newark recommended that City Council consider adopting the Initial Study and approving the Mitigated Negative Declaration of environmental impact for Vesting Tentative Tract Map 8166 (TTM-14-11), the amendment of the Land Use element of the Newark General Plan, the amendment to Title 17 (Zoning) of the Newark Municipal Code and the Official Zoning Map (RZ-14-8) and;

NOW, THEREFORE, the City Council finds and resolves the following:

1. The Initial Study and corresponding Mitigated Negative Declaration of environmental impact were released for public review and said mitigation measures contained within the same would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and;
2. There is no substantial evidence in light of the whole record before the City of Newark that the project may have a significant effect on the environment.
3. The City Council has read and considered the Initial Study and the Mitigated Negative Declaration, and the comments thereon, and has determined the Initial Study and the Mitigated Negative Declaration reflect the independent judgment of the City and were prepared in accordance with CEQA.
4. The Initial Study and the Mitigated Negative Declaration (including any revisions developed under 14 C.C.R § 15070(b)), all documents referenced in the same, and the record of proceedings on which the Planning Commission and City Council's decision is based are located in the Community Development Department at City Hall, located at 37101 Newark Blvd, California, and is available for public review.

NOW, THEREFORE, the City Council:

- a. Adopts the Mitigation Monitoring and Reporting Program, as set forth in Exhibit B to this Resolution and incorporated herein by reference;
- b. Based on the evidence and oral and written testimony presented at public hearings, and based on all the information contained in the Community Development Department's files on the project, including, but not limited to, the Initial Study/Mitigated Negative Declaration, the Planning Commission's and City Council's staff reports, certifies in accordance with CEQA guidelines that:
 1. The Initial Study/Mitigated Negative Declaration was prepared in compliance with CEQA and CEQA guidelines;
 2. The City Council has reviewed and considered the information contained in the Initial Study/Mitigated Negative Declaration prior to approving the project;
 3. The Initial Study/Mitigated Negative Declaration adequately describes the project, its environmental impacts, reasonable alternatives and appropriate mitigation measures;
 4. The Initial Study/Mitigated Negative Declaration reflects the independent judgment and analysis of the City Council.

EXHIBIT B

Cedar Townhomes Residential Project
Mitigation Monitoring and Reporting Program

May 2014

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Monitoring Schedule	Verification
<p>Mitigation Measure AES-1. The following measures shall be incorporated into project building plans:</p> <ul style="list-style-type: none"> a) Parking lot lighting shall be equipped with cut-off lenses to ensure that no light spills over onto either the adjacent streets or properties. The cut-off lenses shall be shown on the plans submitted for a building permit. b) Light levels shall meet the minimum security standards required by the Newark Police Department. c) Photometric plans shall be submitted and approved by the Newark Planning Division prior to issuance of a building permit to ensure that spillover of lights will be kept to a minimum. 	Project Developer	Newark Planning Division and Police Department	Prior to issuance of a building permit	
<p>Mitigation Measure AIR-1. The developer shall be responsible for the following measures to control fugitive dust emissions. These measures shall be included on construction and demolition plans and specifications.</p> <ul style="list-style-type: none"> a) Using water as needed to control dust and eliminate visible dust plumes. b) Covering all trucks hauling building debris, soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. c) Sweeping daily (preferably with 	Project Developer	Newark City Engineer or Building Official	During project construction	

Verification

Monitoring Schedule

Monitoring Responsibility

Implementing Responsibility

Mitigation Measure

<p>water sweepers) all paved access roads, parking areas and staging areas at construction sites.</p> <p>d) Sweeping streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.</p> <p>e) Watering or covering of stockpiles of construction debris, soil, sand or other materials that can be blown by the wind..</p>				
<p>Mitigation Measure BIO-1. If grading activities take place on the site during the nesting season (February-August), a pre-construction survey shall be completed by a qualified biologist for nesting birds. If any birds protected under the Migratory Bird Treaty Act are found, a buffer of at least 75 feet (for passerine birds) or 200 feet (raptors) shall be established. Once young birds have fledged, construction within the buffer area can proceed.</p>	<p>Prior to approval of grading permit</p>	<p>Newark Planning Division</p>	<p>Project Developer</p>	
<p>Mitigation Measure CULT-1. If buried archeological, historical, paleontological or Native America artifacts are found during project grading and construction, all work within a 50-foot wide radius of any discovery of such artifacts shall be halted. The City will then select a qualified professional to evaluate such resources and prepare a resource protection plan that complies with CEQA</p>	<p>During project construction</p>	<p>Newark Planning Division</p>	<p>Project Developer</p>	

Mitigation Measure

Implementing Responsibility

Monitoring Responsibility

Monitoring Schedule

Verification

<p>standards; work shall not be restarted until the resource protection plan is fully implemented. If human remains are encountered, the County Coroner and the Newark Police Department shall be immediately notified. This requirement shall be included in grading plans and specifications.</p>				
<p>Mitigation Measure HYD-1. Prior to issuance of a grading permit, a hydrology report shall be prepared by a California registered civil engineer using Alameda County Flood Control and Water Conservation District standards documenting existing stormwater flows from the site, estimated increases in the amount of peak stormwater flows, the estimated direction of flows and the capacity of downstream drainage facilities to accommodate estimated project increases. The report shall also document increases in downstream capacity that would be needed to accommodate drainage and the project's financial contribution to downstream improvements. The report shall be approved by the City of Newark and, at the discretion of the City Engineer, the Alameda County Flood Control and Water Conservation District..</p>	<p>Project Developer</p>	<p>Newark Engineering Division</p>	<p>Prior to issuance of a grading permit</p>	
<p>Mitigation Measure NOISE-1. Noise from mechanical equipment must not exceed an L_{dn} of 58 dBA at the adjacent property lines to the north and west. For continuously operating mechanical equipment an L_{dn} of 58 dBA corresponds to an hourly average noise level of no greater than 60 dBA (L_{eq}) at</p>	<p>Project Developer</p>	<p>Newark Building Division</p>	<p>Prior to issuance of a building permit</p>	

<p>the property line during daytime hours (7 am – 10 pm). If mechanical equipment operates continuously during the night (10 pm – 7 am), the equipment must not exceed an hourly average noise level of 52 dBA (L_{eq}) at the property line during both daytime and nighttime hours.</p>				
<p>Mitigation Measure NOISE-2. The design of the project buildings should incorporate measures such as sound-rated windows to achieve an interior L_{dn} of 45 dBA or less. The required design features should be determined through a site-specific noise study that takes into account the future noise exposure at the various building facades and the project floor plans and elevations consistent with General Plan Action EH-7.A.</p>	<p>Project Developer</p>	<p>Newark Building Division</p>	<p>Prior to issuance of a building permit</p>	
<p>Mitigation Measure NOISE-3. To reduce daytime noise impacts due to construction, the project sponsor shall require the project to implement the following measures:</p> <ul style="list-style-type: none"> a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible) b. Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project 	<p>Project Developer</p>	<p>Newark Building Division</p>	<p>During project construction</p>	

<p>construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.</p>			
<p>c. Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures to the extent feasible.</p>			
<p>d. Monitor the effectiveness of noise attenuation measures by taking noise measurements to the extent there are persistent and on-going complaints.</p>		<p>Project Developer</p>	<p>Prior to issuance of a building permit</p>
<p>Mitigation Measure NOISE-4. Prior to the issuance of building permit, along with the submission of construction documents, the project sponsor shall submit to the City Building Department a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:</p>	<p>Newark Building Division</p>	<p>Project Developer</p>	<p>Prior to issuance of a building permit</p>

<p>a. A procedure for notifying the City Building Division staff and Newark Police Department;</p> <p>b. A plan for posting signs on-site pertaining to permitted construction days and hours and complaint procedures and who to notify in the event of a problem;</p> <p>c. A listing of telephone numbers (during regular construction hours and off-hours);</p> <p>d. The designation of an on-site construction complaint manager for the project;</p> <p>e. Notification of neighbors within 300 feet of the project construction area at least 30 days in advance of pile-driving and/or other extreme noise-generating activities about the estimated duration of the activity; and</p> <p>f. A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.</p>				
<p>Mitigation Measure TRAF-1. The final design of the project shall incorporate the following features.</p> <p>a) Install stop-sign control for southbound traffic exiting the existing driveway at Mowry School Road. Re-stripe the outbound travel lane for one (1) shared left-through lane and one (1) right-turn lane. (If possible, install stop-sign for</p>	<p>Project Developer</p>	<p>Newark Engineering and Planning Divisions</p>	<p>Prior to issuance of building permit; included in project improvement p</p>	

Mitigation Measure

Implementing Responsibility

Monitoring Responsibility

Monitoring Schedule

Verification

- northbound traffic at existing Balentine Plaza Center driveway directly opposite project driveway). Install painted directional flow arrows on the Mowry School Road driveway indicating north and south traffic flows;
- b) Trim hedge/foliage on raised median dividing the Mowry School Road driveway to improve vehicle sight distance and continue this maintenance into the future;
 - c) At the internal median break on the Mowry School Road main driveway, install stop-sign controls for both the new eastbound (outbound) movement from the proposed project driveway and existing westbound movement from current office parking lot. In addition, the project driveway connecting to the mid-block driveway (from Mowry School Road) should be re-aligned to the existing median break to prevent inbound left-turn conflicts. Multi-Way-Stop-Control (MWSC) should be installed where the east-west project driveway intersects the project's internal north-south drive aisle;
 - d) Install stop-sign control for all internal east-west drive aisles;
 - e) Limit vehicle access at the proposed secondary project driveway at Mowry School Road (35-40 feet east of Cedar Boulevard) to emergency vehicles only inbound/outbound to prevent left-turn conflicts on Mowry School Road.

Initial Study/ Mitigated Negative Declaration

Project:
Cedar Townhome Development

Lead Agency:
City of Newark

March 2014

Table of Contents

Introduction	2
Contact Person	2
Project Sponsor	2
Project Location and Context	2
Previous Project Approval	3
Project Description	3
Environmental Factors Potentially Affected	14
Evaluation of Environmental Impacts	15
Attachment to Initial Study	28
1. Aesthetics	28
2. Agricultural and Forestry Resources	29
3. Air Quality	30
4. Biological Resources	33
5. Cultural Resources	34
6. Geology and Soils	35
7. Greenhouse Gas Emissions	36
8. Hazards and Hazardous Materials	37
9. Hydrology and Water Quality	38
10. Land Use and Planning	40
11. Mineral Resources	41
12. Noise	41
13. Population and Housing	48
14. Public Services	48
15. Recreation	49
16. Transportation/Traffic	50
17. Utilities and Service Systems	61
18. Mandatory Findings of Significance	63
Initial Study Preparers	64
Agencies and Organizations Consulted	64
References	64
Attachment 1 (acoustic report)	65
Attachment 2 (traffic report)	66

**City of Newark
Environmental Checklist/
Initial Study**

Introduction

This Initial Study has been prepared in accordance with the provisions of the California Environmental Quality Act (CEQA) and assesses the potential environmental impacts of implementing the proposed project described below. The Initial Study consists of a completed environmental checklist and a brief explanation of the environmental topics addressed in the checklist.

Contact Person

Terrence Grindall, AICP
City of Newark
Community Development Department
37101 Newark Boulevard
Newark, CA 94560
(510) 578 4208

Project Sponsor

Integral Communities
500 La Gonda Way, Suite 102
Danville CA 94526

Attn: Kevin Fryer
(925) 899-5065

Project Location and Context

The project site is located within the City of Newark on the west side of the Interstate 880 freeway, north of Stevenson Boulevard. Specifically, the project site is at the northeast corner of Cedar Boulevard and Mowry School Road. Site addresses are 39850 and 39888 Cedar Boulevard. The Alameda County Assessors Parcel Number (APN) is 901-0195-039-00.

Topographically, the site is flat with a gradual slope to the west, toward San Francisco Bay. The site is vacant and contains approximately 4.3 acres of land and is currently vacant.

Surrounding land uses include a mix of multi-family housing to the west, an extended stay lodging facility to the north, a multi-story office complex to the east, and a combination of offices and retail uses to the south.

Exhibit 1 depicts the regional location of Newark. **Exhibit 2** shows the project location in relation to surrounding features.

Previous Project Approval

In 2007, the City of Newark approved a previous project known as “the Atrium” on the site. This project was a mixed-use development that included of two multi-story buildings totaling up to 70,190 square feet of building area with a combination of surface and subsurface parking.

This project was not constructed and would be replaced by the proposed Cedar Townhouse project, the subject of this Initial Study.

Project Description

Overview. The proposed project would include construction of up to 85 attached townhome-style condominium dwellings on the site and would include grading of the site to accommodate dwellings, extension of utilities to serve individual dwellings and landscaping of portions of the site. Implementation of the project would require a General Plan Amendment, rezoning of the site, a subdivision map to create individual townhouse lots and Architectural and Site Plan review by the City of Newark. These features are described below.

Site Development Plan. **Exhibit 3** shows the proposed site plan, building layout and on-site circulation layout. Eighty-five (85) individual attached townhome dwellings would be constructed on site. Single rows of dwellings would be located fronting on Cedar Boulevard and along the eastern property line in an approximate north-south direction. Five rows of dwellings would be constructed in the center of the site in an approximate east-west direction.

The project would be composed of three- and four-story dwellings and five floor plan designs would be offered, as follows. Generally, the ground floor of each dwelling would accommodate the garage and small bedroom. The second and third floors would contain living rooms, kitchens, dining areas, bedrooms and bathrooms. A number of dwellings would have fourth floors with flex space and a balcony.

- Plan 1 would provide 1,486 square feet of living space with a 2-car tandem ground floor garage and balcony. Up to 22 Plan 1 dwellings are proposed in the project.
- Plan 2 would consist of 1,707 square feet of living space with a 2-car side-by-side ground floor garage and balcony. Twelve Plan 2 dwellings are proposed.

- Plan 2A would consist of 2,020 square feet of interior space with a 2-car side-by-side ground floor garage, terrace and balcony. There would be up to 10 Plan 2A dwellings constructed.
- Plan 3 would provide up to 16 floor plans that would include 1,902 square feet of living space with a 2-car side-by-side garage and balcony.
- Plan 4 would contain up to 2,114 square feet of living space with a 2-car side-by-side garage and balcony.

Proposed buildings along Cedar Boulevard and Mowry School Road would be oriented toward the street. Building complexes in the center of the project would be generally located facing each other with front doors oriented toward a central paseo or walkway. Dwellings located along the eastern property line would face outward.

Exterior Design. Building elevations would be of a Spanish design, with combinations of white and tan exterior colors. Groupings of buildings would generally have flat roofs, but would contain small parapets at building corners elsewhere to provide architectural interest. Ground floor elevations would consist of brick veneer. Other design features would include use of window awnings at selected windows and enhanced balcony treatments of either treated wood or arched stucco. **Exhibits 4a-d** shows exterior elevations

Circulation, Parking and Access. Vehicle access to the project site would be via a driveway to and from the office complex private driveway to the east. A limited access emergency vehicle access would be provided to and from Mowry School Road.

On-site access would be provided via a series of private drives through the proposed complex that would serve each garage.

Pedestrian access would be provided by sidewalks along the perimeter of the site and a series of pedestrian walkways and paseos in the interior of the project.

Landscaping. **Exhibit 5** shows the proposed landscaping plan, which will include tree, shrub and turf plantings along Cedar Boulevard, Mowry School Road and the eastern property line. Trees, shrubs and other plants would be located adjacent to buildings.

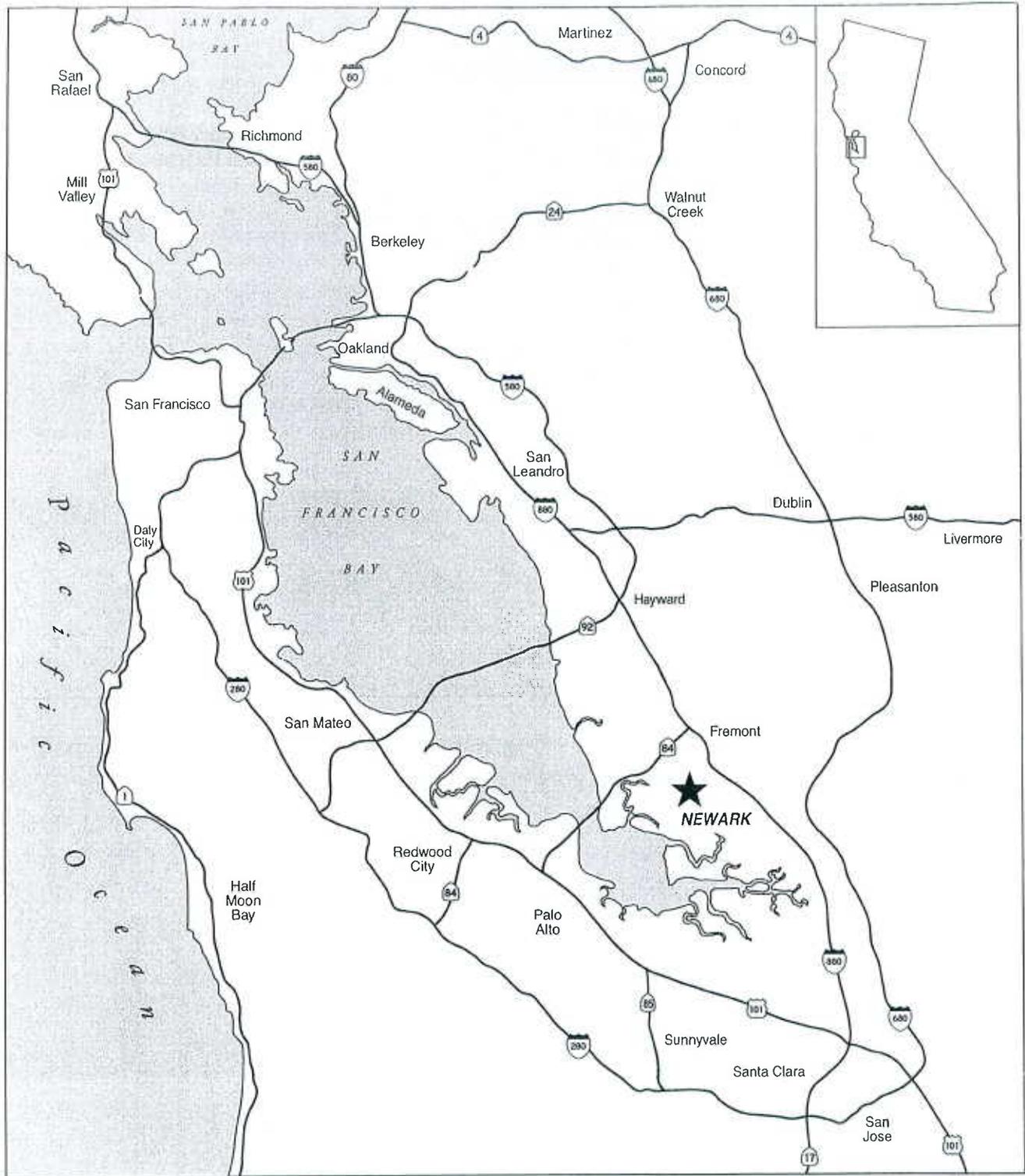
A tot-lot/ recreation area is proposed in the southeast corner of the site.

Utilities and Grading. The applicant has also proposed on-site water lines, sewer, storm drain and related infrastructure improvements. These improvements would include various surface water quality features including, but not limited to bio-retention facilities. Grading of the project site is proposed to improve site drainage and to allow construction of building pads, driveways and related improvements.

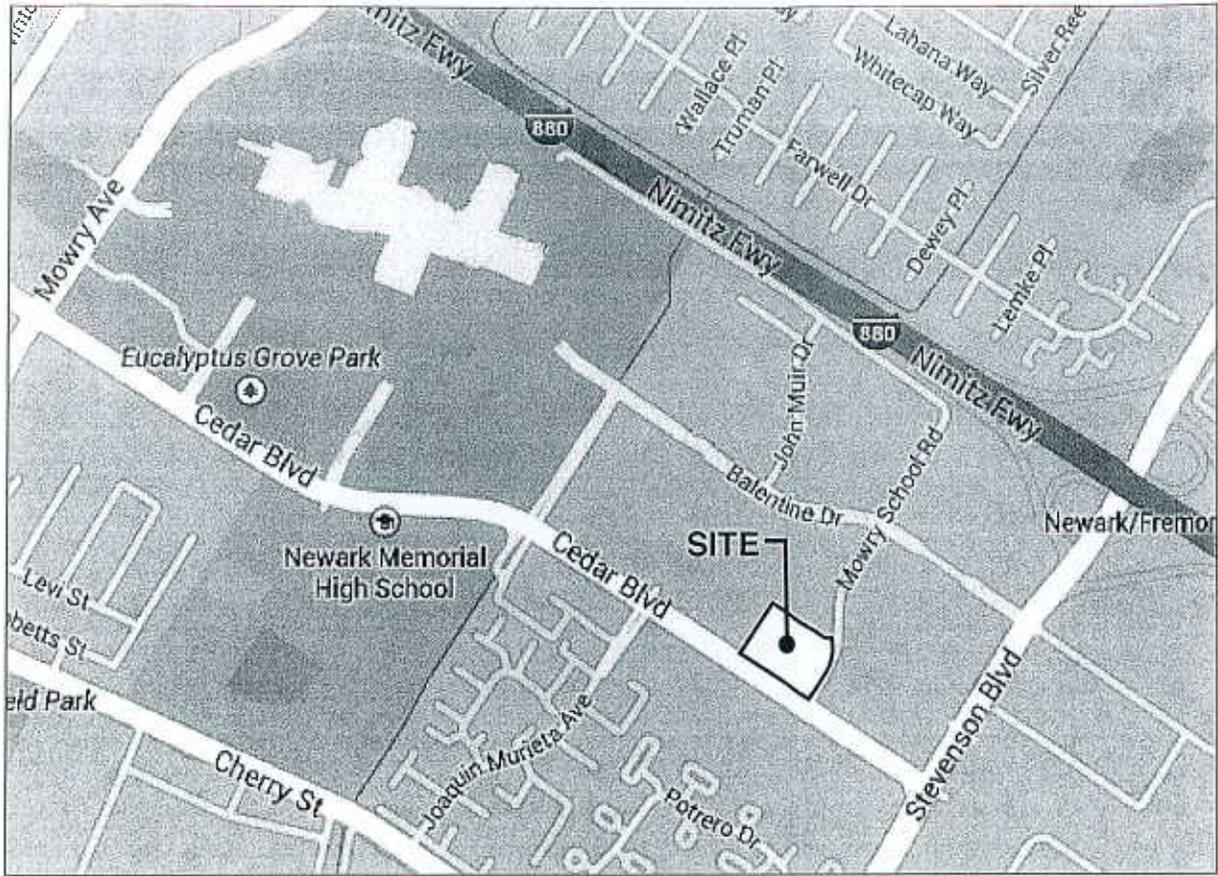
Land Use Entitlements. Requested land use entitlements include the following:

- *General Plan Amendment.* An amendment from the “Neighborhood Commercial” to the “High Density Residential” land use designation is required to accommodate the proposed project use.
- *Rezoning.* The project site is zoned “Community Commercial.” Rezoning of the site to the R-1,500 District/Planned Development Overlay will be required to ensure consistency between the amended General Plan land use map and City zoning.
- *Tentative and Final Subdivision Maps.* Tentative and Final subdivision maps will be required to create individual building lots.
- *Architectural & Site Plan Review.* Architectural and Site Plan review will be required to approve the overall layout of the proposed project, exterior building elevations, landscaping, lighting and project signs.

Blue Ox Associates, Berkeley, California 3-5-2014



CITY OF NEWARK
CEDAR TOWNHOMES PROJECT
INITIAL STUDY



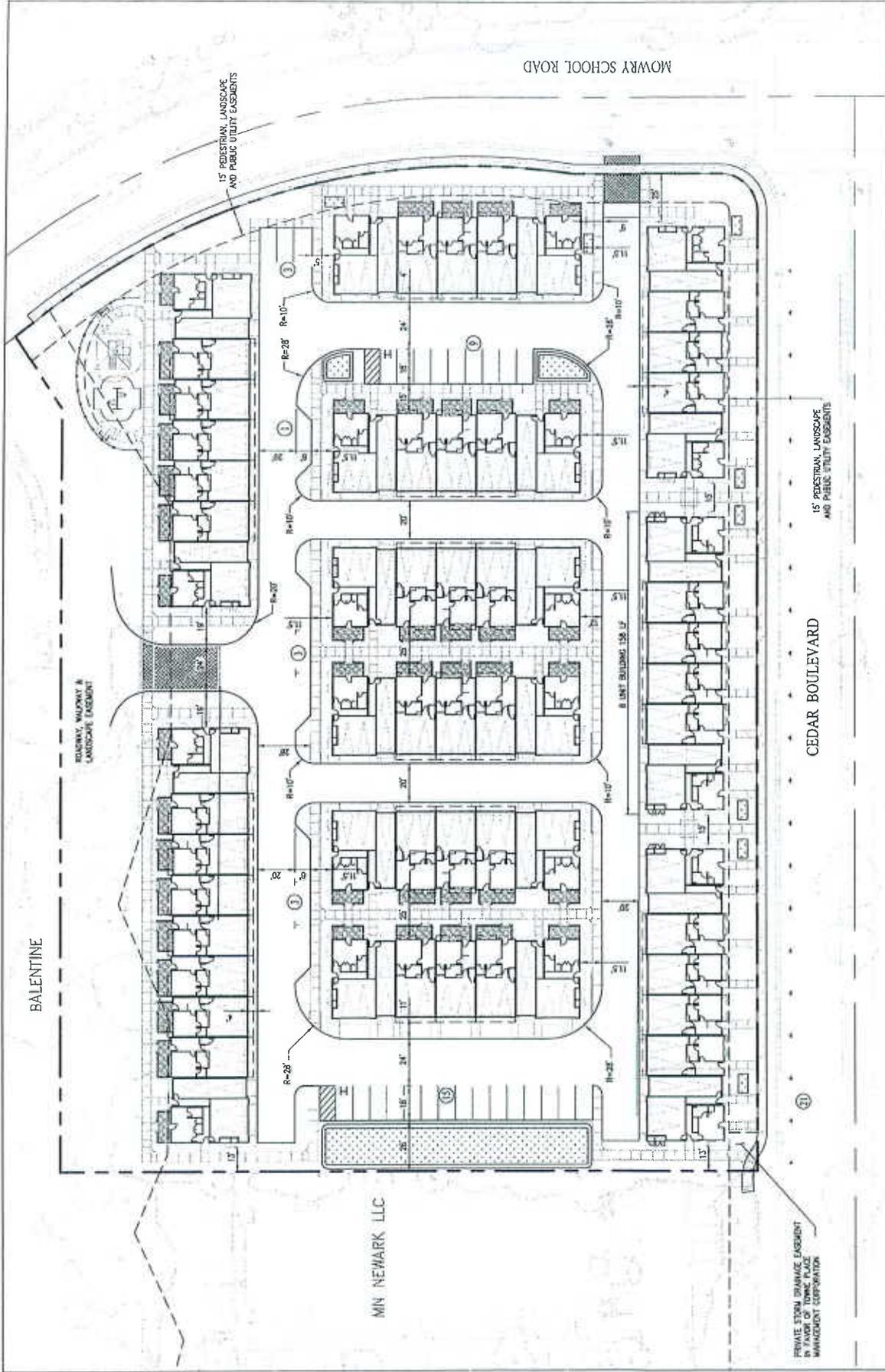
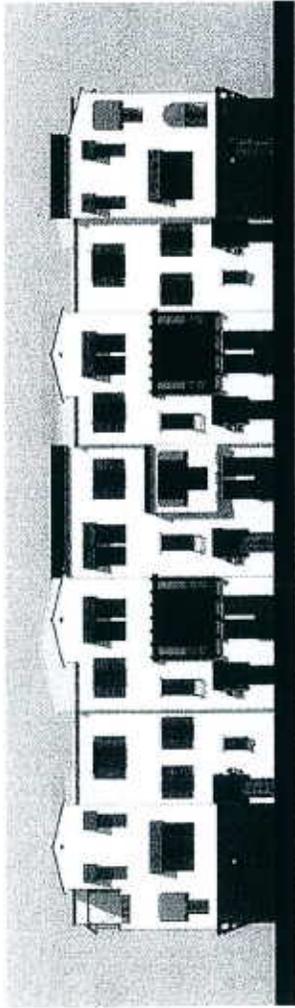


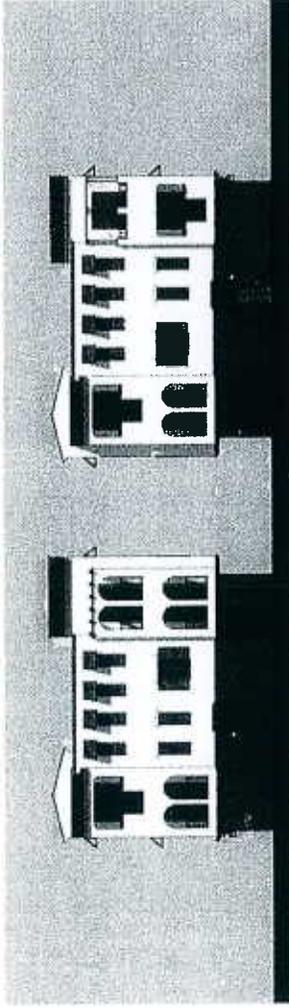
Exhibit 3
PROPOSED SITE PLAN

SOURCE: cbg: Carlson, Barbee & Gibson, Inc., 11 November 2013.

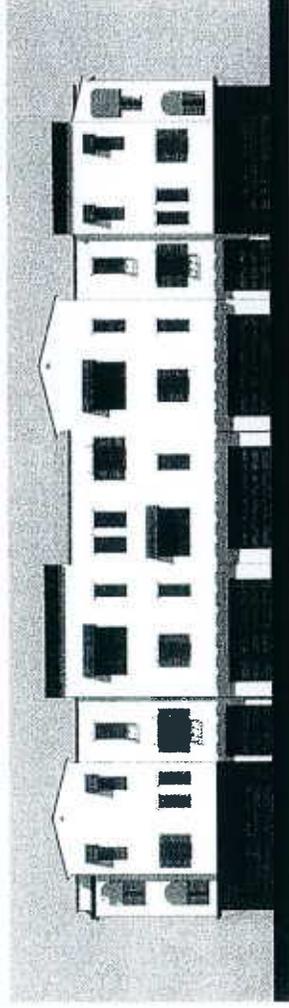
CITY OF NEWARK
CEDAR TOWNHOMES PROJECT
 INITIAL STUDY



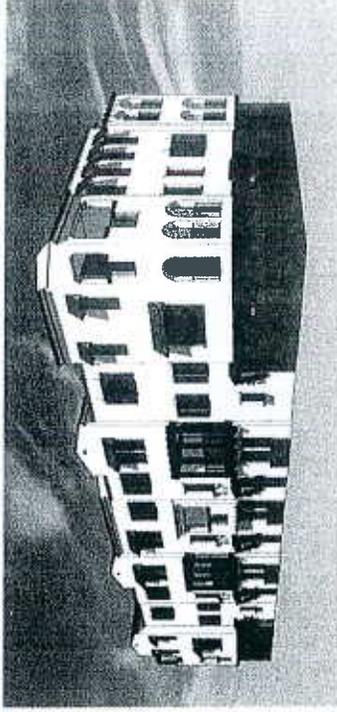
7 PLEX FRONT



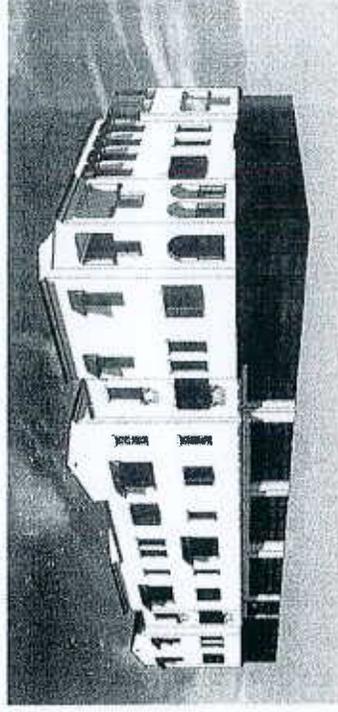
7 PLEX SIDES



7 PLEX REAR



FRONT PERSPECTIVE



REAR PERSPECTIVE

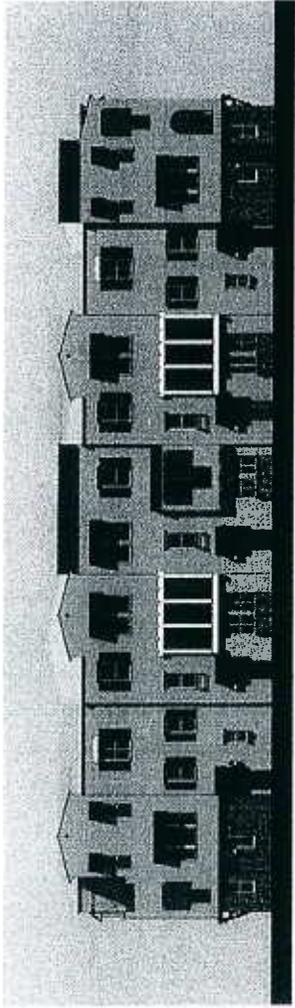
MATERIALS AND COLORS

- 1. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 2. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 3. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 4. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 5. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 6. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 7. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 8. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 9. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 10. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 11. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 12. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 13. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 14. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 15. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 16. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 17. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 18. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 19. EXTERIOR WALLS: LIGHT GRAY STUCCO
- 20. EXTERIOR WALLS: LIGHT GRAY STUCCO

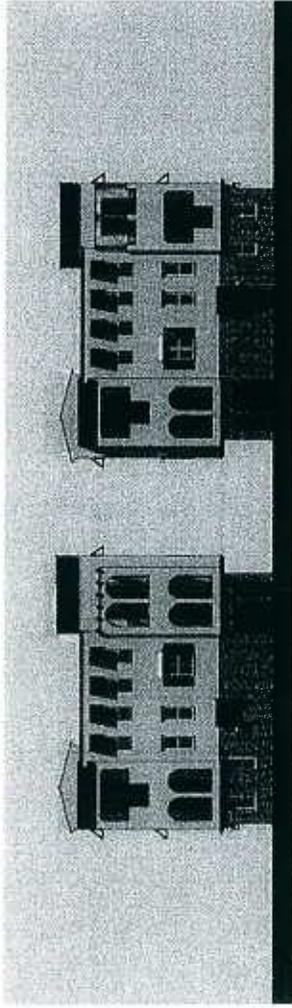
SOURCE: Urban Arena LLC, 12 November 2013.

CITY OF NEWARK
CEDAR TOWNHOMES PROJECT
INITIAL STUDY

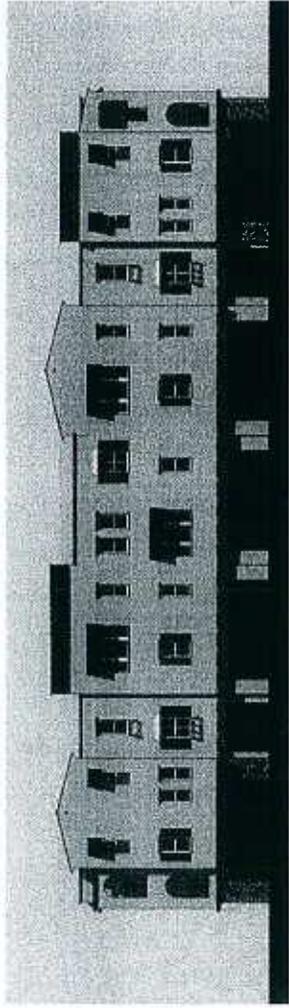
Exhibit 4a
7-PLEX SPANISH ELEVATION A



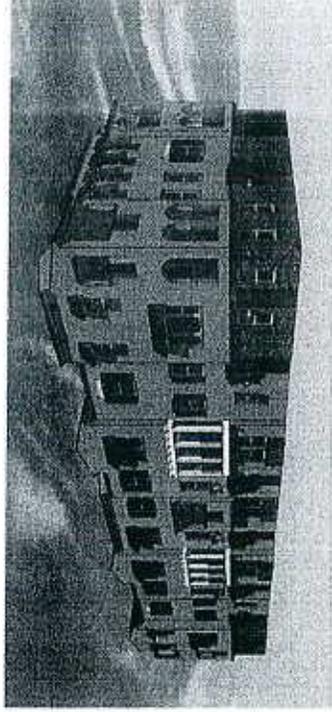
7 PLEX FRONT



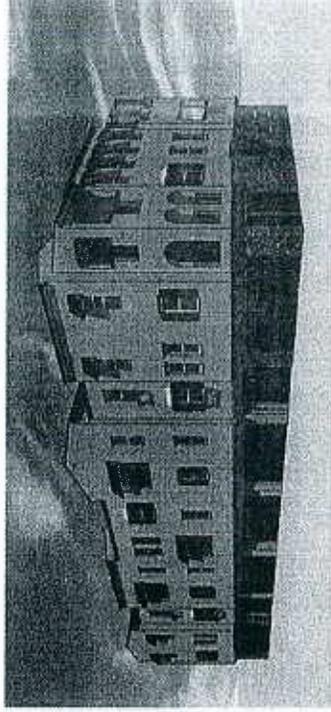
7 PLEX SIDES



7 PLEX REAR



FRONT PERSPECTIVE



REAR PERSPECTIVE

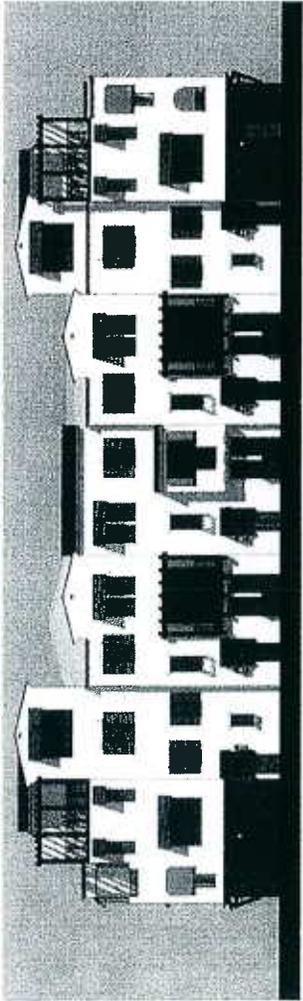
MATERIALS AND COLORS

- 1. BRICK
- 2. STUCCO
- 3. CONCRETE
- 4. METAL
- 5. WOOD
- 6. GLASS
- 7. PAINT
- 8. CERAMIC TILE
- 9. GRANITE
- 10. MARBLE
- 11. LAMINATE
- 12. FABRIC
- 13. LEATHER
- 14. VINYL
- 15. CARPET
- 16. RUG
- 17. CURTAINS
- 18. BLINDS
- 19. SHUTTERS
- 20. DOOR
- 21. WINDOW
- 22. ROOF
- 23. FLOORING
- 24. WALLPAPER
- 25. LIGHTING
- 26. FIXTURES
- 27. APPLIANCES
- 28. FURNITURE
- 29. DECORATION
- 30. LANDSCAPE

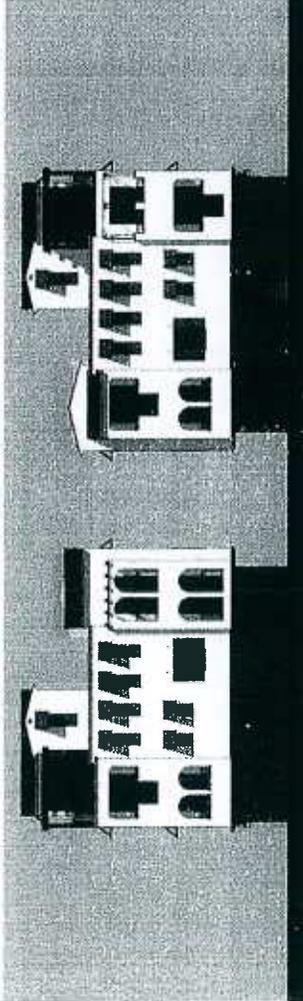
SOURCE: Urban Arena LLC, 12 November 2013.

CITY OF NEWARK
CEDAR TOWNHOMES PROJECT
INITIAL STUDY

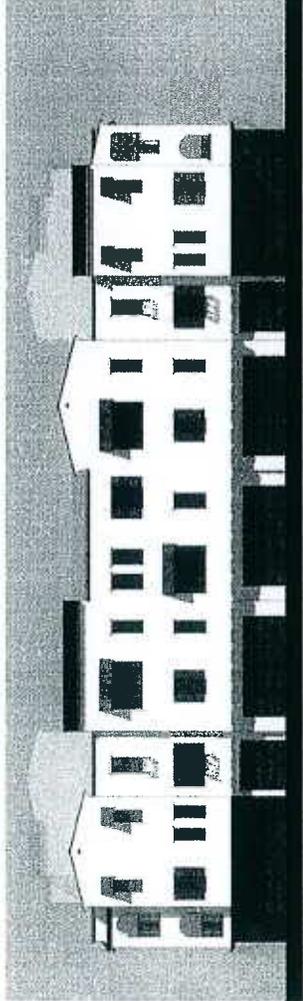
Exhibit 4b
7-PLEX SPANISH ELEVATION B



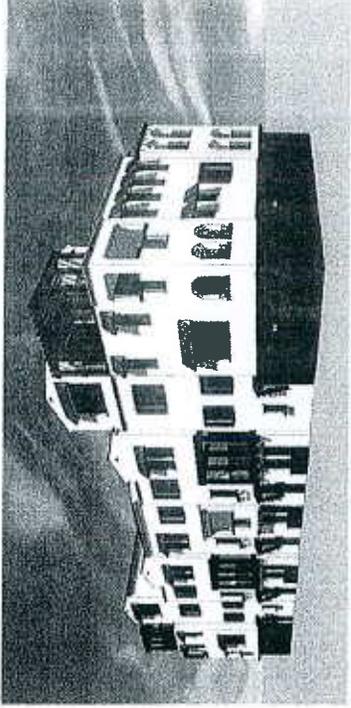
7 PLEX FRONT



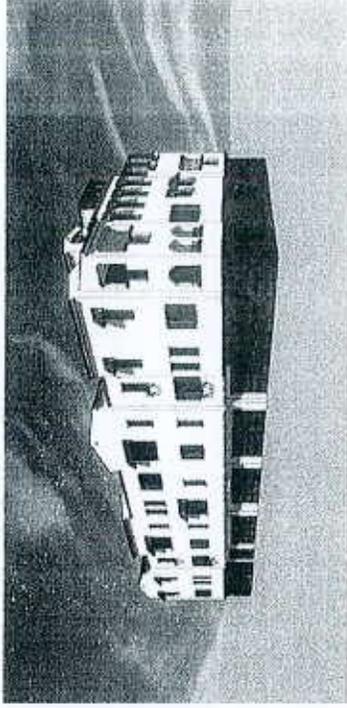
7 PLEX SIDES



7 PLEX REAR



FRONT PERSPECTIVE



REAR PERSPECTIVE

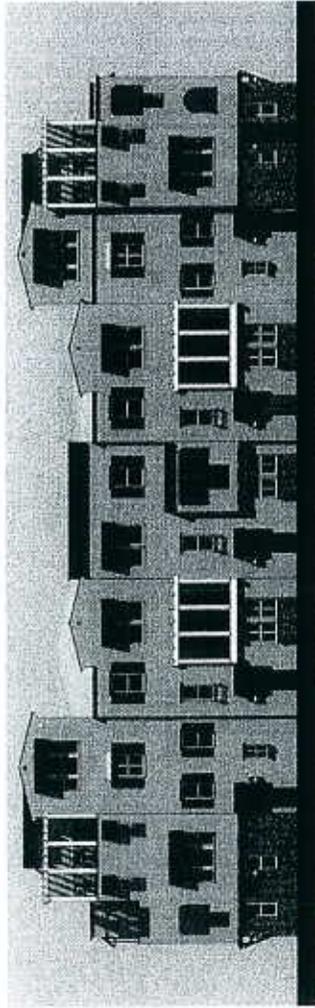
MATERIALS AND COLORS

- 1. 100% POLYURETHANE PAINTS (KLEBER) - WHITE
- 2. 100% POLYURETHANE PAINTS (KLEBER) - BLACK
- 3. 100% POLYURETHANE PAINTS (KLEBER) - GREY
- 4. 100% POLYURETHANE PAINTS (KLEBER) - BROWN
- 5. 100% POLYURETHANE PAINTS (KLEBER) - RED
- 6. 100% POLYURETHANE PAINTS (KLEBER) - BLUE
- 7. 100% POLYURETHANE PAINTS (KLEBER) - GREEN
- 8. 100% POLYURETHANE PAINTS (KLEBER) - PURPLE
- 9. 100% POLYURETHANE PAINTS (KLEBER) - PINK
- 10. 100% POLYURETHANE PAINTS (KLEBER) - YELLOW
- 11. 100% POLYURETHANE PAINTS (KLEBER) - ORANGE
- 12. 100% POLYURETHANE PAINTS (KLEBER) - SILVER
- 13. 100% POLYURETHANE PAINTS (KLEBER) - GOLD
- 14. 100% POLYURETHANE PAINTS (KLEBER) - COPPER
- 15. 100% POLYURETHANE PAINTS (KLEBER) - BRASS
- 16. 100% POLYURETHANE PAINTS (KLEBER) - ZINC
- 17. 100% POLYURETHANE PAINTS (KLEBER) - ALUMINUM
- 18. 100% POLYURETHANE PAINTS (KLEBER) - STAINLESS STEEL
- 19. 100% POLYURETHANE PAINTS (KLEBER) - CHROME
- 20. 100% POLYURETHANE PAINTS (KLEBER) - NICKEL

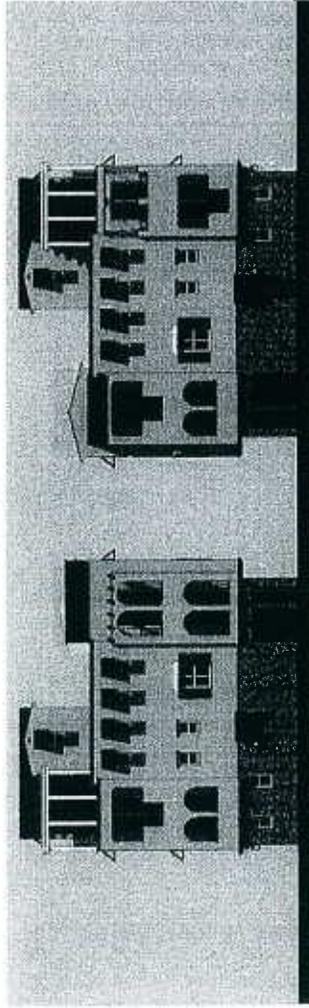
SOURCE: Urban Arena LLC, 12 November 2013.

CITY OF NEWARK
CEDAR TOWNHOMES PROJECT
INITIAL STUDY

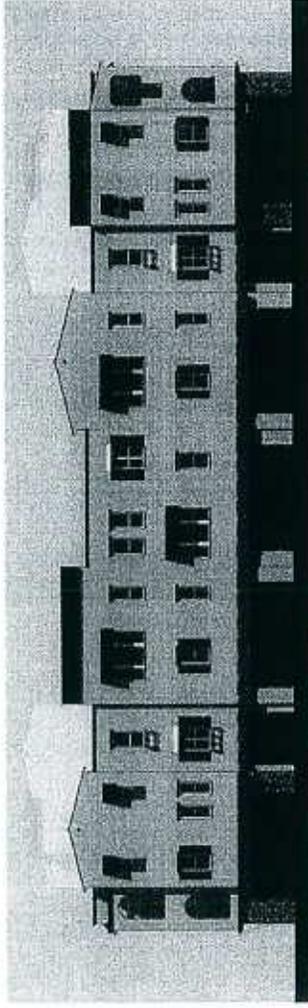
Exhibit 4c
7-PLEX 4TH STORY ELEVATION A



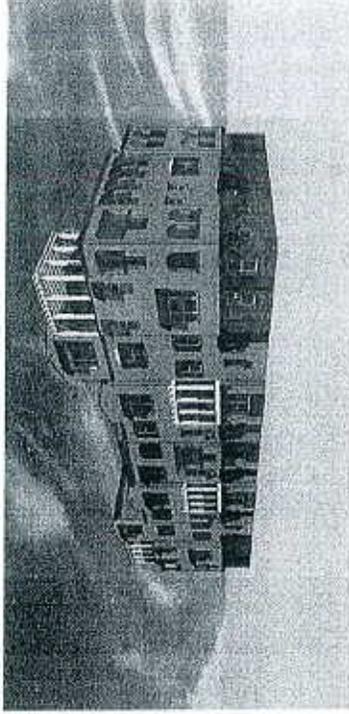
7 PLEX FRONT



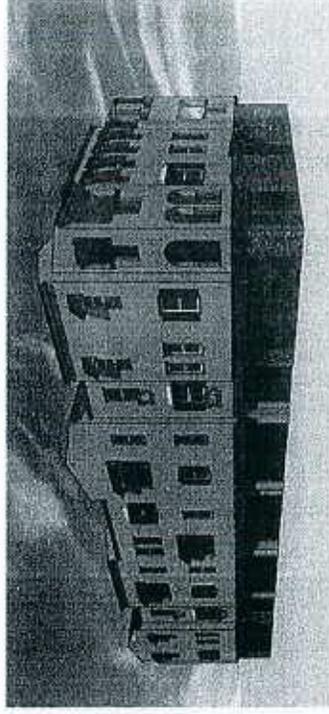
7 PLEX SIDES



7 PLEX REAR



FRONT PERSPECTIVE



REAR PERSPECTIVE

MATERIALS AND COLORS

- 1. BRICK
- 2. CONCRETE
- 3. STONE
- 4. METAL
- 5. WOOD
- 6. GLASS
- 7. PAINT
- 8. CERAMIC
- 9. FABRIC
- 10. LEATHER
- 11. PAPER
- 12. PLASTER
- 13. GYPSUM
- 14. POLYURETHANE
- 15. POLYESTER
- 16. POLYPROPYLENE
- 17. POLYETHYLENE
- 18. POLYVINYL CHLORIDE
- 19. POLYACRYLIC ACID
- 20. POLYURETHANE
- 21. POLYESTER
- 22. POLYPROPYLENE
- 23. POLYETHYLENE
- 24. POLYVINYL CHLORIDE
- 25. POLYACRYLIC ACID
- 26. POLYURETHANE
- 27. POLYESTER
- 28. POLYPROPYLENE
- 29. POLYETHYLENE
- 30. POLYVINYL CHLORIDE
- 31. POLYACRYLIC ACID
- 32. POLYURETHANE
- 33. POLYESTER
- 34. POLYPROPYLENE
- 35. POLYETHYLENE
- 36. POLYVINYL CHLORIDE
- 37. POLYACRYLIC ACID
- 38. POLYURETHANE
- 39. POLYESTER
- 40. POLYPROPYLENE
- 41. POLYETHYLENE
- 42. POLYVINYL CHLORIDE
- 43. POLYACRYLIC ACID
- 44. POLYURETHANE
- 45. POLYESTER
- 46. POLYPROPYLENE
- 47. POLYETHYLENE
- 48. POLYVINYL CHLORIDE
- 49. POLYACRYLIC ACID
- 50. POLYURETHANE
- 51. POLYESTER
- 52. POLYPROPYLENE
- 53. POLYETHYLENE
- 54. POLYVINYL CHLORIDE
- 55. POLYACRYLIC ACID
- 56. POLYURETHANE
- 57. POLYESTER
- 58. POLYPROPYLENE
- 59. POLYETHYLENE
- 60. POLYVINYL CHLORIDE
- 61. POLYACRYLIC ACID
- 62. POLYURETHANE
- 63. POLYESTER
- 64. POLYPROPYLENE
- 65. POLYETHYLENE
- 66. POLYVINYL CHLORIDE
- 67. POLYACRYLIC ACID
- 68. POLYURETHANE
- 69. POLYESTER
- 70. POLYPROPYLENE
- 71. POLYETHYLENE
- 72. POLYVINYL CHLORIDE
- 73. POLYACRYLIC ACID
- 74. POLYURETHANE
- 75. POLYESTER
- 76. POLYPROPYLENE
- 77. POLYETHYLENE
- 78. POLYVINYL CHLORIDE
- 79. POLYACRYLIC ACID
- 80. POLYURETHANE
- 81. POLYESTER
- 82. POLYPROPYLENE
- 83. POLYETHYLENE
- 84. POLYVINYL CHLORIDE
- 85. POLYACRYLIC ACID
- 86. POLYURETHANE
- 87. POLYESTER
- 88. POLYPROPYLENE
- 89. POLYETHYLENE
- 90. POLYVINYL CHLORIDE
- 91. POLYACRYLIC ACID
- 92. POLYURETHANE
- 93. POLYESTER
- 94. POLYPROPYLENE
- 95. POLYETHYLENE
- 96. POLYVINYL CHLORIDE
- 97. POLYACRYLIC ACID
- 98. POLYURETHANE
- 99. POLYESTER
- 100. POLYPROPYLENE
- 101. POLYETHYLENE
- 102. POLYVINYL CHLORIDE
- 103. POLYACRYLIC ACID
- 104. POLYURETHANE
- 105. POLYESTER
- 106. POLYPROPYLENE
- 107. POLYETHYLENE
- 108. POLYVINYL CHLORIDE
- 109. POLYACRYLIC ACID
- 110. POLYURETHANE
- 111. POLYESTER
- 112. POLYPROPYLENE
- 113. POLYETHYLENE
- 114. POLYVINYL CHLORIDE
- 115. POLYACRYLIC ACID
- 116. POLYURETHANE
- 117. POLYESTER
- 118. POLYPROPYLENE
- 119. POLYETHYLENE
- 120. POLYVINYL CHLORIDE
- 121. POLYACRYLIC ACID
- 122. POLYURETHANE
- 123. POLYESTER
- 124. POLYPROPYLENE
- 125. POLYETHYLENE
- 126. POLYVINYL CHLORIDE
- 127. POLYACRYLIC ACID
- 128. POLYURETHANE
- 129. POLYESTER
- 130. POLYPROPYLENE
- 131. POLYETHYLENE
- 132. POLYVINYL CHLORIDE
- 133. POLYACRYLIC ACID
- 134. POLYURETHANE
- 135. POLYESTER
- 136. POLYPROPYLENE
- 137. POLYETHYLENE
- 138. POLYVINYL CHLORIDE
- 139. POLYACRYLIC ACID
- 140. POLYURETHANE
- 141. POLYESTER
- 142. POLYPROPYLENE
- 143. POLYETHYLENE
- 144. POLYVINYL CHLORIDE
- 145. POLYACRYLIC ACID
- 146. POLYURETHANE
- 147. POLYESTER
- 148. POLYPROPYLENE
- 149. POLYETHYLENE
- 150. POLYVINYL CHLORIDE
- 151. POLYACRYLIC ACID
- 152. POLYURETHANE
- 153. POLYESTER
- 154. POLYPROPYLENE
- 155. POLYETHYLENE
- 156. POLYVINYL CHLORIDE
- 157. POLYACRYLIC ACID
- 158. POLYURETHANE
- 159. POLYESTER
- 160. POLYPROPYLENE
- 161. POLYETHYLENE
- 162. POLYVINYL CHLORIDE
- 163. POLYACRYLIC ACID
- 164. POLYURETHANE
- 165. POLYESTER
- 166. POLYPROPYLENE
- 167. POLYETHYLENE
- 168. POLYVINYL CHLORIDE
- 169. POLYACRYLIC ACID
- 170. POLYURETHANE
- 171. POLYESTER
- 172. POLYPROPYLENE
- 173. POLYETHYLENE
- 174. POLYVINYL CHLORIDE
- 175. POLYACRYLIC ACID
- 176. POLYURETHANE
- 177. POLYESTER
- 178. POLYPROPYLENE
- 179. POLYETHYLENE
- 180. POLYVINYL CHLORIDE
- 181. POLYACRYLIC ACID
- 182. POLYURETHANE
- 183. POLYESTER
- 184. POLYPROPYLENE
- 185. POLYETHYLENE
- 186. POLYVINYL CHLORIDE
- 187. POLYACRYLIC ACID
- 188. POLYURETHANE
- 189. POLYESTER
- 190. POLYPROPYLENE
- 191. POLYETHYLENE
- 192. POLYVINYL CHLORIDE
- 193. POLYACRYLIC ACID
- 194. POLYURETHANE
- 195. POLYESTER
- 196. POLYPROPYLENE
- 197. POLYETHYLENE
- 198. POLYVINYL CHLORIDE
- 199. POLYACRYLIC ACID
- 200. POLYURETHANE
- 201. POLYESTER
- 202. POLYPROPYLENE
- 203. POLYETHYLENE
- 204. POLYVINYL CHLORIDE
- 205. POLYACRYLIC ACID
- 206. POLYURETHANE
- 207. POLYESTER
- 208. POLYPROPYLENE
- 209. POLYETHYLENE
- 210. POLYVINYL CHLORIDE
- 211. POLYACRYLIC ACID
- 212. POLYURETHANE
- 213. POLYESTER
- 214. POLYPROPYLENE
- 215. POLYETHYLENE
- 216. POLYVINYL CHLORIDE
- 217. POLYACRYLIC ACID
- 218. POLYURETHANE
- 219. POLYESTER
- 220. POLYPROPYLENE
- 221. POLYETHYLENE
- 222. POLYVINYL CHLORIDE
- 223. POLYACRYLIC ACID
- 224. POLYURETHANE
- 225. POLYESTER
- 226. POLYPROPYLENE
- 227. POLYETHYLENE
- 228. POLYVINYL CHLORIDE
- 229. POLYACRYLIC ACID
- 230. POLYURETHANE
- 231. POLYESTER
- 232. POLYPROPYLENE
- 233. POLYETHYLENE
- 234. POLYVINYL CHLORIDE
- 235. POLYACRYLIC ACID
- 236. POLYURETHANE
- 237. POLYESTER
- 238. POLYPROPYLENE
- 239. POLYETHYLENE
- 240. POLYVINYL CHLORIDE
- 241. POLYACRYLIC ACID
- 242. POLYURETHANE
- 243. POLYESTER
- 244. POLYPROPYLENE
- 245. POLYETHYLENE
- 246. POLYVINYL CHLORIDE
- 247. POLYACRYLIC ACID
- 248. POLYURETHANE
- 249. POLYESTER
- 250. POLYPROPYLENE
- 251. POLYETHYLENE
- 252. POLYVINYL CHLORIDE
- 253. POLYACRYLIC ACID
- 254. POLYURETHANE
- 255. POLYESTER
- 256. POLYPROPYLENE
- 257. POLYETHYLENE
- 258. POLYVINYL CHLORIDE
- 259. POLYACRYLIC ACID
- 260. POLYURETHANE
- 261. POLYESTER
- 262. POLYPROPYLENE
- 263. POLYETHYLENE
- 264. POLYVINYL CHLORIDE
- 265. POLYACRYLIC ACID
- 266. POLYURETHANE
- 267. POLYESTER
- 268. POLYPROPYLENE
- 269. POLYETHYLENE
- 270. POLYVINYL CHLORIDE
- 271. POLYACRYLIC ACID
- 272. POLYURETHANE
- 273. POLYESTER
- 274. POLYPROPYLENE
- 275. POLYETHYLENE
- 276. POLYVINYL CHLORIDE
- 277. POLYACRYLIC ACID
- 278. POLYURETHANE
- 279. POLYESTER
- 280. POLYPROPYLENE
- 281. POLYETHYLENE
- 282. POLYVINYL CHLORIDE
- 283. POLYACRYLIC ACID
- 284. POLYURETHANE
- 285. POLYESTER
- 286. POLYPROPYLENE
- 287. POLYETHYLENE
- 288. POLYVINYL CHLORIDE
- 289. POLYACRYLIC ACID
- 290. POLYURETHANE
- 291. POLYESTER
- 292. POLYPROPYLENE
- 293. POLYETHYLENE
- 294. POLYVINYL CHLORIDE
- 295. POLYACRYLIC ACID
- 296. POLYURETHANE
- 297. POLYESTER
- 298. POLYPROPYLENE
- 299. POLYETHYLENE
- 300. POLYVINYL CHLORIDE

SOURCE: Urban Arena LLC, 12 November 2013.

1. **Project description:** Consideration of development plan to construct up to 85 attached residential dwellings on a 4.28-acre site. The project would include a dwellings, on-site private roadways, guest parking, a tot-lot recreational area, site grading, utility connections, landscaping, storm water quality treatment facilities, and installation of decorative site amenities. Requested land use entitlements include a general plan amendment, rezoning, a subdivision map and Architectural and Site Plan Review.

2. **Lead agency:** City of Newark

3. **Contact person:** Yesnia Jimenez, Community Development Department

4. **Project location:** Northeast corner of Cedar Boulevard and Mowry School Road. Site addresses are 39850 and 39888 Cedar Boulevard (APN 901-0195-039-00)

5. **Project sponsor:** Integral Communities

6. **General Plan designation:** *existing-* CC (Community Commercial)
proposed- HDR (High Density Residential)

7. **Zoning:** *existing-*CC (Community Commercial)
proposed- R-1,500 (High Density Residential)/Planned Development

8. **Other public agency required approvals:**
 - Building permit (City of Newark)
 - Water connection (Alameda County Water District)
 - Sewer connection (Union Sanitary District)
 - Stormwater quality treatment measure installations (Alameda County Mosquito Abatement District)

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.

X	Aesthetics	-	Agricultural Resources	X	Air Quality
-	Biological Resources	X	Cultural Resources	-	Geology/Soils
-	Hazards and Hazardous Materials	-	Hydrology/Water Quality	-	Land Use/Planning
-	Mineral Resources	X	Noise	--	Population/Housing
--	Public Services	-	Recreation	X	Transportation/Circulation
--	Utilities/Service Systems	-	Mandatory Findings of Significance		

Determination (to be completed by 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 the previous **Negative Declaration** certified for this project by the City of Newark adequately addresses potential impacts.

 X 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 the mitigation measures described on an attached sheet have been added to the project. A **Mitigated Negative Declaration** will be prepared.

 _ I find that although the proposed project **may** have a significant effect on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on earlier analysis as described on the attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." A **Environmental Impact Report** is required, but must only analyze the effects that remain to be addressed.

Signature: Terence Gradall (TW) Date: 3/28/14

Printed Name: Terence Gradall For: City of Newark

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 parenthesis following each question. A "no impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "no impact" answer should be explained where it is based on project-specific factors as well as general factors (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 17, "Earlier Analysis," as described in (5) below, 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). The checklist will include a response "no new impact" in these circumstances. 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, etc.). 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 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 agency should identify the significance criteria or threshold, if any, used to evaluate each question and the mitigation measures identified, if any, to reduce the impact to a less than significant level.

Environmental Impacts (Note: Source of determination listed in parenthesis. See listing of sources used to determine each potential impact at the end of the checklist)

Note: A full discussion of each item is found following the checklist.

1. Aesthetics. *Would the project:*

- a) Have a substantial adverse effect on a scenic vista? (Source: 1, 8)
- b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? (Source: 8)
- c) Substantially degrade the existing visual character or quality of the site and its surroundings? (Source: 8)
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Source: 8)

2. Agricultural and Forestry Resources

Would the project:

- a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a non-agricultural use? (Source: 1, 6)
- b) Conflict with existing zoning for agriculture use, or a Williamson Act contract? (Source: 5)
- c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to a non-agricultural use? (Source: 1, 8)
- d) Result in the loss of forest land or conversion of forest land to non-forest use? (8)
- e) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of farmland to a non-agricultural use or conversion of forestland to a non-forest use? (8)

Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
			X
			X
			X
	X		
			X
			X
			X
			X
			X
			X
			X

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
3. Air Quality (Where available, the significance criteria established by the applicable air quality management district may be relied on to make the following determinations). <i>Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan? (Source: 1)			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Source: 1)		X		
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? (1)			X	
d) Expose sensitive receptors to substantial pollutant concentrations? (Source: 1, 8)				X
e) Create objectionable odors affecting a substantial number of people? (Source: 8)				X
4. Biological Resources. <i>Would the project</i>				
a) Have a substantial adverse effect, either directly through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?(Source: 1, 2)		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service? (Source: 1, 2)				X

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
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? (Source: Source: 1, 2)				X
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? (Source: 1, 2)				X
e) Conflict with any local policies or ordinances protecting biological resources, such as tree protection ordinances? (Source: 1, 2)				X
f) Conflict with the provision of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional or state habitat conservation plan? (Source: 1, 2)				X
5. Cultural Resources. Would the project				
a) Cause a substantial adverse impact in the significance of a historical resource as defined in Sec. 15064.5? (Source: 3)				X
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to Sec. 15064.5 (Source: 3)		X		
c) Directly or indirectly destroy a unique paleontological resource, site or unique geologic feature? (Source: 3)		X		
d) Disturb any human remains, including those interred outside of a formal cemetery? (3)		X		
6. Geology and Soils. Would the project				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Earthquake Fault Zoning Map issued by the State Geologist or based on other substantial evidence of a known fault (Source: 4)				X

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
ii) Strong seismic ground shaking (4)			X	
iii) Seismic-related ground failure, including liquefaction? (4)			X	
iv) Landslides? (4)				X
b) Result in substantial soil erosion or the loss of topsoil? (Source: 4)			X	
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 similar hazards (Source: 4)			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (Source: 4)			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (Source: 7)				X
7. Greenhouse Gas Emissions. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (Source: 9)				X
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (Source 9)				X
8. Hazards and Hazardous Materials. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials (Source: 1, 5)			X	
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? (Source: 1, 5)				X
c) Emit hazardous emissions or handle hazardous materials or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (Source: 1, 5)				X

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Sec. 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (Source: 8, 9)				X
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 of public use airport, would the project result in a safety hazard for people residing or working in the project area? (Source: 1, 9)				X
f) For a project within the vicinity of private airstrip, would the project result in a safety hazard for people residing or working in the project area? (Source: 1, 6)				X
g) Impair implementation of or physically interfere with the adopted emergency response plan or emergency evacuation plan? (Source: 1)				X
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? (Source: 8)				X
9. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements? (Source: 7)			X	
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 existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted? (7)				X
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? (Source: 1,7)		X		

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
d) Substantially alter the existing drainage pattern of the site or areas, 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? (Source: 7, 8)		X		
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? (Source: 7, 8)		X		
f) Otherwise substantially degrade water quality? (Source: 7, 8)			X	
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 delineation map? (Source: 7)			X	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? (Source: 7)			X	
i) Expose people or structures to a significant risk of loss, injury, and death involving flooding, including flooding as a result of the failure of a levee or dam? (9)			X	
j) Inundation by seiche, tsunami or mudflow? (1)				X
10. Land Use and Planning. Would the project:				
a) Physically divide an established community? (Source: 1, 8)				X
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, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (Source: 1)				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan? (1)				X
11. Mineral Resources. Would the project				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (Source: 1)				X

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
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? (Source: 1)				X
12. Noise. Would the proposal 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? (9)		X		
b) Exposure of persons or to generation of excessive groundborne vibration or groundborne noise levels? (Source: 9)			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above existing levels without the project? (9)		X		X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (5)		X		
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? (1)				X
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? (Source: 1)				X
13. Population and Housing. Would the project				
a) Induce substantial population growth in an area, either directly or indirectly (for example, through extension of roads or other infrastructure)? (Source: 1, 8)				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (8)				X
c) Displace substantial numbers of people, necessitating the construction of replacement of housing elsewhere? (Source: 8)				X

14. Public Services. *Would the proposal:*

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other performance objectives for any of the public services? (Sources: 7)

- Fire protection
- Police protection
- Schools
- Parks
- Other public facilities
- Solid Waste

15. Recreation:

a) Would the project increase the use of existing neighborhood and regional parks or recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated (Source: 1)

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? (Source: 1, 9)

16. Transportation and Traffic. *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 all 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? (6)

b) Exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency for designated roads or highways? (6)

Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
		X	
		X	
			X
		X	
			X
		X	
		X	
			X
		X	
		X	
		X	

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in the location that results in substantial safety risks? (6)				X
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses, such as farm equipment? (6)		X		
e) Result in inadequate emergency access? (5)				X
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities or otherwise decrease the performance of safety of such facilities? (6)				X
17. Utilities and Service Systems. Would the project				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (7)			X	
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? (7)			X	
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? (7)			X	
d) Have sufficient water supplies available to serve the project from existing water entitlements and resources, or are new or expanded entitlements needed? (7)			X	
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 providers existing commitments? (7)			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? (7)			X	
g) Comply with federal, state and local statutes and regulations related to solid waste? (1)				X

18. Mandatory Findings of Significance.

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number of 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?

Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
			X
			X
			X

Sources used to determine potential environmental impacts

1. General Plan Tune Up EIR (2013)
2. Project Biological Resource Analysis (2013)
3. Northwest Information Center (2006)
4. Project Preliminary Geotechnical Analysis (2013)
5. Project Phase I ESA (2013)
6. Traffic Impact Analysis (2014)
7. Discussion with City staff or service provider
8. Site Visit
9. Other Source

XVII. Earlier Analyses

- a) **Earlier analyses used.** Identify earlier analyses and state where they are available for review.

This document relies on the City of Newark General Plan Tune Up EIR, SCH #2013012052, October 2013. This document is available for review at the City of Newark Community Development Department during normal business hours.

Attachment to Initial Study

Discussion of Checklist

Legend

- PS: Potentially Significant
LS/M: Less Than Significant After Mitigation
LS: Less Than Significant Impact
NI: No Impact

I. Aesthetics

Environmental Setting

The project site is located in an urbanized, developed portion of Newark, near NewPark Mall and related retail, office and multi-family residential development near the Mall. The subject site itself is vacant and contains no parks, playgrounds, public trails or other places of public gathering. No trees, unusual rock outcroppings or historic structures exist on the site. Neither Cedar Boulevard nor Mowry School Road are identified as scenic highways by the City of Newark. No state designated scenic highways are located near the project site (source: http://www.dot.ca.gov/hq/LandArch/scenic_highways/).

Since the site is located within an urbanized area, several sources of light and glare are present on adjacent sites, although not on the project site.

Environmental Impacts

- a) *Have a substantial adverse impact on a scenic vista?* **NI**. There are no places on the project site for viewing scenic vistas; however, construction of the proposed buildings on the site could restrict or, in some instances, block views of the foothills east of the site for residents west of the project site. Since the adjacent residential developments are not considered public gathering places, restrictions or blockages of views to the foothills would be a less-than-significant impact with regard to scenic vistas. No impacts would therefore result with regard to scenic vistas should the townhouse project be approved and built.
- b) *Substantially damage scenic resources, including but not limited to trees, rock outcroppings and historic buildings within a state scenic highway?* **NI**. There are no native trees, rock outcroppings or historic buildings on the site that would be lost should the Cedar Townhouse project be constructed. The site is also not located near any state or locally designated scenic highways. No impacts are therefore anticipated with regard to scenic resources.
- c) *Substantially degrade the existing visual character or quality of the site and its surroundings?* **NI**. The proposed project would allow conversion a currently vacant site into an attached housing development containing up to 85 dwellings and related improvements. The proposed project is subject to design review by the Planning Commission and City Council to determine if the overall site design, exterior building elevations, colors, materials and landscaping are appropriate for the site. The scenic and

visual quality of the project site would, therefore, not significantly be degraded and *no impacts* would occur with respect to this topic.

- d) *Create light or glare? LS/M.* Approval of the proposed project would add new light sources associated with the proposed development. These additional light sources could result in glare onto adjacent streets and dwellings to the west. This would be a potentially significant impact and the following measure is recommended to reduce this impact to a less-than-significant level:

Mitigation Measure AES-1. The following measures shall be incorporated into project building plans:

- a) Parking lot lighting shall be equipped with cut-off lenses to ensure that no light spills over onto either the adjacent streets or properties. The cut-off lenses shall be shown on the plans submitted for a building permit.
- b) Light levels shall meet the minimum security standards required by the Newark Police Department.
- c) Photometric plans shall be submitted and approved by the Newark Planning Division prior to issuance of a building permit to ensure that spillover of lights will be kept to a minimum.

2. Agricultural and Forestry Resources

Environmental Setting

The project site is located in an urbanized portion of Newark, is not used for agricultural cultivation, is not zoned for agricultural and is not encumbered with a Williamson Act Land Conservation Agreement. Similarly, no trees or other forestry resources are present on the site.

Environmental Impacts

- a,c) *Convert prime farmland to a non-agricultural use or involve other changes which could result in conversion of farmland to a non-agricultural use? NI.* the site is not zoned or used for agricultural purposes. Approval and construction of the proposed project would have no impact on prime farmland or convert existing farmland to a non-farm use.
- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract? NI.* No Williamson Act contract or agricultural zoning is present on the site, so there would be no impact with respect to this topic.
- d) *Result in the loss of forest land or conversion of forest land to a non-forest use? NI.* No forest land exists on the project site and no impact would result with respect to this topic.
- e) *Involve other changes which, due to their location or nature, could result of forest land to a non-forest use? NI.* See item “d,” above.

3. Air Quality

Environmental Setting

Air pollution climatology. Newark is located in southwestern Alameda County, part of the nine-county San Francisco Bay Air Basin. Newark is bounded on the west by San Francisco Bay and is indirectly affected by marine air flow. Marine air entering through the Golden Gate is blocked by the East Bay hills, forcing the air to diverge into northerly and southerly paths. The southern flow is directed down the bay, parallel to the hills, where it eventually passes over the Newark area. These sea breezes are strongest in the afternoon. The farther from the ocean the marine air travels, however, the ocean's effect is diminished. Thus, although the climate of Newark is affected by sea breezes, it is affected less so than the regions of the Bay Area closer to the Golden Gate.

The climate of Newark is also affected by its proximity to the San Francisco Bay. The bay cools the air with which it comes in contact during warm weather, while during cold weather the bay warms the air. The normal northwest wind pattern carries this air onshore. Bay breezes push cool air inshore during the day and draw air from the land offshore at night.

Newark has a relatively high potential for air pollution during the summer and fall. When high pressure dominates, low mixing depths and bay and ocean wind patterns can concentrate and carry pollutants from other cities to Newark, adding to the locally emitted pollutant mix. In winter and spring, the air pollution potential in Newark is moderate.

Air pollutants. Principal sources of air pollutants include carbon monoxide, reactive organic gasses, nitrous oxides, particulate matter and lead. Table 1 presents applicable state and federal air quality standards.

Table 1. Relevant California and National Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards
Ozone	8-hour	0.070 ppm (137 $\mu\text{g}/\text{m}^3$)	0.075 ppm (147 $\mu\text{g}/\text{m}^3$)
	1-hour	0.09 ppm (180 $\mu\text{g}/\text{m}^3$)	—
Carbon monoxide	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)
	8-hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)
Nitrogen dioxide	1-hour	0.18 ppm (339 $\mu\text{g}/\text{m}^3$)	0.100 ppm (188 $\mu\text{g}/\text{m}^3$)
	Annual	0.030 ppm (57 $\mu\text{g}/\text{m}^3$)	0.053 ppm (100 $\mu\text{g}/\text{m}^3$)

Pollutant	Averaging Time	California Standards	National Standards
Sulfur Dioxide	1-hour	0.25 ppm (655 $\mu\text{g}/\text{m}^3$)	0.075 ppm (196 $\mu\text{g}/\text{m}^3$)
	24-hour	0.04 ppm (105 $\mu\text{g}/\text{m}^3$)	0.14 ppm (365 $\mu\text{g}/\text{m}^3$)
	Annual	—	0.03 ppm (56 $\mu\text{g}/\text{m}^3$)
Particulate Matter (PM ₁₀)	Annual	20 $\mu\text{g}/\text{m}^3$	—
	24-hour	50 $\mu\text{g}/\text{m}^3$	150 $\mu\text{g}/\text{m}^3$
Particulate Matter (PM _{2.5})	Annual	12 $\mu\text{g}/\text{m}^3$	12 $\mu\text{g}/\text{m}^3$
	24-hour	—	35 $\mu\text{g}/\text{m}^3$

Source: BAAQMD and EPA, 2013.

Notes: ppm = parts per million mg/m^3 = milligrams per cubic meter $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

Toxic Air Contaminants. Toxic Air Contaminants (TACs) are another group of pollutants of concern. There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least 40 different toxic air contaminants. The most important, in terms of health risk, are diesel particulate, benzene, formaldehyde, 1,3-butadiene and acetaldehyde.

Public exposure to TACs can result from emissions from normal operations, as well as accidental releases. Possible health risks associated with TACs include cancer, birth defects, neurological damage and death.

No sensitive air quality receptors were observed on or immediately adjacent to the project site.

Environmental Impacts

- a) *Would the project conflict or obstruct implementation of an air quality plan?* **LS.** Approval and construction of the proposed townhouse project would require an amendment to the Newark General Plan which designates the site for commercial land use. The proposed change in use would add up to 85 new dwellings and associated population to the City of Newark at project build-out. The proposed dwellings would be located near a major commercial center, NewPark Mall, that is designated in the Newark General Plan as a high activity focus area. This impact would be less-than-significant and no significant conflict with the regional air quality plan would occur..
- b) *Would the project violate any air quality standards?* **LS/M.** Construction of the proposed project would have a potentially significant impact with regard to air short-term construction impacts. Construction dust associated with building demolition of existing structures, grading and utility trenching would affect local air quality during construction of the project. The effects of demolition and construction activities would be increased dust and locally elevated levels of PM₁₀ downwind of construction activity, generally toward the east.

During construction, various diesel-powered vehicles and equipment would be in use on the site, and diesel trucks would be used to carry demolition debris from the site. The California Air Resources Board (CARB) has identified particulate matter from diesel-fueled engines as a toxic air contaminant (TAC). CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines.

Health risks from TACs are a function of both concentration and duration of exposure. Unlike the above identified high risk sources, construction equipment diesel emissions are temporary, affecting an area for a period of days or perhaps weeks. Additionally, construction related sources are mobile and transient in nature. Because of its short duration and lack of nearby sensitive receptors, health risks from construction emissions of diesel particulate would be a less-than-significant impact.

According to the BAAQMD CEQA Guidelines, emissions of ozone precursors (ROG and NOx) and carbon monoxide related to construction equipment are already included in the emission inventory that is the basis for regional air quality plans and, thus, are not expected to impede attainment or maintenance of ozone and carbon monoxide standards in the Bay Area. Thus, the potentially significant effect of construction activities would be increased dust and locally elevated levels of PM10 downwind of construction activity. Unmitigated construction dust has the potential for creating a nuisance at nearby properties and would be a significant air quality impact.

Implementation of the following measure will reduce construction-related air quality emissions to a less-than-significant level (these measures are consistent with BAAQMD recommendations):

Mitigation Measure AIR-1. The developer shall be responsible for the following measures to control fugitive dust emissions. These measures shall be included on construction and demolition plans and specifications.

- a) Using water as needed to control dust and eliminate visible dust plumes.
- b) Covering all trucks hauling building debris, soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- c) Sweeping daily (preferably with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- d) Sweeping streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.
- e) Watering or covering of stockpiles of construction debris, soil, sand or other materials that can be blown by the wind.

These measures shall be done to the satisfaction of the Newark City Engineer and/or the City Building Official.

- c) *Would the project result in cumulatively considerable air pollutants?* **LS.** Vehicle trips generated by the project would result in air pollutant emissions affecting the entire San Francisco Bay Air Basin. As noted in the recently certified General Plan EIR, development under the General Plan would not contribute to a cumulatively considerable air pollutant condition and a less-than-significant impact would result.
- d,e) *Expose sensitive receptors to substantial pollutant concentrations or create objectionable odors affecting a substantial number of people?* **NI.** The site is surrounded by office uses, commercial development and multi-family dwellings. No sensitive air quality receptors are located near the site so that no significant populations would be affected by TACs. Similarly, no impacts are anticipated with regard to significantly objectionable odors since the proposed project would include a residential subdivision that would not emit significant odors.

4. Biological Resources

Environmental Setting

This section of the Initial Study is based on a document entitled “Biological Resource Assessment for the Newark Atrium Property” Prepared by Olberding Environmental Inc. dated June 2013. This assessment document is incorporated by reference into the Initial Study and is available for review at the Newark Community Development Department during normal business hours.

The project site is vacant and is located in an urbanized, developed portion of Newark. The Olberding report notes that the site is characterized as annual ruderal grassland. The site is routinely mowed and no rare, special-status plants were found on the site.

The site has the potential to provide foraging habitat for several status birds, including but not limited to white-tailed kite, red-tailed hawk and great egret. Due to site characteristics, the potential for burrowing owl presence on the site is considered low.

Although the Olberding report notes the presence of an ornamental pond on the site to the north, no wetlands have been observed on the site and the site contains no significant mature trees that could provide nesting or roosting habitat to bird species.

Environmental Impacts

- a) *Have a substantial adverse impact on a candidate, sensitive, or special-status species?* **LS/M.** The area around the project site area is developed with buildings and paved parking areas. The Olberding report noted that the presence on the site of rare, threatened or special-status plants is low and no impacts would occur with respect to this topic. However, the Olberding report does conclude that there is a potential for an impact to special-status bird species. The following mitigation measure will reduce this impact to a less-than-significant level.

Mitigation Measure BIO-1. If grading activities take place on the site during the nesting season (February-August), a pre-construction survey shall be completed by a qualified biologist for nesting birds. If any birds protected under the Migratory Bird Treaty Act are found, a buffer of at least 75 feet (for passerine birds) or 200 feet (raptors) shall be established. Once young birds have fledged, construction within the buffer area can proceed.

- b, c) *Have a substantial adverse impact on riparian habitat or federally protected wetlands?* **NI.** The site is inland and surrounded by urban land uses. No wetlands, waters of the United States or waters of the state have been observed on the site. There would be no impact on riparian habitat or federally or state protected wetlands.
- d) *Interfere with movement of native fish or wildlife species?* **NI.** With the exception of the project site, which is vacant, the surrounding area is developed with multi-family residential, commercial uses and roadways. No streams or watercourses exist on the site. Therefore, no impacts are anticipated with regard to blockage of fish or wildlife corridors.
- e, f) *Conflict with local policies or ordinances protecting biological resources or any adopted Habitat Conservation Plans or Natural Community Conservation Plans?* **NI.** The site is not located within the boundaries of any Habitat Conservation Plan or Natural Community Conservation Plan. No impacts would, therefore, result.

5. Cultural Resources

Environmental Setting

The project site is vacant and contains no above-ground historic resources. An archeological records search was completed for the site and surrounding area by the Northwest Information Center in August 21, 2006, for the previously approved CEQA document for this site. The Northwest Information Center notes that there is a moderate likelihood of encountering Native American resources on the project site and a low possibility of encountering archeological resources.

Environmental Impacts

- a) *Cause substantial adverse change to significant historic resources?* **NI.** The site is vacant and contains no historic above-ground resources. No impacts are anticipated with respect to this topic.
- b, c) *Cause a substantial adverse impact or destruction to archeological or paleontological resources?* **LS/M.** Based on the records search from the Northwest Information Center, there is a moderate probability of encountering buried archeological, historical, paleontological or Native American artifacts on the project site. A condition of project approval will require that construction of the project be halted. The project applicant shall adhere to the following measure to reduce this impact to a less less-than-significant level:

Mitigation Measure CULT-1. If buried archeological, historical, paleontological or Native America artifacts are found during project grading and construction, all work within a 50-foot wide radius of any discovery of such artifacts shall be halted. The City will then select a qualified professional to evaluate such resources and prepare a resource protection plan that complies with CEQA standards; work shall not be restarted until the resource protection plan is fully implemented. If human remains are encountered, the County Coroner and the Newark Police Department shall be immediately notified. This requirement shall be included in grading plans and specifications.

- d) *Disturb any human remains, including those interred outside of a formal cemetery?*
LS/M. The project applicant shall comply with Mitigation Measure CULT-1, above, to ensure this impact is less-than-significant.

6. Geology and Soils

Environmental Setting

This section of the Initial Study is based on a report titled "Geotechnical Feasibility Assessment, Cedar Boulevard and Mowry School Road, Newark California" prepared by ENGENEO, Inc. dated July 9, 2013. This report is hereby incorporated by reference into this Initial Study and is available for review at the Newark Community Development Department during normal business hours.

The project site is topographically flat and contains no unique rock outcroppings. Based on information contained in the Newark General Plan and General Plan EIR, underlying site soils are characterized by clay-rich soils with potential high shrink-swell potential. The ENGENEO report notes that there is a high potential for liquefaction on the site.

The ENGENEO report states that known active seismic faults have been identified in the Newark planning area, however, the area is subject to moderate to severe ground shaking from the nearby Hayward, San Andreas and Calaveras Faults.

Environmental Impacts

- a) *Expose people or structures to potential substantial adverse impacts, including loss, injury or death related to ground rupture, seismic ground shaking, ground failure, or landslides?*
LS. Proposed improvements on the site would be subject to moderate to severe ground shaking during seismic events on nearby fault zones. In the absence of an Earthquake Safety Zone on the site, the risk of ground rupture is considered low. With adherence to construction techniques identified in the California Building Code, other applicable State of California standards and the projects geotechnical report, less-than-significant seismic impacts to humans or structures are anticipated. As part of the normal development review process, the City of Newark will require submittal of a construction-level soils and geotechnical report prepared by an engineering professional to ensure that any impacts to building foundations due to the presence of shrink-swell characteristics will be less-than-significant. Recommendations in the report will be required to be incorporated into final

building plans. No impacts related to landslide hazard are anticipated since the project site contains minimal topographic relief.

- b) *Is the site subject to substantial erosion and/or the loss of topsoil?* **LS.** There is a possibility that grading activities and stockpiling of trench spoils could erode into nearby streets, Alameda County Flood Control and Water Conservation District regional drainage channels and ultimately into San Francisco Bay. This would be a significant impact and would be mitigated to a less-than-significant level by adherence to standard Newark Engineering Division conditions that require conformance with Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) permit and standards, enforced by the City of Newark, that mandates reduction of erosion off of all project sites in the community. Adherence to NPDES during construction and post construction periods will reduce the potential for soil erosion to a less-than-significant level.
- c-d) *Is the site located on soil that is unstable or expansive or could result in potential lateral spreading, liquefaction, landslide or collapse?* **LS.** The ENGEO report concludes that the site is underlain by potentially expansive soils that have a moderate to high potential for liquefaction. Forces exerted during shrink-swell could damage building foundations, walkways and parking areas. Differential settlement of soils could also occur. The City of Newark will require preparation and submittal of a construction-level soils and geotechnical report by a qualified engineering professional as part of the normal review process. Adherence to foundation and other construction techniques recommended in the soils and geotechnical report will reduce impacts related to liquefaction, lateral spreading and shrink-swell potential to a less-than-significant level.
- e) *Have soils incapable of supporting on-site septic tanks if sewers are not available?* **NI.** The proposed buildings will be connected to the Union Sanitary District (USD) sanitary sewer system under existing City ordinance and USD policy. There would be no impact with regard to septic tanks.

7. Greenhouse Gas Emissions

Environmental Setting

Greenhouse gasses (GHGs) are gasses that trap heat in the earth's atmosphere and affect the earth's temperature. This is also known as the Greenhouse Effect. Elements and compounds that typically comprise carbon dioxide and water vapor but also include other compounds, such as methane, nitrous oxides and others.

Although still controversial, GHGs have been linked to such phenomenon as changes in the earth's temperature, weather patterns and sea levels.

The City of Newark has adopted a Climate Action Plan (CAP) to investigate and identify feasible measures that could be taken on a local level to reduce GHGs emissions. The CAP

establishes a target for a 5% reduction of municipal emissions by July 2012, a 5% reduction of community wide GHG reductions by July 2015 and a 15% reduction by 2020.

Even if the GHG reduction targets are met the General Plan found that building out of all land uses included in the General Plan would exceed GHG emissions thresholds established by the Bay Area Air Quality Management District and would result in a significant and unavoidable impact.

Environmental Impacts

- a,b) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?* **LS.** Construction of the proposed project would add a number of additional vehicle trips to the site that would incrementally add to greenhouse gas emissions. However, Table 3-1 contained in the May 2011 Bay Area Air Quality Management District CEQA Guidelines demonstrates that mid-rise apartment development with fewer than 87 dwellings do not significantly contribute to greenhouse gas emissions. Since the proposed project contains 85 dwellings, this impact would be less-than-significant.

8. Hazards and Hazardous Materials

Environmental Setting

This portion of the Initial Study is based on a Phase I Environmental Site Assessment for the subject property entitled "ASTM Phase I Environmental Site Assessment, Newark Atrium Project, Cedar Boulevard and Mowry School Road, Newark CA" prepared by Haley & Aldrich, Inc. dated June 28, 2013. This Phase I report is incorporated by reference into this Initial Study and is available for review at the Newark Community Development Department during normal business hours.

The Phase I analysis found no recognized environmental conditions on the site. The site is not located near any public or private airports or airstrips nor is it located within a wildland fire hazard area.

Environmental Impacts

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?* **LS.** The proposed project, if approved, would include normal and customary transport, use and storage of building materials, paints, solvents and lawn care chemicals, many of which are considered hazardous or potentially hazardous. These materials would be used for building and landscape maintenance, and handled by building maintenance staff pursuant to local, state and federal standards. Use of such materials is not anticipated to result in a significant hazard to the public and a less-than-significant impact would exist.
- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous material into*

the environment? **NI.** Based on the Haley & Aldrich Phase I site assessment, no recognized environmental hazards have been identified on the site. No impact is anticipated with respect to this topic.

- c) *Emit hazardous materials or handle hazardous or acutely hazardous materials, substances, waste within one-quarter mile of a school?* **NI.** The nearest school to the project area is Newark Memorial High School, which is located more than one-quarter mile from the project site. No impact is anticipated with regard to emitting acutely hazardous materials near a school site.
- d) *Is the site listed as a hazardous materials site?* **NI.** The project site is not listed on the State of California Department of Toxics Substances Control list (the Cortese List) as of February 10, 2014. No impacts are anticipated with respect to this topic.
- e,f) *Is the site located within an airport land use plan of a public airport or private airstrip?* **NI.** No public or private airstrips or airfields exist within or immediately adjacent to the City of Newark, so there would be no impact with respect to conflicts with airport land use plans or local airport activities.
- g) *Interference with an emergency evacuation plan?* **NI.** The proposed project is not designed in such a manner as to block vehicular traffic along Cedar Boulevard or Mowry School Road, both of which provide normal and emergency access to and from the site. Therefore, no impacts are anticipated with regard to interference with emergency evacuation plans.
- h) *Expose people or structures to significant risk due to wildlife fire, including where residences are intermixed with wildlife?* **NI.** The project site is located in an urban area, with commercial or higher density residential land uses on all sides. No impacts are, therefore, anticipated with respect to significant risk of the proposed project to wildland fire.

9. Hydrology and Water Quality

Environmental Setting

Surface water. Surface water flows within channelized creeks maintained by the Alameda County Flood Control and Water Conservation District. No channels are located on or adjacent to the project site.

Groundwater. The Newark planning area overlays a major aquifer known as the Niles Cone. Niles Cone has historically provided water to the Newark and Fremont areas and continues to play a part in satisfying the overall water demand from the region.

Surface water quality. The City of Newark, along with all other cities in Alameda County and Alameda County itself, is a participant in the Alameda Countywide Clean Water Program that was formed in 1989 to control urban runoff. The City of Newark enforces the most recent C.3 and C.6 requirements set forth in the Municipal Regional Stormwater National Pollutant

Discharge Elimination System (NPDES) permit issued to the City by the San Francisco Bay Regional Water Quality Control Board in October 2009. The C.3 and C.6 requirements state that development projects are to provide site design measures, source controls, Low Impact Development (LID) treatment measures, hydromodification management, and construction best management practices that are appropriate for the type and size of the project to control stormwater pollution. Treatment measures could include biotreatment systems that are designed subject to established numeric sizing criteria. Each development project is required to complete a Stormwater Requirements Checklist and prepare Stormwater Treatment Design Plans and a Stormwater Pollution Prevention Plan that collectively establish how the project will satisfy NPDES water quality standards.

Flooding. A portion of the site is located within a 500-year flood hazard area where there is a 0.2% annual chance of flooding as mapped by the Federal Emergency Management Agency on Flood Insurance Rate Map Panel No. 06001C0463G, dated August 3, 2009. No portions of the site are within a 100-year flood plain.

Environmental Impacts

- a) *Violate any water quality standards or waste discharge requirements?* **LS.** The proposed project would dispose of wastewater through Union Sanitary District treatment facilities, which can accommodate the additional amount of wastewater generated by the proposed project (source: Al Bunyi, USD, 2/25/14). The project will also be required to comply with NPDES surface water quality standards as enforced by the City of Newark, so that less-than-significant impacts would result with regard to violation of water quality standards or waste discharge requirements.
- b) *Substantially deplete groundwater recharge areas or lowering of water table?* **NI.** Water for the proposed would be provided by the Alameda County Water District, which relies on a combination of imported water and locally pumped groundwater. The site is not designated in the Newark General Plan as a groundwater recharge area and there would no impacts to groundwater resources.
- c) *Substantially alter drainage patterns, including streambed courses such that substantial siltation or erosion would occur?* **LS/M.** The project site is vacant and stormwater likely sheet flows off of the site and into adjacent streets. Construction of the proposed project would increase the amount of impervious surfaces in terms of buildings, parking areas and paved walkways. The amount, velocity and rate of increased stormwater runoff from the site is unknown; however, the amount of increased runoff could alter existing drainage patterns and result in a potentially significant impact in terms of the ability of downstream drainage facilities to accommodate increased flows. Adherence to the following measure will mitigate this impact to a less-than-significant level.

Mitigation Measure HYD-1. Prior to issuance of a grading permit, a hydrology report shall be prepared by a California registered civil engineer using Alameda County Flood Control and Water Conservation District standards documenting existing stormwater flows from the site, estimated increases in the amount of peak stormwater flows, the estimated direction of flows and the capacity of

downstream drainage facilities to accommodate estimated project increases. The report shall also document increases in downstream capacity that would be needed to accommodate drainage and the project's financial contribution to downstream improvements. The report shall be approved by the City of Newark and, at the discretion of the City Engineer, the Alameda County Flood Control and Water Conservation District.

- d) *Substantially alter drainage patterns or result in flooding, either on or off the project site?* **LS/M.** See item "c" above.
- e) *Create stormwater runoff that would exceed the capacity of drainage systems or add substantial amounts of polluted runoff?* **LS/M.** See items "c" and "d" above.
- f) *Substantially degrade water quality?* **LS.** Construction of the proposed project has the potential to degrade surface water quality through runoff of polluted stormwater and debris from the site. To reduce this impact to a less-than-significant level, the Newark Engineering Division will require that the developer prepare and implement a Stormwater Treatment Design Plan and a Stormwater Pollution Prevention Plan to ensure that the subdivision will comply with C.3 and C.6 Municipal Regional Stormwater NPDES water quality standards and other applicable standards.
- g-i) *Place housing within a 100-year flood hazard area as mapped by a Flood Insurance Rate Map, or impede or redirect flood flow, including dam failure?* **LS.** The project site is not included within a 100-year flood hazard areas (see Environmental Setting section, above). The site may be subject to inundation of flood water from upstream failure of Del Valle, Calaveras and Turner dams and reservoirs, but this is anticipated to be less-than-significant (source: <http://www.abag.ca.gov/cgi-bin/pickdamx.pl>).
- j) *Result in inundation by seiche, tsunami or mudflows?* **NI.** There are expected to be no impacts with regard to seiche, tsunami or mudflows since the project site is located a sufficiently large distance east of San Francisco Bay. No hillsides are located near the site that could result in mudflows.

10. Land Use and Planning

Environmental Setting

The project site is vacant and has been planned and zoned for commercial land uses by the City of Newark. The applicant has requested approval of an amendment to the Newark General Plan to re-designate the site for residential use. No amendments are proposed to any General Plan environmental goals, policies or programs have been requested.

Environmental Impacts

- a) *Physically divide an established community?* **NI.** The project site is presently vacant and is located in a commercial and medium density residential portion of the community.
Approval and construction of the townhouse project would extend the existing residential

neighborhood west of the site to the site itself. There would be no disruption of an established community on the site or in the immediate area and no impact to nearby established communities would result.

- b) *Conflict with any applicable land use plan, policy or regulation?* **NI.** The project applicant has requested approval of a general plan amendment to re-designate the site for residential uses. This would not change any other local land use policy or regulation affecting environmental quality and no impact would result.
- c) *Conflict with a habitat conservation plan or natural community conservation plan?* **NI.** No impacts would result regarding Habitat Conservation Plans or Natural Community Conservation Plans since none of these preserves have been created on the project site nor are such plans being contemplated.

11. Mineral Resources

Environmental Setting

The Newark General Plan does not indicate the project site contains any significant sources of minerals.

Environmental Impacts

- a, b) *Result in the loss of availability of regionally or locally significant mineral resources?* **NI.** No impacts would occur to any mineral resources since none have been identified on this site in the General Plan.

12. Noise

Environmental Setting

This section of the Initial Study is based on an acoustic analysis prepared by the firm of Rosen, Goldberg, Der & Lewitz. This report is included as Attachment 1 of this Initial Study.

Environmental noise fundamentals. Noise can be defined as unwanted sound and is commonly measured with an instrument called a sound level meter. The sound level meter “captures” sound with a microphone and converts it into a number called a sound level. Sound levels are expressed in units of decibels (dB). To quantify the noise level over a 24-hour period, the Day/Night Average Sound Level (L_{dn} /DNL) or Community Noise Equivalent Level (CNEL) is used. These descriptors are averages like the L_{eq} except they include a 10 dBA penalty for noises that occur during nighttime hours (and a 5 dBA penalty during evening hours in the CNEL) to account for peoples increased sensitivity during these hours.

In environmental noise, a change in the noise level of 3 dBA is considered a just noticeable difference. A 5 dBA change is clearly noticeable, but not dramatic. A 10 dBA change is perceived as a halving or doubling in loudness

Existing noise environment. The site is affected by noise from Cedar Boulevard and to a lesser extent, Mowry School Road.

Noise measurements were made on and around the project site to quantify the existing noise environment. The measurements included one 24-hour noise measurement and four short term, 15-minute measurements. The noise measurement locations are shown on **Exhibit 7**. The short-term measurements were made at locations that represent the noise exposure at the proposed buildings and the ambient noise at the setback of the nearby existing buildings. The short-term measurement results were correlated with simultaneous measurements at the long-term monitoring location to determine the DNL at the short-term measurement locations. Table 2 shows the results of the measurements

Table 2. Short-Term Noise Measurement Results

	Location	Time	A-weighted Sound Level, dBA				
			L _{eq}	L ₁₀	L ₅₀	L ₉₀	DNL
1	Mowry School Road Setback of proposed buildings	23 Dec 2013 10:52 – 11:07 AM	55	58	52	49	56
2	Northeast corner of site at location of proposed tot lot	23 Dec 2013 11:14 – 11:29 AM	54	56	51	49	55
3	Northwest corner of site adjacent to existing hotel	23 Dec 2013 11:33 – 11:48 AM	52	54	52	51	53
4	Cedar Boulevard Setback of proposed buildings	23 Dec 2013 11:58 – 12:13 PM	63	67	61	54	63

Estimate of DNL based on comparison of Short-term measurements with results of Long-term measurements

Source: RGD Acoustics, 2006

Environmental Impacts

a, c) *Would the project result in exposure of persons to, or generate noise levels in excess of standards established by the General Plan or noise ordinance or applicable standards of other agencies or result in substantial permanent increases in ambient noise levels??*

LS/M. According to the traffic study, the proposed project would generate approximately 24 peak hour trips on Cedar Boulevard and 32 peak hour trips on Mowry School Road. This will increase the noise level along both Cedar Boulevard and Mowry School Road by less than 1 dBA. Table 3 presents the increase in Ldn due to the project under existing and cumulative conditions. Although cumulative noise increases along Cedar Boulevard are greater than 3 dBA, the contribution from the project is less than 1 dBA, and therefore, not cumulatively considerable.

Table 3. Project Traffic Related Noise Level Increases

Roadway	Link	L _{dn} at 50 feet from roadway centerline (dBA)							
		Existing		Existing Plus Project		Cumulative Without Project		Cumulative Plus Project	
		L _{dn}	L _{dn}	Incr. re Exist	L _{dn}	Incr. re Exist	L _{dn}	Incr. re Exist	Incr. re Cum. w/o Proj.
Cedar Blvd	Stevenson to Mowry School	64.8	64.8	0.0	68.1	3.3	68.1	3.3	0.0
	Mowry School Rd. to Joaquin Mureta Av.	64.8	65.0	0.2	68.1	3.2	68.1	3.3	0.0
Mowry School Rd	Cedar to Access	52.0	52.8	0.8	52.0	0.0	52.8	0.8	0.8
	Access to Balentine	51.4	52.2	0.8	51.4	0.0	52.2	0.8	0.8
Stevenson Boulevard	South of Cedar	66.9	66.9	0.0	69.2	2.3	69.2	2.3	0.0
	North of Cedar	67.8	67.8	0.0	70.7	2.9	70.7	2.9	0.0

Source: RGD, 2014

Operational noise impacts. Operational noise sources associated with the project include occupant activities, intermittent landscaping and mechanical systems such as the heating, ventilation and air-conditioning system (HVAC). Of these noise sources, the mechanical equipment has the greatest potential to significantly increase long-term average noise levels at adjacent uses. The specific mechanical equipment that will be installed as part of this project is unknown. Depending on the type of equipment there is a potential it to increase noise levels at adjacent land uses by more than 5 dBA, particularly if the equipment would operate continuously and at night. Therefore, noise from mechanical equipment is a potentially significant impact. Adherence to the following measure will reduce this impact to a less-than-significant level.

Mitigation Measure NOISE-1. Noise from mechanical equipment must not exceed an L_{dn} of 58 dBA at the adjacent property lines to the north and west. For continuously operating mechanical equipment an L_{dn} of 58 dBA corresponds to an hourly average noise level of no greater than 60 dBA (L_{eq}) at the property line during daytime hours (7 am – 10 pm). If mechanical equipment operates continuously during the night (10 pm – 7 am), the equipment must not exceed an hourly average noise level of 52 dBA (L_{eq}) at the property line during both daytime and nighttime hours.

Land use compatibility. The site is currently exposed to traffic noise from Cedar

Boulevard and Mowry School Road. Based on traffic volume projections contained in the project traffic study, and the noise measurements, the noise level at the proposed building setback along Cedar Boulevard is calculated to be an L_{dn} of 66 dBA while the proposed building set back along Mowry School Road will be an L_{dn} of 57 dBA.

An L_{dn} of 65 dBA or less is considered “normally acceptable” for multi-family residential development. The noise exposure along Mowry School Road at the buildings and proposed tot lot would be within the normally acceptable noise exposure. Since the future noise exposure along Cedar Boulevard exceeds this level, this is considered a significant impact and will be reduced to a less-than-significant level by adherence to the following measure.

Mitigation Measure NOISE-2. The design of the project buildings should incorporate measures such as sound-rated windows to achieve an interior L_{dn} of 45 dBA or less. The required design features should be determined through a site-specific noise study that takes into account the future noise exposure at the various building facades and the project floor plans and elevations consistent with General Plan Action EH-7.A.

- b) *Exposure of people to excessive groundborne vibration or groundborne noise levels?* **LS.** The nearest existing building to the project is the hotel to the west. This building is 35 feet from the proposed project construction area. The residences to the south are about 140 feet from the project buildings and the distance to the commercial building to the north is approximately 100 feet. At these distances, the construction vibration is predicted to be below the thresholds for damage risk for all nearby existing buildings. The hotel would be close enough to experience vibration levels that could cause an annoyance impact, based on criteria developed for transit noise impact assessment (Federal Transit Administration, FTA). The commercial building and residences would be exposed to vibration levels that are below the annoyance impact criteria. General Plan Action EH-7.E requires the project to implement a standard operating procedure that requires the use of less vibration intensive equipment or construction techniques if construction-related vibration is determined to exceed FTA vibration annoyance criteria. This impact would be less-than-significant.
- d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels without the project?* **LS/M.** Construction will occur in several distinct phases, although the exact details of these phases are as yet unknown. For the purposes of this assessment it is assumed that pile driving is not required. The maximum noise levels could reach 88 dBA at the northwestern property line when activities are closest to the property line. The noise level produced by the construction equipment would become quieter as construction progresses away from the northwestern property line. Typical maximum noise levels of 75 dBA would be expected when construction activities are at the center of the site. As the exteriors of the buildings are completed, much of the construction related tasks would occur indoors, which will provide additional acoustical shielding.

Construction noise would be clearly audible at the adjacent residential and commercial land uses and exceed the City’s standard since ambient noise levels would increase by more

than 5 dB due to construction. This is a potentially significant impact. Therefore, in addition to the General Plan policy restricting hours of construction, the following mitigation measures are recommended.

Mitigation Measure NOISE-3. To reduce daytime noise impacts due to construction, the project sponsor shall require the project to implement the following measures:

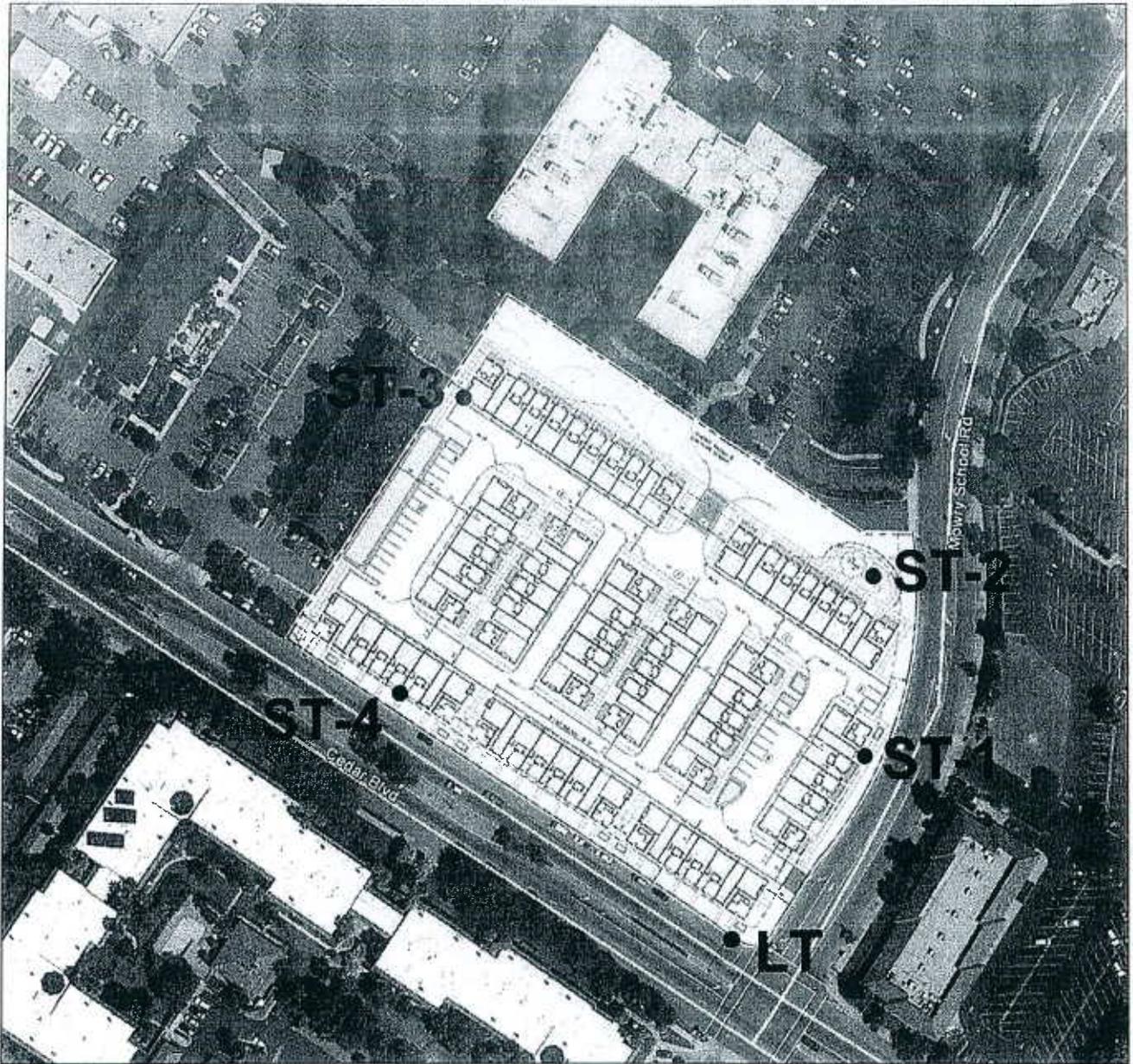
- a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (*e.g.*, improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible)
- b. Impact tools (*e.g.*, jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.
- c. Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures to the extent feasible.
- d. Monitor the effectiveness of noise attenuation measures by taking noise measurements to the extent there are persistent and on-going complaints.

Mitigation Measure NOISE-4. Prior to the issuance of building permit, along with the submission of construction documents, the project sponsor shall submit to the City Building Department a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:

- a. A procedure for notifying the City Building Division staff and Newark Police Department;
- b. A plan for posting signs on-site pertaining to permitted construction days and hours and complaint procedures and who to notify in the event of a problem;
- c. A listing of telephone numbers (during regular construction hours and off-hours);
- d. The designation of an on-site construction complaint manager for the project;
- e. Notification of neighbors within 300 feet of the project construction area at least 30 days in advance of pile-driving and/or other extreme noise-generating activities about the estimated duration of the activity; and

f, A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

e,f) *Be located within an airport land use plan area, within two miles of a public or private airport or airstrip?* **NI.** No public or private airports or airstrips exist within or near the City of Newark. *No impact* would, therefore, result.



SOURCE: Rosen, Goldberg, Der & Lewitz, Inc., 24 February 2014.

13. Population and Housing

Environmental Setting

Newark is a balanced community consisting of stable residential neighborhoods, shopping districts and a large industrial and research and development base.

The project site is currently vacant, but multi-family residences have been constructed west of the site.

Environmental Impacts

- a) *Induce substantial population growth in an area, either directly or indirectly?* **LS.** The proposed project would include adding a permanent population on the site, which is currently planned for commercial land uses. However, the relatively small size of the project, 85 dwellings, would not represent a substantial population increase in this portion of Newark. Surrounding properties on all sides of the site are currently undeveloped, so that there would be a less-than-significant impact with respect to population increase.
- b,c) *Would the project displace substantial numbers of existing housing units or people?* **NI.** The project site is vacant and no dwellings or residents would be displaced to accommodate the proposed project. No impacts would result with respect to this topic.

14. Public Services

Environmental Setting

Services to the City of Newark are provided by the following:

Fire and Emergency Services: Alameda County Fire Department. The Department provides fire suppression, emergency rescue, inspection and hazardous material spill response to Newark under contract to the City and other jurisdictions in Alameda County. The Department maintains staffed fire stations at the following locations:

- Station 27, 39039 Cherry Street
- Station 28, 7550 Thornton Boulevard
- Station 29, 35775 Ruschin Drive

Police Services: City of Newark. The Police Department provides crime investigation, crime prevention, traffic control, school resources and community-oriented policing. The Department is headquartered at the Newark Civic Center.

Public Educational Service: Newark Unified School District provides K-12 educational services to the community.

Solid Waste Collection and Disposal: Republic Services

Environmental Impacts

- a) *Fire protection?* **LS.** The closest fire station to the project area is Fire Station #27 at the southwest corner of Cherry Street and Mowry Avenue. Approval of the proposed project would increase the number of calls for service for the Newark Fire Department based on occupancy of additional residences. Based on discussions with Fire Department staff, construction of the proposed project would not require the construction of new or expanded Fire Department facilities (source: Holly Guinier, ACFD, 2/6/14). This would be a less-than-significant impact.
- b) *Police protection?* **LS.** The Newark Police Station is located approximately 1 to 1.5 miles north of the project site. Based on information provided by the Newark Police Department, construction of the proposed subdivision could be served by the existing police facility without the need for additional facilities so that impacts to the Police Department would be less-than-significant (source: Sgt. Arguello, Newark Police Department, 2/12/14).
- c) *Schools?* **NI.** There would be no impact to the Newark Unified School District since payment of mandated school impact fees to the District will off-set potentially higher student enrollment generated by the proposed project.
- d) *Other governmental service, including maintenance of public facilities?* **NI.** There would be no impact to maintenance services provided by the City since the project involves private improvements on private property.
- e) *Solid waste generation?* **LS.** Less-than-significant impacts regarding generation of solid waste are anticipated since any additional staffing and equipment to collect solid waste and recycling by Waste Management, Inc. would be off-set by user fees charged to commercial customers. The amount of solid waste generated from the site is anticipated to be reduced in the future as the requirements of AB 939 take effect. This law, adopted in 1989, mandates a reduction in the municipal waste stream. Based on a discussion with Waste Management officials, adequate capacity exists in nearby solid waste landfills to accommodate additional waste generated by this project.

15. Recreation

Environmental Setting

The City of Newark maintains a wide range of parks and associated recreational services for residents. The nearest neighborhood park to the project site is Eucalyptus Grove Park located north of the project site.

Regional park facilities in Newark and surrounding communities are provided by the East Bay Regional Park District.

Environmental Impacts

- a) *Would the project increase the use of existing neighborhood or regional parks?* **LS.**
Additional residents occupying proposed Cedar Townhouses would increase demand for

park facilities in the community. Payment of park in-lieu fees charged by the City will off-set impacts to the City's park system. This impact is anticipated to be less-than-significant.

- b) *Does the project include recreational facilities or require the construction of recreational facilities?* **NI.** The proposed project includes a small lot-lot facility within the proposed development. The subdivider would also be required to pay in-lieu park fees to the City to off-set the need for additional park facilities. No impacts are anticipated with respect to this topic.

16. Transportation/Traffic

(Note: A traffic and transportation analysis for the proposed project was completed by the firm of Omni Means Ltd. A copy of the analysis is included as Attachment 2 to the Initial Study. The results of the traffic report are summarized below.)

Environmental Setting

The following sections describe the existing street network, study intersections, operating conditions, and points of congestion in the project study area.

Existing roadways. Streets that provide local and sub-regional access into and around the proposed project vicinity include Mowry School Road, Cedar Boulevard, Stevenson Boulevard, Balentine Drive, Albrae Street, Joaquin Murieta Avenue, and Newpark Mall Drive. Regional access to the project site is provided by Interstate 880. A brief description of each roadway follows:

Mowry School Road would provide direct access to the proposed project site and is located immediately south of the site. Extending in an east-west direction, Mowry School Road is a two-lane street that extends from Cedar Boulevard through Balentine Drive. East of Balentine Drive, the roadway extends north and parallels I-880 before terminating in a cul-de-sac.

Cedar Boulevard is a north-south arterial street that is located directly west of the project site. In the project study area between Stevenson Boulevard and Mowry Avenue, Cedar Boulevard is a four-lane divided street and serves both commercial-retail and residential areas as well as providing access to the Newark Memorial High School.

Stevenson Boulevard is an east-west arterial street located south of the proposed project site. Between I-880 and Cedar Boulevard, Stevenson Boulevard has six travel lanes with raised medians and turn lanes at major intersections. At Cedar Boulevard, the roadway narrows to four travel lanes and this configuration extends through Boyce Road. Stevenson Boulevard provides access to commercial and light-industrial areas and also extends east over I-880 into Fremont.

Balentine Drive is located east of the proposed project site and extends in a northerly direction from Stevenson Boulevard. Just prior to reaching Newpark Mall Drive, the roadway

turns west and extends to Cedar Boulevard. Between Stevenson Boulevard and Newpark Mall Drive, Balentine Drive has four travel lanes with a two-way-left-turn-lane (TWLTL). The section extending to Cedar Boulevard has two-travel lanes.

Albrae Street is located south of the project site off of Stevenson Boulevard within the City of Fremont and forms the northbound approach of the Stevenson/Balentine intersection. A two-lane street, Albrae Street provides access to commercial and light-industrial areas south of Stevenson Boulevard.

Joaquin Murieta Avenue extends between Cherry Street and Cedar Boulevard northwest of the project site. A wide two-lane roadway, Joaquin Murieta Avenue provides access to residential areas.

Newpark Mall Drive is a privately owned four-lane roadway located north of the project site that provides direct access to the Newpark Mall. The roadway extends in a circular fashion (ring road) around the mall and connects with multiple roadways including Mowry Avenue, Cedar Drive, and Balentine Drive.

Regional access to the proposed project site is provided by Interstate 880 (I-880) located east of the project site. A multi-lane freeway, I-880 is a north-south freeway that has a full-access interchange at Stevenson Boulevard. I-880 provides access north to Hayward and Oakland and south to Fremont and San Jose.

Existing Intersections. The following list of study intersections have been reviewed by Newark Engineering staff for both existing and proposed project operating conditions. Intersection operation is usually considered a key factor in determining the traffic handling capacity of a local street circulation system. Based on discussions with City of Newark Engineering staff, seven (7) key intersections in addition to the main access driveway were selected for evaluation of current operational characteristics on Cedar Boulevard, Balentine Drive, and Stevenson Boulevard as follows:¹

- | | |
|---|----------------------|
| 1. Cedar Boulevard/Balentine Drive | Signalized |
| 2. Balentine Drive/Mowry School Road | Signalized |
| 3. Cedar Boulevard/Mowry School Road | Signalized |
| 4. Stevenson Boulevard/I-880 Northbound Ramps | Signalized |
| 5. Stevenson Boulevard/I-880 Southbound Ramps | Signalized |
| 6. Stevenson Boulevard/Balentine Dr./Albrae St. | Signalized |
| 7. Stevenson Boulevard/Cedar Boulevard | Signalized |
| 8. Mowry School Road/Office-Project Driveway | Stop-Sign (Driveway) |

Intersection Level of Service (LOS) Methodology. A method of measuring intersection operation is to apply a Level-of-Service (LOS) scale of operational performance. At a signalized intersection, LOS is determined by calculating the volume of conflicting turning movements at

¹ *Soren Fajeau, City Engineer, City of Newark, Project study intersections—personal communication, December, 2013.*

the intersection during a one-hour peak period. This total is then divided by the design capacity calculated to accommodate those turning movements. This calculation yields a volume/capacity ratio (v/c) ratio and vehicle delay in seconds. The resulting output corresponds to LOS ratings between “A” to “F” that describe increasing levels of traffic demand and increases in vehicle delay and deterioration of service (please refer to LOS Definitions, show in Table 1 of the Traffic Analysis in Attachment 2).

As an example, LOS A represents free-flow conditions with little or no delay. LOS E represents unstable flow conditions with volumes at or near design capacity. Motorists are likely to experience major delays (40 to 60 seconds) to clear an intersection. LOS F represents “jammed” conditions where traffic flows exceed the design capacity of the intersection.

At non-signalized intersections, LOS usually refers to the minor street movement controlled by a stop-sign. While overall intersection LOS from the major street may be C or better, a minor street turning movement may be functioning at LOS D or E. For all-way-stop-control intersections, intersection LOS refers to the average delay of all approaches. However, if one of the intersections’ approach legs is substantially unbalanced (volume), that specific leg may experience proportionately longer delays.

Highway Capacity Manual 2000 (*HCM 2000*) operations methodology was used to calculate signalized and non-signalized intersection LOS and delay using Synchro/SimTraffic software. These “field level” intersection LOS calculations incorporate appropriate heavy vehicle adjustment factors, peak hour factors, and shared/non-shared lane factors. A standard peak hour factor (PHF) of 0.92 is typically applied to all non-signalized analysis scenarios in this study (PHF refers to traffic approach progression through the intersection) except where previously recommended mitigation applies.

Existing Intersection Operation. With the proposed project being residential in nature, the primary trip generation would occur during the weekday AM and PM commute periods when residents travel to/from their homes. Therefore, traffic impact analyses have focused on the weekday AM and PM peak periods between 7:00-9:00 a.m. and 4:00-6:00 p.m. when both on-street traffic and vehicle trip generation would be at their highest.

New AM and PM peak period intersection counts were conducted at the eight project study intersections.² From these peak period counts, PM peak hour volumes were derived and are shown in Figure 2 of the full Traffic Report, see Attachment 2).

PM peak hour signalized and non-signalized intersection LOS have been calculated using the *Transportation Research Board (TRB), Highway Capacity Manual 2000, Chapters 16 and 17, Signalized and Unsignalized Intersections.*

As shown in Table 4, all seven project study intersections are operating at acceptable levels (LOS C or better) during the AM and PM peak hours. However, periodic vehicle queuing was

² Baymetrics Traffic Resources, AM and PM peak period (7:00-9:00 a.m. and 4:00-6:00 p.m.) intersection turning movement counts on Cedar Boulevard, Mowry School Road, and Stevenson Boulevard, City of Newark, January 19, 2014.

observed at the Stevenson/I-880 interchange on-ramps. Specifically, at the Stevenson Boulevard overcrossing of I-800, both the “free movement” southbound and northbound on-ramps experience queuing during the PM peak hour. While these ramps are free movements, vehicle queuing is caused by metering to provide uniform access to I-880 and prevent additional congestion on the freeway. Subsequent field observations indicate vehicle queuing at the I-880 ramp intersections at Stevenson Boulevard is in large part affected by freeway congestion on I-880.³

Table 4. Existing Conditions-Weekday AM and PM Peak Hour Intersection LOS

Intersection	Control Type	AM Peak Hour			PM Peak Hour		
		Delay	LOS	Warrant Met	Delay	LOS	Warrant Met
1 Cedar Boulevard/Balentine Drive	Signal	32.4	C	---	20.7	C	---
2 Mowry School Road/Balentine Drive	Signal	9.8	A	---	11.8	B	---
3 Mowry School Road/Cedar Boulevard	Signal	8.5	A	---	10.5	B	---
4 Stevenson Boulevard/I-880 NB Off-Ramp	Signal	15.1	B	---	14.8	B	---
5 Stevenson Boulevard/I-880 SB Off-Ramp	Signal	10.0	B	---	15.3	B	---
6 Stevenson Boulevard/Albrae St.-Balentine Dr.	Signal	28.4	C	---	28.4	C	---
7 Stevenson Boulevard/Cedar Boulevard	Signal	30.7	C	---	27.8	C	---
8 Mowry School Road/Office-Project Access	TWSC	8.4	A	No	9.0	A	No

Legend: TWSC = Two-Way-Stop Control

Intersection LOS is expressed in seconds of vehicle delay based on HCM 2000 Operations methodology.

Source: Omni-Means, 2014

Existing traffic flows were also observed along Mowry School Road at the existing (proposed project) driveway. Currently, this driveway extends north from Mowry School Road and serves existing office development located just east and north of the proposed project site. The project driveway is divided by a raised median with separate lanes for inbound and outbound traffic flows. There is a one-way traffic circle at the north end of the driveway where it terminates near the existing office building.

Observations during the PM peak period indicate that traffic flows in/out of the driveway are very light as are east-west traffic volumes on Mowry School Road (less than 150 vehicles traveling through the entire intersection). The driveway is not controlled by a yield or stop-sign and some motorists were observed to be using the inbound travel lane to exit outbound onto Mowry School Road.

Near-Term Project Conditions. Near-term (no project) conditions represent approved/pending projects approved by the City of Newark prior to proposed project development combined with increases in regional traffic growth. This would represent a 2- year period consistent with

³ Ms. Moon Choi, Baymetrics Traffic Resources, Traffic observations at Stevenson Boulevard/I-880, Personal communication, February 7, 2014.

previous studies. The proposed project development would likely represent a 1–2 year horizon. However, near-term (no project) conditions are conservative in nature. Approved/pending projects likely to affect traffic flows in the general study areas were identified from the recent studies conducted for the City of Newark General Plan Tune Up EIR.⁴

Based on overall growth projections discussed in the General Plan EIR Transportation and Traffic section, build-out of General Plan land uses would include an increase of 16,580 residents, 6,208 housing units, and 2,882 jobs over existing Year 2012 base levels. Using these growth estimates, the Alameda County Transportation Commission (ACTC) transportation model was updated to provide Year 2035 traffic volume forecasts.⁵ Using the difference between existing Year 2012 baseline volumes and Year 2035 model volumes at each study intersection, existing volumes were increased by a two-year growth ratio based on the uniform 23-year increase in model volumes.

AM and PM peak-hour near-term (no project) volumes have been added to existing intersection volumes based on trip assignments established in the General Plan Tune Up EIR.

Based on discussions with the City of Newark Engineering staff, there are not immediate circulation improvements planned in the study area (that would be completed in a one–two year horizon period).⁶ The City of Fremont has planned improvements to Stevenson Boulevard between Balentine Drive and Cedar Boulevard which includes median modifications and a new traffic signal.

With near-term (no project) traffic added to existing peak-hour traffic volumes, baseline intersection LOS have been calculated and are shown in Table 5. With near-term (no project) volumes, all study intersections would be operating at acceptable levels (LOS C or better) during both the AM and PM peak hours.

Based on peak-hour minimum volume criteria (MUTCD #3), the Mowry School Road/Office-Project Access intersection would not qualify for signalization under near-term (no project) conditions.

⁴ *Planning Center / DC&E, General Plan Tune Up EIR, Chapter 4, Transportation and Traffic, City of Newark, 2013*

⁵ *The Planning Center / DC&E, General Plan Tune Up EIR, Ibid.....*

⁶ *Mr. Soren Fajaeu, City Engineer, City of Newark, Planned roadway improvements, Personal communication, January 2014.*

**Table 5. Existing and Near-Term (No Project) Conditions:
Intersection LOS-Weekday AM and PM Peak Hours**

Intersection	Control Type	Wkdy. AM LOS/Delay		Wkdy. PM LOS/Delay	
		Existing (No Project)	Near-Term (No Project)	Existing (No Project)	Near-Term (No Project)
1 Cedar Boulevard/Balentine Drive	Signal	C 32.4	C 33.5	C 20.7	C 21.1
2 Mowry School Road/Balentine Drive	Signal	A 9.8	A 9.8	B 11.8	B 11.8
3 Mowry School Road/Cedar Boulevard	Signal	A 8.5	A 8.5	B 10.5	B 10.1
4 Stevenson Blvd/I-880 NB Off-Ramp	Signal	A 15.1	B 15.1	B 14.8	B 14.9
5 Stevenson Blvd/I-880 SB Off-Ramp	Signal	B 10.0	B 10.2	B 15.3	B 15.3
6 Stevenson Blvd/Albrae St.-Balentine Dr.	Signal	C 28.4	C 31.6	C 28.4	C 29.1
7 Stevenson Boulevard/Cedar Boulevard	Signal	C 30.7	C 31.9	C 27.8	C 28.4
8 Mowry School Rd/Office-Project Access	TWSC	A 8.4	A 9.1	A 9.0	A 9.2

Based on Highway Capacity Manual (HCM) 2000, Operations methodology for stop-sign controlled (non-signalized) intersections using Synchro-Simtraffic software. Intersection calculation yields an LOS and vehicle delay in seconds. Stated LOS refers to the minor street (stop-sign) controlled movement.

Public transportation. Public transportation in the City of Newark is provided by AC Transit and the Bay Area Rapid Transit District (BART). The closest BART station is in Fremont, east of Newark.

Pedestrian and bicycle transportation. No sidewalks exist adjacent to the site.

a) Environmental Impacts

b) *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the local circulation system, taking into account all modes of transportation, including intersections, streets highways, freeways and other modes? LS.* This analysis consists of the following:

Project traffic generation and distribution. Daily and peak hour vehicle trip generation for the proposed project has been based on accepted rates found in the Institute of Transportation Engineers (ITE) trip research manual for multi-family dwelling units.⁷ ITE has conducted extensive research on the trip generation characteristics of residential units (apartment) uses. Consequently, established rates for proposed project uses are an industry standard used by both consultants and public agencies for measuring the impacts of residential uses.

⁷ Institute of Transportation Engineers (ITE), *Trip Generation, 9th Edition, Apartments, (land use #220)*, 2012.

Vehicle trip generation for the proposed project is broken down by daily vehicle trips and “peak hour” vehicle trips. Daily trips are the total vehicle trips generated by the project over a 24-hour period. The peak hour trips are typically generated during the highest hour of the morning (7:00-9:00 a.m.) and evening (4:00-6:00 p.m.) commute periods when weekday traffic is significant. The peak hour rates reflect the amount of traffic that would be generated by the proposed project during the “peak hour of adjacent street traffic.” However, it is possible the proposed project could generate a higher amount of trips during some other period during the day. Regardless, the combination of peak hour project trips combined with the peak hour of adjacent street traffic commonly yields a “worst case” scenario for measuring project impacts and vehicle congestion. Typically, the PM peak hour period yields the greatest combination of project trip generation and vehicle congestion.

Daily and peak hour proposed project trip generation is shown in Table 6. As calculated, the proposed project is expected to generate 565 daily trips with 43 AM peak hour trips and 53 PM peak hour trips.

Table 6. Proposed Project Trip Generation: Daily, AM & PM Peak Hour

Land Use Category	Unit	Daily Trip	AM Peak Hour Trip Rate/Unit			PM Peak Hour Trip Rate/Unit		
		Rate	Total	In %	Out %	Total	In %	Out %
Apartment (#220)	D.U.	6.65	0.51	20	80	0.62	65	35
	Size	Daily	AM Peak Hour Trips			PM Peak Hour Trips		
Proposed Uses	DU	Trips	Total	In	Out	Total	In	Out
Apartment	85	565	43	9	34	53	35	18
Net New Project Trips		565	43	9	34	53	35	18

Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition, Apartment (#220), Daily and peak hour generation based on average trip rates.

Project trip assignment. Peak hour trip distribution has been based on existing peak hour traffic volumes at key intersections around the site, area demographics, and previous/recent transportation studies for other residential development in the surrounding area.^{8 9} Consideration was also given to project access driveways, access to Interstate 880, and adjacent intersections. Based on these factors, the project’s peak hour trip distribution is estimated as follows:

- Interstate 880 to/from the north: 15%**
- Interstate 880 to/from the south: 15%**
- Cedar Boulevard to/from the south: 25%**
 - Stevenson Blvd. east of I-880: 15%
 - Stevenson Blvd to/from the west: 10%
- Cedar Boulevard to/from the north: 40%**
 - Mowry Blvd. to/from the east: 10%

⁸ Omni-Means, Ltd., Traffic Analysis for the Proposed Newark Mixed-Use Project, City of Newark, 2006.

⁹ Planning Center / DC&E, General Plan Tune UP EIR, Chapter 4, Transportation and Traffic, City of Newark, 2013

Mowry Blvd. to/from the west: 10%
 Cedar Blvd. north of Mowry Blvd.: 20%
Balentine Drive to/from the north: 5%

Total: 100%

AM and PM peak hour project trips have been added to existing intersection volumes and are shown in Figure 4 of the full traffic analysis (see Attachment 1).

Existing plus project intersection operations. With AM and PM peak hour project trips added to existing (no project) traffic volumes, study intersection LOS have been calculated and are shown in Table 7. With existing plus project volumes, all eight project study intersections would be operating at acceptable levels (LOS C or better) during the AM and PM peak hours. There would be slight increases in vehicle delays at specific intersections. However, all intersections would continue to operate at acceptable levels.

**Table 7. Existing and Existing Plus Project Conditions:
 Intersection LOS-Weekday AM and PM Peak Hour**

Intersection	Control Type	Wkdy. AM LOS/Delay		Wkdy. PM LOS/Delay	
		Existing (No Project)	Existing Plus Project	Existing (No Project)	Existing Plus Project
1 Cedar Boulevard/Balentine Drive	Signal	C 32.4	C 32.5	C 20.7	C 20.9
2 Mowry School Road/Balentine Drive	Signal	A 9.8	B 12.6	B 11.8	B 12.7
3 Mowry School Road/Cedar Boulevard	Signal	A 8.5	A 9.2	B 10.5	B 11.2
4 Stevenson Blvd/I-880 NB Off-Ramp	Signal	A 15.1	B 15.2	B 14.8	B 14.8
5 Stevenson Blvd/I-880 SB Off-Ramp	Signal	B 10.0	B 10.0	B 15.3	B 15.3
6 Stevenson Blvd/Albrae St.-Balentine Dr.	Signal	C 28.4	C 28.4	C 28.4	C 28.4
7 Stevenson Boulevard/Cedar Boulevard	Signal	C 30.7	C 30.8	C 27.8	C 27.9
8 Mowry School Rd/Office-Project Access	TWSC	A 8.4	A 8.8	A 9.0	A 9.2

Based on Highway Capacity Manual (HCM) 2000, Operations methodology for stop-sign controlled (non-signalized) intersections using Synchro-Simtraffic software. Intersection calculation yields an LOS and vehicle delay in seconds. Stated LOS refers to the minor street (stop-sign) controlled movement.

Near Term Plus Project intersection operations. Table 8 shows near-term plus project study intersection LOS. With near-term plus project volumes, all eight study intersections would be operating at acceptable levels (LOS C or better) during the AM and PM peak hours. As with existing plus project conditions, there would be slight increases in vehicle delays at selected intersections. The adjacent project intersection of Mowry School Road/Balentine Drive would change from LOS A (9.8 seconds of delay) to LOS B (12.5 seconds of delay). However, the addition of proposed project trips would be considered less-than-significant.

Cumulative (2035) traffic conditions. Cumulative Year 2035 (no project) traffic conditions have been evaluated based on the following source:¹⁰

- Year 2035 AM and PM peak hour study intersection volumes supplied by recent City of Newark General Plan Tune Up EIR.

Cumulative year 2035 (no project) volumes for the study area were taken directly from the transportation and traffic section performed for the City of Newark General Plan Tune Up EIR.¹¹ As noted in the near-term (no project) section, future volume projections were based on City of Newark buildout projections associated with residents, housing units, and jobs. The Alameda County Transportation Commission (ACTC) transportation model was then updated to reflect these buildout projections from the City of Newark for the 2035 horizon year.

Since cumulative year 2035 (no project) volumes contain land uses on the project site consistent with current zoning (neighborhood retail-commercial), proposed residential project trips would likely be less than the maximum development potential of the site and assumed in the City's General Plan buildout projections. Therefore, proposed project trips were subtracted from Year 2035 volume projections to produce cumulative year 2035 (no project) volumes.

AM and PM peak hour cumulative year 2035 (no project) intersection volumes are shown in Figure 7 of the full traffic analysis

The transportation analysis conducted for the City of Newark General Plan Tune Up EIR assumed the transportation network for Year 2035 would be same as described under Existing Conditions.

With Year 2035 cumulative (no project) traffic volumes, four of the eight project study intersections would be operating at LOS D during either the AM or PM peak hour. These would include the following:

¹⁰ *Planning Center / DC&E, General Plan Tune UP EIR, Chapter 4, Transportation and Traffic, City of Newark, 2013*

¹¹ *Planning Center / DC&E, General Plan Tune UP EIR, Chapter 4, Transportation and Traffic, City of Newark, 2013*

**Table 8. Cumulative 2035 (No Project) Plus Project Intersection LOS:
Weekday AM and PM Peak Hour**

Intersection	Control Type	Wkdy. AM LOS/Delay		Wkdy. PM LOS/Delay	
		Year 2035 (No Project)	Year 2035 Plus Project	Year 2035 (No Project)	Year 2035 Plus Project
1 Cedar Boulevard/Balentine Drive	Signal	D 37.1	D 37.4	C 26.7	C 26.9
2 Mowry School Road/Balentine Drive	Signal	A 9.4	B 12.1	B 11.4	B 12.3
3 Mowry School Road/Cedar Boulevard	Signal	A 8.1	A 8.5	A 9.6	B 10.1
4 Stevenson Blvd/I-880 NB Off-Ramp	Signal	C 20.2	C 20.3	D 37.5	D 37.7
5 Stevenson Blvd/I-880 SB Off-Ramp	Signal	B 14.9	B 14.9	B 14.2	B 14.2
6 Stevenson Blvd/Albrae St.-Balentine Dr.	Signal	C 28.8	C 28.9	D 48.5	D 48.6
7 Stevenson Boulevard/Cedar Boulevard	Signal	D 50.5	D 50.8	D 36.7	D 36.9
8 Mowry School Rd/Office-Project Access	TWSC	A 9.1	A 9.3	A 9.2	A 9.6

Based on Highway Capacity Manual (HCM) 2000, Operations methodology for stop-sign controlled (non-signalized) intersections using Synchro-Simtraffic software. Intersection calculation yields an LOS and vehicle delay in seconds. Stated LOS refers to the minor street (stop-sign) controlled movement.

- Cedar Boulevard/Balentine Drive
- Stevenson Boulevard/I-880 Northbound Off-Ramp
- Stevenson Boulevard/Albrae Street-Balentine Drive
- Stevenson Boulevard/Cedar Boulevard

The study intersections listed above would experience significant increases in through-traffic on Cedar Boulevard and Stevenson Boulevard as a result of cumulative buildout related to the City's General Plan. However, all project study intersections would continue to operate within the City's acceptable threshold limits of LOS D or better during the AM and PM peak hour.

With the addition of project traffic to proposed project volumes, cumulative year 2035 intersection LOS would change from LOS A to LOS B at the adjacent project study intersections of Mowry School Road/Balentine Drive (AM peak hour) and Mowry School Road/Cedar Boulevard (PM peak hour). As shown in Table 8, all remaining project study intersections would continue to operate at LOS D or better during the AM and PM peak hours.

Therefore, based on the above analysis, project traffic would not conflict with any applicable plan, ordinance or policy establishing measures of performance of the City of Newark circulation system and this impact would be less-than-significant.

- 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 CMA for designated roads or highways? **LS.** Cumulative traffic conditions have been based on the Alameda County Congestion Management Agency's (CMA) *Technical and Policy Guidelines* from the Congestion Management Plan (CMP). CMA guidelines specify that any proposed project generating 100 PM peak hour trips over existing conditions must conduct a traffic analysis of the project using the County Transportation Demand Model. Project impacts must be identified on the Metropolitan Transportation System (MTS) routes of regional significance. The proposed project would generate fewer than 100 PM peak hour trips as shown on Table 8, so this impact would be less-than-significant.

- c) *Result in a change of air traffic patterns?* **NI.** The proposed project would have no impact on air traffic patterns, since it consists of approval and construction of residential complex.
- d) *Substantially increase hazards due to a design feature or incompatible use?* **LS/M.** The proposed project would be served by an existing, full-access mid-block driveway located off Mowry School Road. A second project driveway would be located approximately 35-40 feet east of Cedar Boulevard would serve emergency vehicle access only (see Project Site Plan, **Exhibit 3**).

The short (approximately 30-feet) access driveway into the project site from the east via an existing office park complex does not align with the existing median break that serves office parking areas as shown in the current project site plan. The proposed project driveway alignment is shown off-set to the north towards the existing office traffic circle (approximately 12-18 feet). This would cause inbound residents to the project site to travel around the traffic circle to access the driveway and/or attempt non-standard left-turn movements into the project driveway leading to potential vehicle conflicts with outbound traffic from office areas.

From the project's main access driveway off Mowry School Road, motorists would turn west into the site's main driveway. After traveling a short distance (30 feet), motorists would turn either north or south to access the site's residential units and internal drive aisles. There would be two main north-south drive aisles that would connect in a loop fashion with east-west internal drive aisles. There would also be two additional east-west "alleys" between the residential buildings connecting the north-south drive aisles. With the exception of the east-west drive aisles on either end of project site, all drive aisles would be 20-feet in travel width. None of the internal project study intersections are controlled by yield or stop-signs.

Taken together, several issues with internal project circulation and potential traffic safety impacts have been noted. Adherence to the following measure will reduce traffic safety impacts to a less-than-significant level.

Mitigation Measure TRAF-1. The final design of the project shall incorporate the following features.

- a) Install stop-sign control for southbound traffic exiting the existing driveway at Mowry School Road. Re-stripe the outbound travel lane for

one (1) shared left-through lane and one (1) right-turn lane. (If possible, install stop-sign for northbound traffic at existing Balentine Plaza Center driveway directly opposite project driveway). Install painted directional flow arrows on the Mowry School Road driveway indicating north and south traffic flows;

- b) Trim hedge/foilage on raised median dividing the Mowry School Road driveway to improve vehicle sight distance and continue this maintenance into the future;
 - c) At the internal median break on the Mowry School Road main driveway, install stop-sign controls for both the new eastbound (outbound) movement from the proposed project driveway and existing westbound movement from current office parking lot. In addition, the project driveway connecting to the mid-block driveway (from Mowry School Road) should be re-aligned to the existing median break to prevent inbound left-turn conflicts. Multi-Way-Stop- Control (MWSC) should be installed where the east-west project driveway intersects the project's internal north-south drive aisle;
 - d) Install stop-sign control for all internal east-west drive aisles;
 - e) Limit vehicle access at the proposed secondary project driveway at Mowry School Road (35-40 feet east of Cedar Boulevard) to emergency vehicles only inbound/outbound to prevent left-turn conflicts on Mowry School Road.
- e) *Result in inadequate emergency access?* **NI.** No impacts would occur with regard to emergency access since the proposed project would not block any City streets or emergency access routes. Two routes in and out of the project site are proposed by the applicant which would provide sufficient emergency access.
- f) *Conflict with adopted policies, plans or programs regarding transit, bicycle or pedestrian facilities or otherwise decrease the performance or safety of such facilities?* **NI.** There would be no impacts with regard to conflicts with transit, bicycle or pedestrian policies, plans or programs. The City will require installation of a sidewalk around the project frontage and bicyclists would continue to use adjacent streets. The project would have no impact on AC Transit bus routes or BART operations due to the nature of the project.

17. Utilities and Service Systems

Environmental Setting

The following utility providers serve the City of Newark and the project site.

Water Service: Alameda County Water District (ACWD)

Wastewater Service: Union Sanitary District (USD)

Solid Waste Collection and Disposal: Waste Management, Inc.

Environmental Impacts

- a) *Exceed wastewater treatment requirements of the RWQCB?* **LS.** The Union Sanitary District (USD) provides wastewater services to the City of Newark as well as a number of surrounding communities. The existing church on the project site is connected to USD wastewater facilities. Wastewater flows via local sewer laterals and main trunk sewers to Newark's pump station and then on to USD's Alvarado Treatment Plant, which has the treatment capacity of approximately 32 million gallons per day (mgd). USD staff has indicated that the treatment plant has the capacity to handle the anticipated small net increment of wastewater generated from new housing units as proposed as part of the project (source: Al Bunyi, USD staff, 2/25/14). Treated effluent is disposed of into San Francisco Bay through facilities operated by the East Bay Dischargers Authority. Overall, based on a discussion with USD staff representatives, a less-than-significant impact is anticipated with regard to exceeding Regional Water Board discharge requirements.
- b) *Require new water or wastewater treatment facilities or expansion of existing facilities?* **LS.** The Alameda County Water District (ACWD) provides water service to the City of Newark and surrounding communities. Currently, ACWD relies on three sources of water: the State Water Project, groundwater aquifers and water supplies from the San Francisco Water Department via the Hetch Hetchy aqueduct. Although minor upgrades and improvements may need to be made in the local water distribution system, District staff indicate that a long-term water supply is available to serve the proposed project. A less-than-significant changes would result (source: Ed Stevenson, ACWD, 2/13/14).
- c) *Require new storm drainage facilities?* **LS.** As noted in Section 9 of this Initial Study, this impact would be less-than-significant.
- d) *Are sufficient water supplies available?* **LS.** The Alameda County Water District staff has indicated that sufficient water supplies are available to serve future development within the project area. Less-than-significant impacts would result.
- e) *Adequate wastewater capacity to serve the proposed project?* **LS.** The staff of the Union Sanitary District has indicated that adequate capacity exists to serve future commercial development within the project area as per the zoning and General Plan. A less-than-significant impact would result.
- f,g) *Adequate solid waste disposal?* **LS.** Operation of the proposed project would generate solid waste based on residential use. Residents would participate in the City's recycling program for paper, glass, plastic and other material to reduce the project's contribution to the waste stream as required by AB 939. Overall, impacts related to solid waste generation are anticipated to be less-than-significant.

18. Mandatory Findings of Significance

- a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number of 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?* **No.** The preceding analysis indicates that the proposed project would not have a significant adverse impact on overall environmental quality, including biological resources or cultural resources with adherence to mitigation measures contained in this Initial Study.
- 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). **No.** Although additional traffic would be added to local and regional roadways as a result of this project and contributions would be made to regional air emissions and increases in the quantity of stormwater runoff, these impacts have not been found in the Initial Study to be cumulatively considerable. Less-than-significant impacts have been identified in the Initial Study to public services and utilities.
- c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?* **No.** No such impacts have been discovered in the course of preparing this Initial Study.

Initial Study Preparers

Jerry Haag, Urban Planner, *project manager and principal author*
Peter Galloway, Omni Means, *traffic and circulation*
Rob Tuma, Omni-Means, *traffic and circulation*
Alan Rosen, RGDL Associates, *acoustics*
Jane Maxwell, *report graphics*

Agencies and Organizations Consulted

The following agencies and organizations were contacted in the course of this Initial Study:

City of Newark
Terrence Grindall, Community Development Director
Yesenia Jimenez, Planner
Soren Fajeau, Senior Civil Engineer
Sgt. Arguello, Newark Police Department
Holly Guier, Alameda County Fire Department

Union Sanitary District
Andrew Baile
Al Bunyi

Alameda County Water District
Ed Stevenson
Thomas Niesar

Applicant Representative
Kevin Fryer

References

Archaeological Records Search, Northwest Information Center, August 2006
CEQA Guidelines, Bay Area Air Quality Management District, May 2011n
Department of Toxic Substances Control State of California, website, January 2014
General Plan Tune Up EIR (SCH #2013012052), City of Newark, October 2013

**Attachment 1-
Acoustic Analysis
(Rosen Goldberg Der & Lewitz)**

ROSEN
GOLDBERG
DER &
LEWITZ, INC.

A Acoustical, Technical & Legal Consulting Firm

Environmental Noise Impact Analysis
for
**The Cedar Townhome Project
Newark, CA**

SUBMITTED TO:

**Jerry Haag
Urban Planner
2029 University Ave.
Berkeley, CA 94704**

PREPARED BY:

**Harold S. Goldberg, P.E.
Alan Rosen**

DATE:

3 March 2014

A. Existing Setting

1. Environmental Noise Fundamentals

Noise can be defined as unwanted sound and is commonly measured with an instrument called a sound level meter. The sound level meter "captures" sound with a microphone and converts it into a number called a sound level. Sound levels are expressed in units of decibels (dB).

To correlate the microphone signal to a level that corresponds to the way humans perceive noise, the A-weighting filter is used. A-weighting de-emphasizes low-frequency and very high-frequency sound in a manner similar to human hearing. The use of A-weighting is required by most local agencies as well as other federal and state noise regulations (e.g. Caltrans, EPA, OSHA and HUD). The abbreviation dBA is often used when the A-weighted sound level is reported.

Because of the time-varying nature of environmental sound, there are many descriptors that are used to quantify the sound level. Although one individual descriptor alone does not fully describe a particular noise environment, taken together, they can more accurately represent the noise environment. There are four descriptors that are commonly used in environmental studies; the L_{max} , L_{eq} , L_{90} and DNL (or CNEL).

The maximum instantaneous noise level (L_{max}) is often used to identify the loudness of a single event such as a car pass-by or airplane flyover. To express the average noise level, the L_{eq} (equivalent noise level) is used. The L_{eq} can be measured over any length of time but is typically reported for periods of 15 minutes to 1 hour. The background noise level (or residual noise level) is the sound level during the quietest moments. It is usually generated by steady sources such as distant freeway traffic. It can be quantified with a descriptor called the L_{90} which is the sound level exceeded 90 percent of the time.

To quantify the noise level over a 24-hour period, the Day/Night Average Sound Level (L_{dn} /DNL) or Community Noise Equivalent Level (CNEL) is used. These descriptors are averages like the L_{eq} except they include a 10 dBA penalty for noises that occur during nighttime hours (and a 5 dBA penalty during evening hours in the CNEL) to account for peoples increased sensitivity during these hours.

In environmental noise, a change in the noise level of 3 dBA is considered a just noticeable difference. A 5 dBA change is clearly noticeable, but not dramatic. A 10 dBA change is perceived as a halving or doubling in loudness.

2. Regulatory Setting

a. State of California

i. California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) Environmental Impact requires the analysis of potential noise impacts from certain projects. The noise impacts are to be assessed with respect to applicable standards and significant noise increases.

ii. California Building Code Noise Insulation Standards

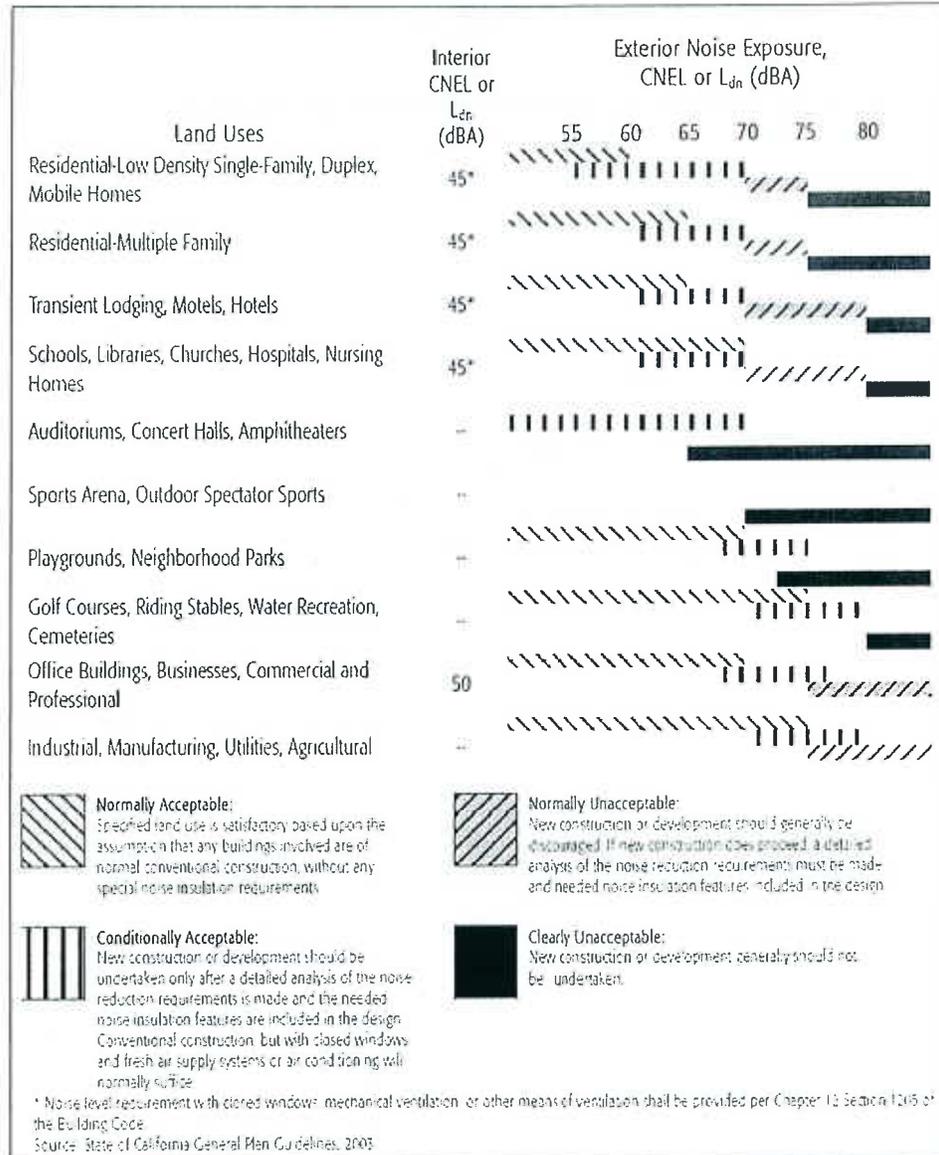
The State of California building code (CBC Section 1207) requires that indoor noise levels in new multi-family housing be controlled to an L_{dn} of 45 dBA if outdoor levels are in excess of an L_{dn} of 60 dBA. Furthermore, if windows must be in the closed position to meet the requirement, then the building design must also specify a ventilation or air-conditioning system to provide a habitable interior environment. The ventilation system must not compromise the noise reduction provided by the façade.

b. City of Newark

i. Noise Element

The City of Newark General Plan contains a Noise Element. The Noise Element has compatibility guidelines for various types of land uses that are expressed in terms of the L_{dn} or CNEL. Table 1 below lists the guideline levels for residential and commercial land uses as found in "Figure EH-2" of the General Plan.

Table 1: Land Use Compatibility Guidelines



Source: City of Newark General Plan, Table EH-2, August 2013

The Noise Element addresses noise and land use compatibility for residential project following four policies and actions:

Policy EH-7.1 Land Use Planning and Noise Compatibility. Use the noise compatibility guidelines in Table EH-2 and the future-conditions noise contour map in Figure EH-4 to plan for appropriate land uses near existing uses that generate noise. Noise mitigation should be included to ensure that new residential areas and other noise-sensitive uses are appropriately buffered from significant noise sources.

Policy EH-7.4 Residential Noise Standard – Exterior. Plan for and implement strategies to maintain exterior noise levels that are consistent with the noise compatibility guidelines in Table EH-2. For residential areas, this limit is 60 dBA L_{dn} for outdoor living areas. Where this level is exceeded due to freeways, arterials, and/or railroads, the construction of berms, walls, buffer zones, and other noise-reduction measures to reduce noise to the greatest extent feasible will be required.

Policy EH-7.5 Residential Noise Standard – Interior. Use site planning and architectural design to protect occupants of new buildings from excessive noise, per California State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the Uniform Building Code (UBC). For example, site planning should place bedrooms and other noise-sensitive rooms away from exterior noise sources and architectural design should use double-paned windows and other insulating measures to reduce interior noise.

Action EH-7.A Acoustical Study Requirement. Require acoustical studies for new developments in areas where the noise levels exceed the 'normally acceptable' levels for the proposed land use; based on Table EH-2. For residential uses, the analysis should include mitigation measures to limit the noise exposure in interior living spaces to 45 dB L_{dn} , consistent with California Title 24.

Acoustical studies should have the following minimum attributes:

- Be the responsibility of the development applicant
- Be prepared by qualified persons experienced in the fields of environmental noise assessment and architectural acoustics.
- Include representative noise level measurements with sufficient sampling periods and locations to adequately describe existing local conditions.
- Include estimates for existing and projected (20 years hence) noise levels in terms of (a) L_{dn} or CNEL and (b) any future noise regulations to be adopted by the City. Those existing

and projected noise levels shall be compared to the adopted policies of the Noise Element.

- Include recommended mitigation measures to achieve compliance with the adopted policies and standards of the Noise Element. Where the noise source in question consists of intermittent single events, the report should address the effects of maximum noise levels in sleeping rooms and potential sleep disturbance issues.
- Include estimates for interior and exterior noise exposure after the prescribed mitigation measures have been implemented.
- Describe a post-project assessment program that could be used to evaluate the effectiveness of the proposed mitigation measures.

The Noise Element addresses construction noise and vibration in the following three policies and actions:

Policy EH-6.6 Construction Noise – Regulating Construction Hours. Reduce noise associated with construction activities by prohibiting construction in residential neighborhoods between the hours of 7 PM and 7 AM Monday through Friday and at all times on Saturdays, Sundays, and State/federal holidays.

Policy EH-6.7 Construction Noise – Addressing Sources of Construction Noise. Reduce noise associated with construction activities by requiring properly maintained mufflers on construction vehicles, requiring the placement of stationary construction equipment as far as possible from developed areas, and requiring temporary acoustical barriers/shielding to minimize construction noise impacts at adjacent receptors. Special attention should be paid to noise-sensitive receptors (including residential, hospital, school, and religious land uses).

Action EH-7.E Vibration-Intensive Construction. Implement a standard operating procedure that requires the evaluation of vibration impacts for individual projects which use vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, near sensitive receptors. If construction-related vibration is determined to be perceptible (i.e., in excess of Federal Transit Administrations vibration annoyance criterion) at vibration-sensitive uses, then additional requirements, such as the use of less-vibration-intensive equipment or construction techniques, shall be implemented during construction.

ii. Municipal Code

There are currently no applicable noise standards in the City of Newark Municipal Code.

3. Existing Noise Environment

- a. The project site is currently an empty lot. The site is bounded by Mowry School Road to the southeast, Cedar Boulevard to the southwest, a business park to the northeast and a Town Place Suites by Marriot Hotel to the northwest. There are existing residences across Cedar Boulevard.

The site is affected by noise from Cedar Boulevard and to a lesser extent, Mowry School Road.

Noise measurements were made on and around the project site to quantify the existing noise environment. The measurements included one 24-hour noise measurement and four short term, 15-minute measurements. The noise measurement locations are shown in Figure 1.

The short-term measurements were made at locations that represent the noise exposure at the proposed buildings and the ambient noise at the setback of the nearby existing buildings. The short term measurement results were correlated with simultaneous measurements at the long-term monitoring location to determine the DNL at the short-term measurement locations. Table 2 shows the results of the measurements. Figure 2 shows the hourly plot of the measured noise levels at Monitor LT.

Figure 1: Noise Measurement Locations

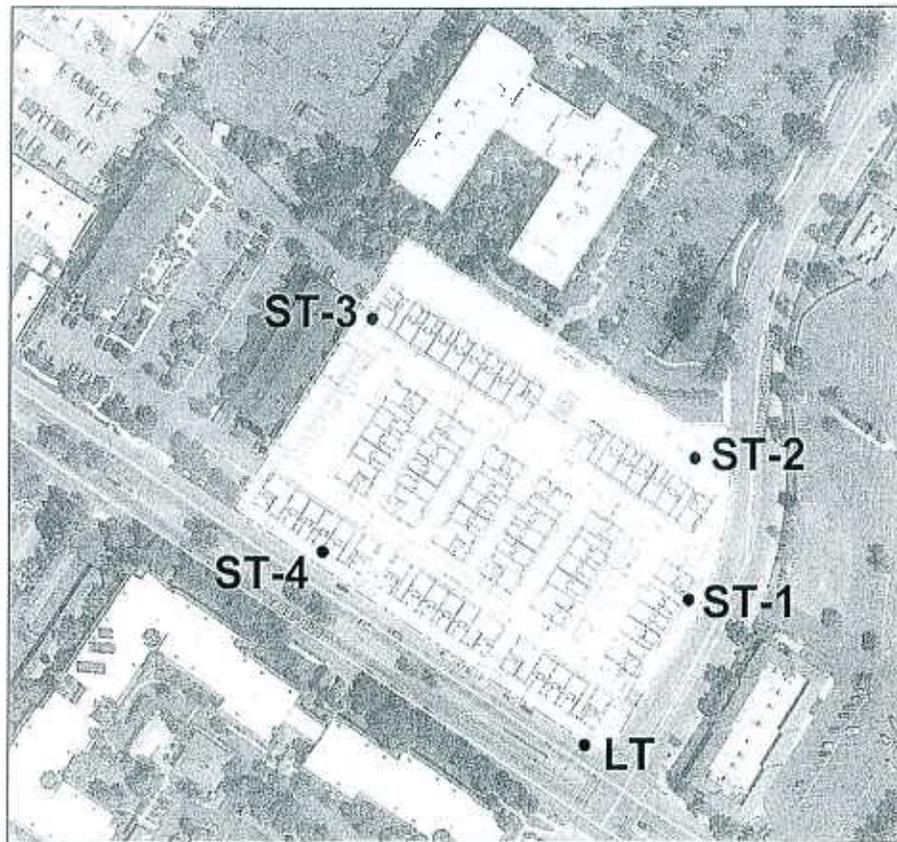
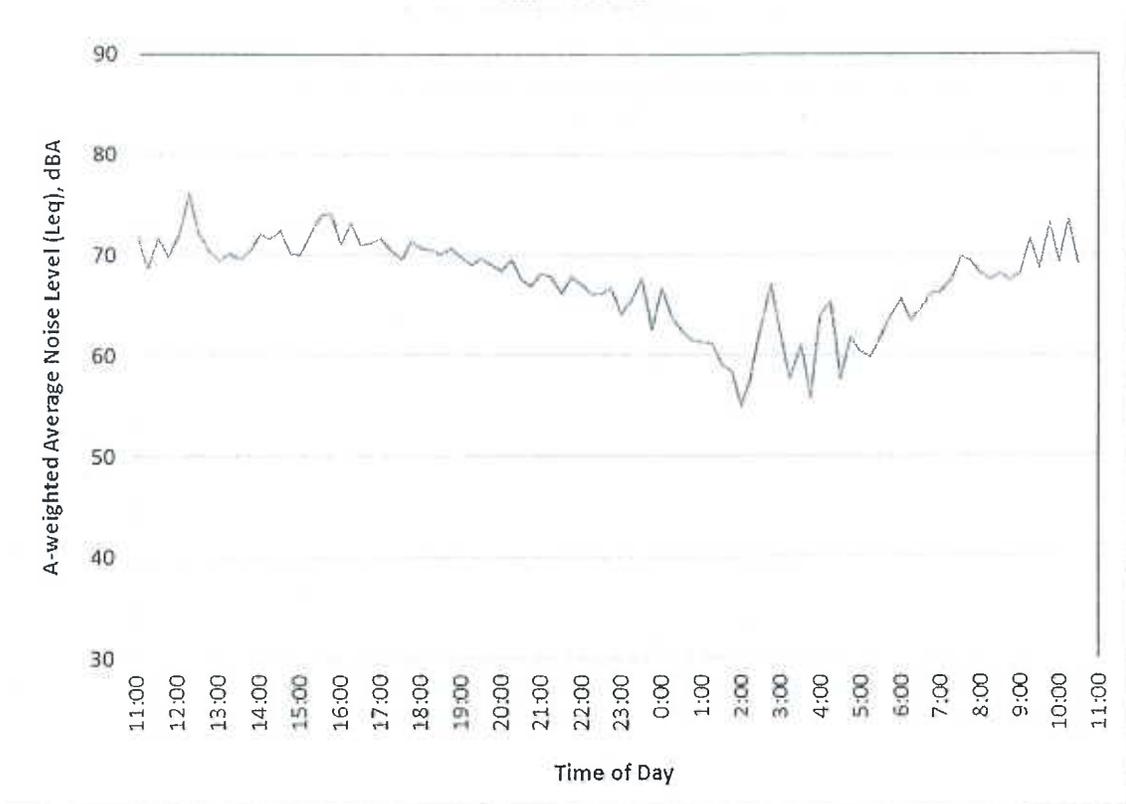


Table 2: Short-term Noise Measurement Results

	Location	Time	A-weighted Sound Level, dBA				
			L _{eq}	L ₁₀	L ₅₀	L ₉₀	DNL
1	Mowry School Road Setback of proposed buildings	23 Dec 2013 10:52 – 11:07 AM	55	58	52	49	56
2	Northeast corner of site at location of proposed tot lot	23 Dec 2013 11:14 – 11:29 AM	54	56	51	49	55
3	Northwest corner of site adjacent to existing hotel	23 Dec 2013 11:33 – 11:48 AM	52	54	52	51	53
4	Cedar Boulevard Setback of proposed buildings	23 Dec 2013 11:58 – 12:13 PM	63	67	61	54	63

* Estimate of DNL based on comparison of Short-term measurements with results of Long-term measurements

Figure 2: Long-term Noise Measurement Results Location LT
DNL 72 dBA



B. Impact Discussion

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

Threshold: Result in a permanent increase of more than 5 dBA in ambient noise levels in the project vicinity above levels existing without the project; 3 dBA if future noise levels exceed "normally acceptable" ¹

Traffic Noise

According to the traffic study, the proposed project would generate approximately 24 peak hour trips on Cedar Boulevard and 32 peak hour trips on Mowry School Road. This will increase the noise level along both Cedar Boulevard and Mowry School Road by less than 1 dBA. Table 3 presents the increase in Ldn due to the project under existing and cumulative conditions. Although cumulative noise

¹ Threshold for significant noise increase consistent with Newark General Plan EIR, August 2013.

increases along Cedar Boulevard are greater than 3 dBA, the contribution from the project is less than 1 dBA, and therefore, not cumulatively considerable.

Table 3: Project Traffic Related Noise Level Increases

Roadway	Link	L _{dn} at 50 feet from roadway centerline (dBA)							
		Existing		Existing Plus Project		Cumulative Without Project		Cumulative Plus Project	
		L _{dn}	L _{dn}	Incr. re Exist	L _{dn}	Incr. re Exist	L _{dn}	Incr. re Exist	Incr. re Cum. w/o Proj.
Cedar Blvd	Stevenson to Mowry School	64.8	64.8	0.0	68.1	3.3	68.1	3.3	0.0
	Mowry School Rd. to Joaquin Mureta Av.	64.8	65.0	0.2	68.1	3.2	68.1	3.3	0.0
Mowry School Rd	Cedar to Access	52.0	52.8	0.8	52.0	0.0	52.8	0.8	0.8
	Access to Balentine	51.4	52.2	0.8	51.4	0.0	52.2	0.8	0.8
Stevenson Boulevard	South of Cedar	66.9	66.9	0.0	69.2	2.3	69.2	2.3	0.0
	North of Cedar	67.8	67.8	0.0	70.7	2.9	70.7	2.9	0.0

Operational Noise

Operational noise sources associated with the project include occupant activities, intermittent landscaping and mechanical systems such as the heating, ventilation and air-conditioning system (HVAC). Of these noise sources, the mechanical equipment has the greatest potential to significantly increase long-term average noise levels at adjacent uses. The specific mechanical equipment that will be installed as part of this project is unknown. Depending on the type of equipment there is a potential it to increase noise levels at adjacent land uses by more than 5 dBA, particularly if the equipment would operate continuously and at night. Therefore, noise from mechanical equipment is a potentially significant impact.

Mitigation 1 – Mechanical Equipment: Noise from mechanical equipment must not exceed an L_{dn} of 58 dBA at the adjacent property lines to the north and west. For continuously operating mechanical equipment an L_{dn} of 58 dBA corresponds to an hourly average noise level of no greater than 60 dBA (L_{eq}) at the property line during daytime hours (7 am – 10 pm). If mechanical equipment operates continuously during the night (10 pm –

7 am), the equipment must not exceed an hourly average noise level of 52 dBA (L_{eq}) at the property line during both daytime and nighttime hours.

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

Threshold: City of Newark Noise Element

Construction Noise

Construction will occur in several distinct phases, although the exact details of these phases are as yet unknown. For the purposes of this assessment it is assumed that pile driving is not required.

The noisiest phases would be site grading and foundation work. These phases typically include use of heavy diesel powered machinery such as compactors, front loaders, backhoes, bulldozers, scrapers, graders, trucks and concrete equipment. The later phases involve construction of the building, and may require a crane and other smaller equipment such as generators, compressors, power tools, and hand tools.

Table 4 shows typical noise levels for construction equipment, the maximum noise levels could reach 88 dBA at the northwestern property line when activities are closest to the property line. The noise level produced by the construction equipment would become quieter as construction progresses away from the northwestern property line. Typical maximum noise levels of 75 dBA would be expected when construction activities are at the center of the site. As the exteriors of the buildings are completed, much of the construction related tasks would occur indoors, which will provide additional acoustical shielding.

Table 4: Construction Equipment Noise Levels

Equipment	Typical Noise Level (dBA) 50 ft from Source
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Derrick	88
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	85
Paver	89
Pile-driver (Impact)	101
Pile-driver (Sonic)	96
Pneumatic Tool	85
Pump	76
Rock Drill	98
Roller	74
Saw	76
Scraper	89
Truck	88

Construction noise would be clearly audible at the adjacent residential and commercial land uses and exceed the City's standard since ambient noise levels would increase by more than 5 dB due to construction. This is a potentially significant impact. Therefore, in addition to the General Plan policy restricting hours of construction, the following mitigation measures are recommended.

Mitigation Measure 2 - Construction: To reduce daytime noise impacts due to construction, the project sponsor shall require the project to implement the following measures:

- o Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).

- o Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.
- o Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures to the extent feasible.
- o Monitor the effectiveness of noise attenuation measures by taking noise measurements to the extent there are persistent and on-going complaints.

Mitigation Measure 3 - Construction: Prior to the issuance of building permit, along with the submission of construction documents, the project sponsor shall submit to the City Building Department a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:

- o A procedure for notifying the City Building Division staff and Newark Police Department;
- o A plan for posting signs on-site pertaining to permitted construction days and hours and complaint procedures and who to notify in the event of a problem;
- o A listing of telephone numbers (during regular construction hours and off-hours);
- o The designation of an on-site construction complaint manager for the project;
- o Notification of neighbors within 300 feet of the project construction area at least 30 days in advance of pile-driving and/or other extreme noise-generating activities about the estimated duration of the activity; and
- o A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

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

Threshold: City of Newark Noise Element

Land Use Compatibility

The site is currently exposed to traffic noise from Cedar Boulevard and Mowry School Road. Based on traffic volume projections contained in the project traffic study, and the noise measurements, we calculate that the noise level at the proposed building setback along Cedar Boulevard will be an L_{dn} of 66 dBA while the proposed building set back along Mowry School Road will be an L_{dn} of 57 dBA.

An L_{dn} of 65 dBA or less is considered "normally acceptable" for multi-family residential development. The noise exposure along Mowry School Road at the buildings and proposed tot lot would be within the normally acceptable noise exposure. Since the future noise exposure along Cedar Boulevard exceeds this level, this is considered a significant impact.

Mitigation Measure 4 – Building Sound Insulation: The design of the project buildings should incorporate measures such as sound-rated windows to achieve an interior L_{dn} of 45 dBA or less. The required design features should be determined through a site specific noise study that takes into account the future noise exposure at the various building facades and the project floor plans and elevations consistent with General Plan Action EH-7.A.

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

Table 5 presents vibration levels from typical construction vibration sources as well as impact criteria for building damage and annoyance.

TABLE 5: Groundborne Vibration Levels for Construction Equipment

Equipment	Approximate Velocity Level ^a (VdB) at 25 Feet	Peak Particle Velocity (inch/sec) at 25 Feet
Vibratory Roller	94	0.210
Large Bulldozer	87	0.089
Caisson Drilling	87	0.089
Jackhammer	79	0.035
Small Bulldozer	58	0.003
Loaded Trucks	86	0.076
FTA Criteria – Human Annoyance (Daytime)	78 to 90 ^b	—
FTA Criteria – Structural Damage	—	0.2 to 0.5 ^c

^a RMS velocity calculated using the reference of 1 micro-inch per second.
^b Depending on affected land use. For residential 78 VdB, for offices 84 VdB, workshops 90 VdB.
^c Depending on affected building structure, for timber and masonry buildings 0.2 in/sec, for reinforced-concrete, steel, or timber 0.5 in/sec.
 Source: Federal Transit Administration, Transit Noise, and Vibration Impact Assessment, 2006, Newark General Plan Tune Up EIR, August 2013.

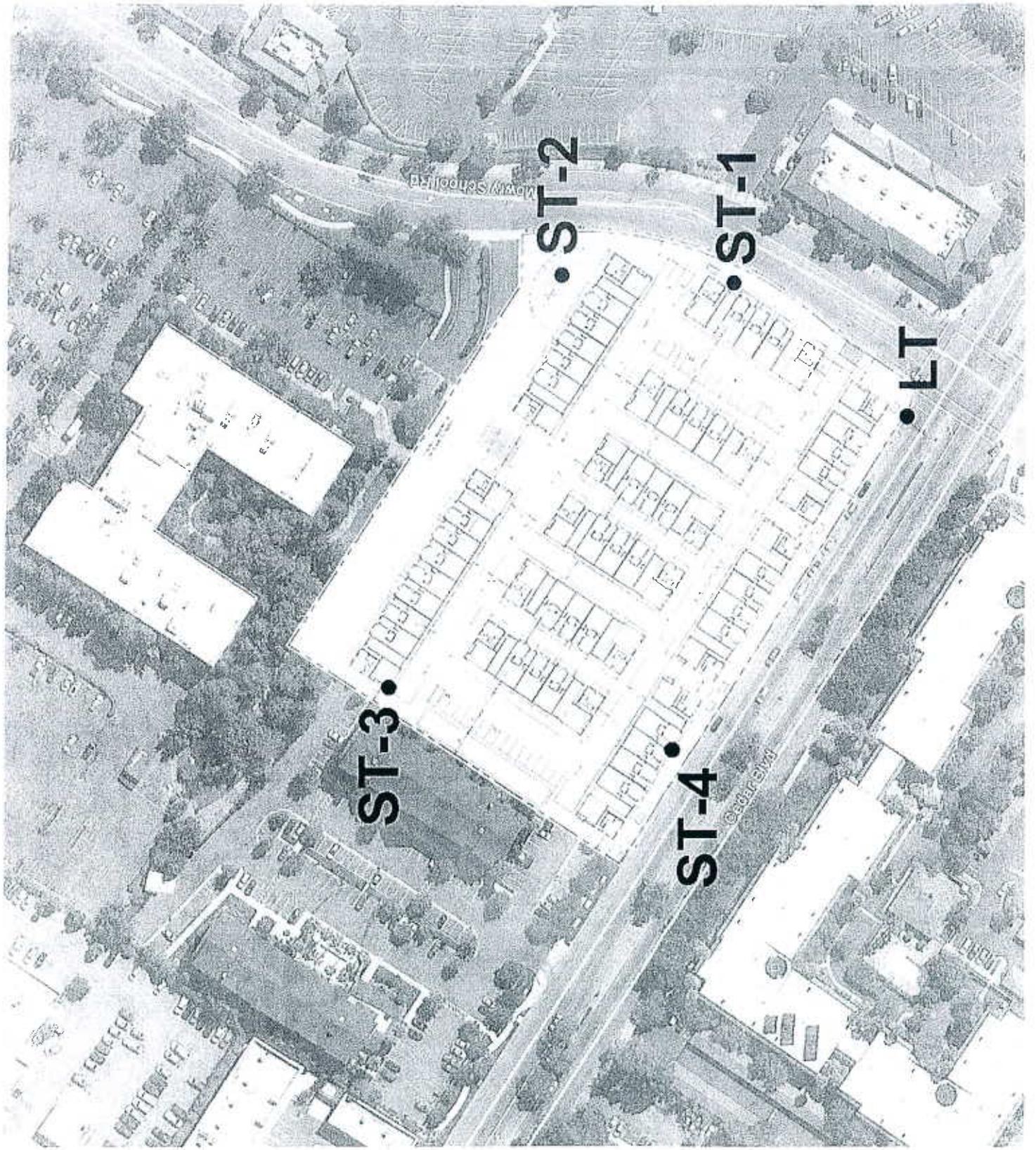
The nearest existing building to the project is the hotel to the west. This building is 35 feet from the proposed project construction area. The residences to the south are about 140 feet from the project buildings and the distance to the commercial building to the north is approximately 100 feet. At these distances, the construction vibration is predicted to be below the thresholds for damage risk for all nearby existing buildings. The hotel would be close enough to experience vibration levels that could cause an annoyance impact, based on criteria developed for transit noise impact assessment (Federal Transit Administration, FTA, see Table 5 footnotes). The commercial building and residences would be exposed to vibration levels that are below the annoyance impact criteria. General Plan Action EH-7.E requires the project to implement a standard operating procedure that requires the use of less vibration intensive equipment or construction techniques if construction-related vibration is determined to exceed FTA vibration annoyance criteria.

5. *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?*

Not applicable to this project

6. *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?*

Not applicable to this project



ST-3

ST-2

ST-1

ST-4

LT

Attachment 2-Traffic Analysis (Omni Means)

INTRODUCTION

This report presents the results of a traffic impact analysis performed by OMNI-MEANS for the proposed Cedar Townhome project in the City of Newark. The proposed project would consist of 85 multi-family residential dwelling units. The proposed project site is located immediately north of Mowry School Road between Albrae Street and Cedar Boulevard on the northeast quadrant of the Mowry School Road/Cedar Boulevard intersection (see Figure 1-- Project Location and Vicinity Map). Based on discussions with City Engineering staff, the traffic issues for this development relate to operations at key intersections as well as more localized operations regarding vehicle access to/from the site. Some of the key components of the analysis include the following:

- Weekday peak hour traffic operations at intersections in the project area along Cedar Boulevard, Albrae Street, and Stevenson Boulevard;
- *Highway Capacity Manual (HCM) 2000* intersection Level-of-Service (LOS) methodologies;
- Proposed project trip generation relative to multi-family residential uses;
- Cumulative Year 2035 traffic conditions;
- Consistency with recent transportation analyses conducted for the Newark General Plan Update Environmental Impact Report (EIR) and the adjacent Fremont projects in the study area.

Based on communication with City Planning staff, the following six scenarios have been analyzed as part of a comprehensive transportation and circulation analysis:

- Existing Traffic Conditions: Represents existing traffic flow conditions collected through new field counts. Points of congestion and vehicle delays are noted for both the AM and PM weekday commute peak hour;
- Existing Plus Project Conditions: Proposed project trips added to existing traffic volumes to determine project specific impacts;
- Near-Term Conditions: Represents existing traffic plus traffic from anticipated approved/pending projects over the next 2-3 year period. Approved/pending developments may not have begun construction, may be under construction but not occupied, or may be partially occupied;
- Near-Term Plus Project Conditions: Proposed project trips added to near-term traffic volumes to determine project-specific impacts;
- Cumulative Year 2035 (No Project) Conditions: Year 2035 conditions were derived by using recent transportation studies for the Newark General Plan Update Draft EIR;
- Cumulative Year 2035 Plus Project Conditions: Year 2035 conditions adjusted to include proposed project volumes.

STUDY CONDITIONS

Existing conditions describe the existing transportation and bicycle/pedestrian facilities serving the project site.

EXISTING ROADWAYS

A base map with existing study intersection locations, surrounding street network, and project site is shown in Figure 1. Streets that provide local and sub-regional access into and around the proposed project vicinity include Mowry School Road, Cedar Boulevard, Stevenson Boulevard, Balentine Drive, Albrae Street, Joaquin Murieta Avenue, and Newpark Mall Drive. Regional access to the project site is provided by Interstate 880. A brief description of each roadway follows:

Mowry School Road would provide direct access to the proposed project site and is located immediately south of the site. Extending in an east-west direction, Mowry School Road is a two-lane street that extends from Cedar Boulevard through Balentine Drive. East of Balentine Drive, the roadway extends north and parallels I-880 before terminating in a cul-de-sac.

Cedar Boulevard is a north-south arterial street that is located directly west of the project site. In the project study area between Stevenson Boulevard and Mowry Avenue, Cedar Boulevard is a four-lane divided street and serves both commercial-retail and residential areas as well as providing access to the Newark Memorial High School.

Stevenson Boulevard is an east-west arterial street located south of the proposed project site. Between I-880 and Cedar Boulevard, Stevenson Boulevard has six travel lanes with raised medians and turn lanes at major intersections. At Cedar Boulevard, the roadway narrows to four travel lanes and this configuration extends through Boyce Road. Stevenson Boulevard provides access to commercial and light-industrial areas and also extends east over I-880 into Fremont.

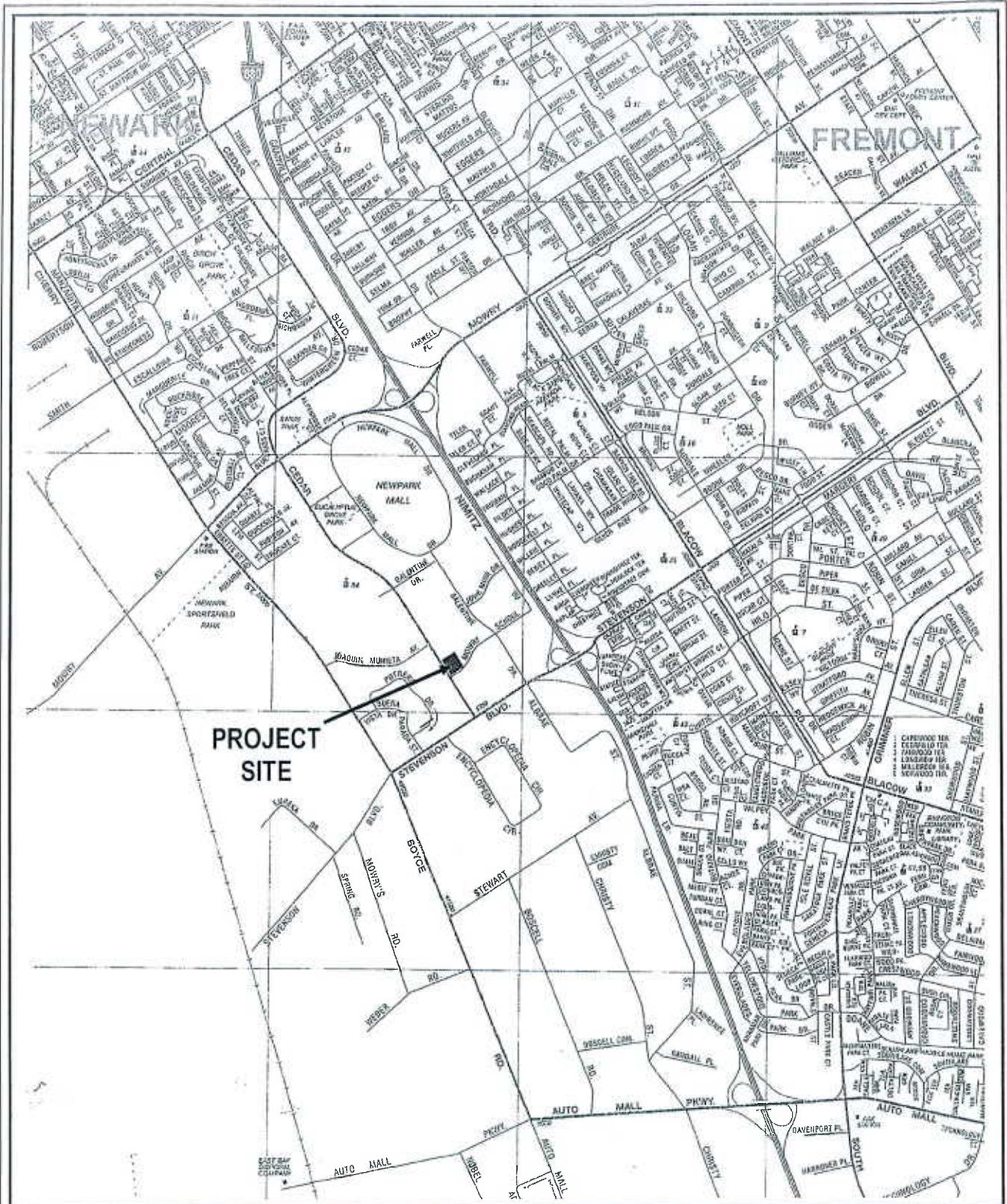
Balentine Drive is located east of the proposed project site and extends in a northerly direction from Stevenson Boulevard. Just prior to reaching Newpark Mall Drive, the roadway turns west and extends to Cedar Boulevard. Between Stevenson Boulevard and Newpark Mall Drive, Balentine Drive has four travel lanes with a two-way-left-turn-lane (TWLTL). The section extending to Cedar Boulevard has two-travel lanes.

Albrae Street is located south of the project site off of Stevenson Boulevard in the City of Fremont and forms the northbound approach of the Stevenson/Balentine intersection. A two-lane street, Albrae Street provides access to commercial and light-industrial areas south of Stevenson Boulevard.

Joaquin Murieta Avenue extends between Cherry Street and Cedar Boulevard northwest of the project site. A wide two-lane roadway, Joaquin Murieta Avenue provides access to residential areas.

Newpark Mall Drive is a privately owned four-lane roadway located north of the project site that provides direct access to the Newpark Mall. The roadway extends in a circular fashion (ring road) around the mall and connects with multiple roadways including Mowry Avenue, Cedar Drive, and Balentine Drive.

Regional access to the proposed project site is provided by Interstate 880 (I-880) located east of the project site. A multi-lane freeway, I-880 is a north-south freeway that has a full-access interchange at Stevenson Boulevard. I-880 provides access north to Hayward and Oakland and south to Fremont and San Jose.



PROJECT SITE

FREMONT

Project Vicinity Map



omni-means

figure 1

EXISTING INTERSECTIONS

The following list of study intersections have been reviewed by Newark Engineering staff for both existing and proposed project operating conditions. Intersection operation is usually considered a key factor in determining the traffic handling capacity of a local street circulation system. Based on discussions with City of Newark Engineering staff, seven (7) key intersections (in addition to the main access driveway) were selected for evaluation of current operational characteristics on Cedar Boulevard, Balentine Drive, and Stevenson Boulevard as follows:¹

1. Cedar Boulevard/Balentine Drive	Signalized
2. Balentine Drive/Mowry School Road	Signalized
3. Cedar Boulevard/Mowry School Road	Signalized
4. Stevenson Boulevard/I-880 Northbound Ramps	Signalized
5. Stevenson Boulevard/I-880 Southbound Ramps	Signalized
6. Stevenson Boulevard/Balentine Dr./Albrae St.	Signalized
7. Stevenson Boulevard/Cedar Boulevard	Signalized
8. Mowry School Road/Office-Project Driveway	Stop-Sign (Driveway)

Existing study intersections' AM and PM peak hour traffic volumes are shown on Figure 2.

INTERSECTION LEVEL-OF-SERVICE (LOS) CONCEPT/METHODOLOGIES

A method of measuring intersection operation is to apply a Level-of-Service (LOS) scale of operational performance. At a signalized intersection, LOS is determined by calculating the volume of conflicting turning movements at the intersection during a one-hour peak period. This total is then divided by the design capacity calculated to accommodate those turning movements. This calculation yields a volume/capacity ratio (v/c) ratio and vehicle delay in seconds. The resulting output corresponds to LOS ratings between "A" to "F" that describe increasing levels of traffic demand and increases in vehicle delay and deterioration of service (please refer to LOS Definitions, show in Table 1).

As an example, LOS A represents free-flow conditions with little or no delay. LOS E represents unstable flow conditions with volumes at or near design capacity. Motorists are likely to experience major delays (40 to 60 seconds) to clear an intersection. LOS F represents "jammed" conditions where traffic flows exceed the design capacity of the intersection.

At non-signalized intersections, LOS usually refers to the minor street movement controlled by a stop-sign. While overall intersection LOS from the major street may be C or better, a minor street turning movement may be functioning at LOS D or E. For all-way-stop-control intersections, intersection LOS refers to the average delay of all approaches. However, if one of the intersections' approach legs is substantially unbalanced (volume), that specific leg may experience proportionately longer delays.

Highway Capacity Manual 2000 (*HCM 2000*) operations methodology was used to calculate signalized and non-signalized intersection LOS and delay using Synchro/SimTraffic software. These "field level" intersection LOS calculations incorporate appropriate heavy vehicle adjustment factors, peak hour factors, and shared/non-shared lane factors. A standard peak hour factor (PHF) of 0.92 is typically applied to all non-signalized analysis scenarios in this study (PHF refers to traffic approach progression through the intersection) except where previously recommended mitigation applies.

¹ Soren Fajeau, City Engineer, City of Newark, Project study intersections—personal communication, December, 2013.



commMeans

Existing Weekday A.M. and (P.M.) Peak Hour Volumes



figure 2

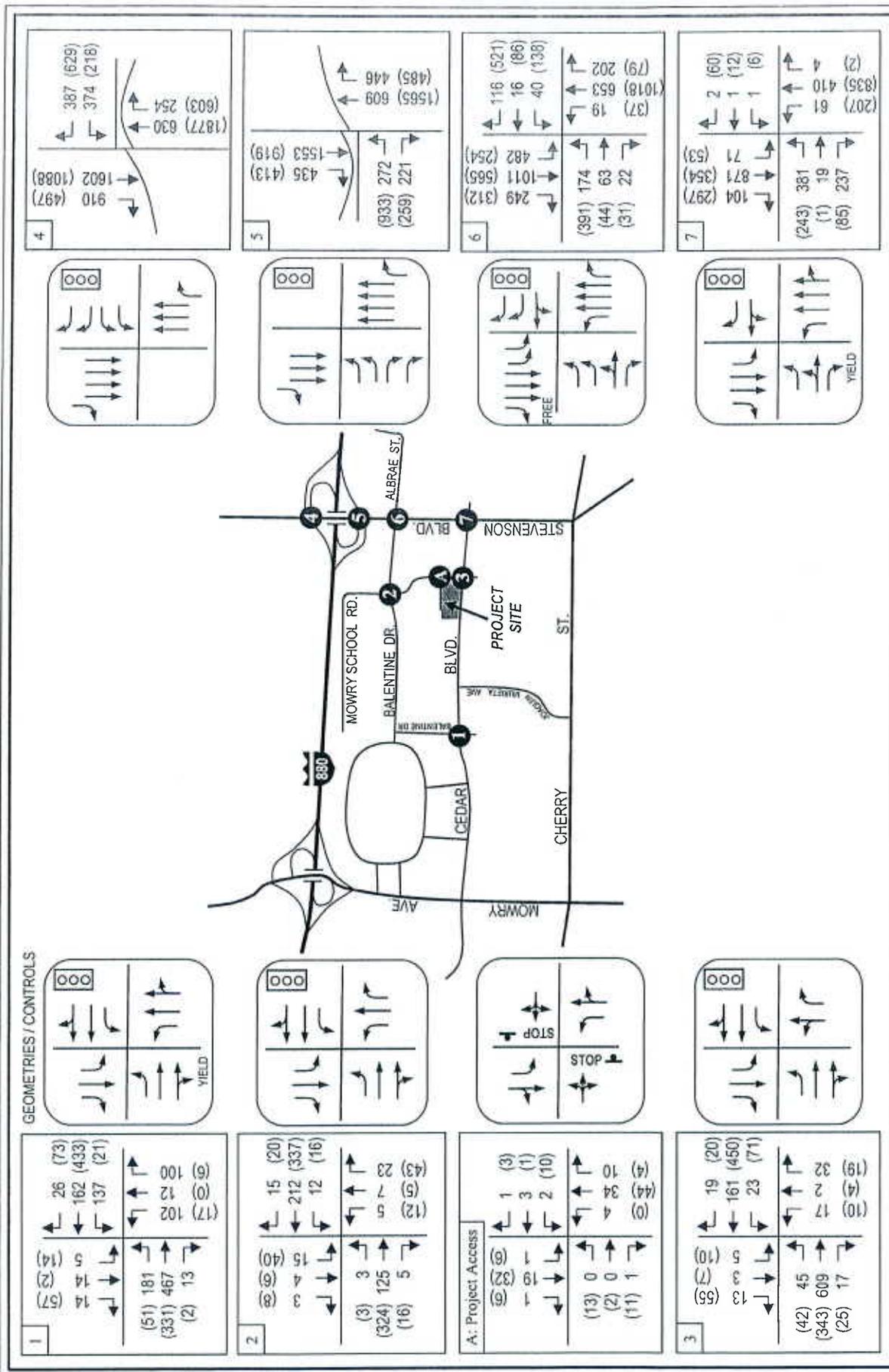


TABLE 1
LEVELS-OF-SERVICE (LOS) CRITERIA FOR INTERSECTIONS

LEVEL OF SERVICE	TYPE OF FLOW	DELAY	MANEUVERABILITY	CONTROL DELAY (SECONDS/VEHICLE)		
				SIGNALIZED	UNSIGNALIZED	ALL-WAY STOP
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10.0 secs. ≤ 0.60 v/c	≤ 10.0	≤ 10.0
B	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	>10 and ≤ 20.0 secs. 0.61 – 0.70 v/c	>10 and ≤ 15.0	>10 and ≤ 15.0
C	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted	>20 and ≤ 35.0 secs. 0.71 – 0.80 v/c	>15 and ≤ 25.0	>15 and ≤ 25.0
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles of stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	>35 and ≤ 55.0 secs. 0.81 – 0.90 v/c	>25 and ≤ 35.0	>25 and ≤ 35.0
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	>55 and ≤ 80.0 secs. 0.91 – 1.00 v/c	>35 and ≤ 50.0	>35 and ≤ 50.0
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	> 80.0 secs. > 1.00 v/c	> 50.0	> 50.0

References: 1. Highway Capacity Manual, Fourth Edition, Transportation Research Board, 2000, Contra Costa Transportation Authority (CCTA), Technical Procedures Update, Final, July 9, 2006

EXISTING INTERSECTION OPERATION

With the proposed project being residential in nature, the primary trip generation would occur during the weekday AM and PM commute periods when residents travel to/from their homes. Therefore, traffic impact analyses have focused on the weekday AM and PM peak periods between 7:00-9:00 a.m. and 4:00-6:00 p.m. when both on-street traffic and vehicle trip generation would be at their highest.

New AM and PM peak period intersection counts were conducted at the eight project study intersections.² From these peak period counts, PM peak hour volumes were derived and are shown in Figure 2.

PM peak hour signalized and non-signalized intersection LOS have been calculated using the *Transportation Research Board (TRB), Highway Capacity Manual 2000, Chapters 16 and 17, Signalized and Unsignalized Intersections*.

As shown in Table 2, all seven project study intersections are operating at acceptable levels (LOS C or better) during the AM and PM peak hours. However, periodic vehicle queuing was observed at the Stevenson/I-880 interchange on-ramps. Specifically, at the Stevenson Boulevard overcrossing of I-880, both the “free movement” southbound and northbound on-ramps experience queuing during the PM peak hour. While these ramps are free movements, vehicle queuing is caused by metering to provide uniform access to I-880 and prevent additional congestion on the freeway. Subsequent field observations indicate vehicle queuing at the I-880 ramp intersections at Stevenson Boulevard is in large part affected by freeway congestion on I-880.³

Existing traffic flows were also observed along Mowry School Road at the existing (proposed project) driveway. Currently, this driveway extends north from Mowry School Road and serves existing office development located just east and north of the proposed project site. The project driveway is divided by a raised median with separate lanes for inbound and outbound traffic flows. There is a one-way traffic circle at the north end of the driveway where it terminates near the existing office building.

Observations during the PM peak period indicate that traffic flows in/out of the driveway are very light as are east-west traffic volumes on Mowry School Road (less than 150 vehicles traveling through the entire intersection). The driveway is not controlled by a yield or stop-sign and some motorists were observed to be using the inbound travel lane to exit outbound onto Mowry School Road.

TRAFFIC SIGNAL WARRANT ANALYSIS

A supplemental traffic signal warrant analysis has been completed to determine whether the existing non-signalized study intersection would require or benefit from the installation of a traffic signal. The term “signal warrant” refers to any of the eight established methods used by Caltrans to quantify the need for a traffic signal at a non-signalized intersection. The eight signal warrant methods are described in the latest edition of the California Manual on Uniform Traffic Control Devices (MUTCD).

² Baymetrics Traffic Resources, AM and PM peak period (7:00-9:00 a.m. and 4:00-6:00 p.m.) intersection turning movement counts on Cedar Boulevard, Mowry School Road, and Stevenson Boulevard, City of Newark, January 19, 2014.

³ Ms. Moon Choi, Baymetrics Traffic Resources, Traffic observations at Stevenson Boulevard/I-880, Personal communication, February 7, 2014.

TABLE 2
EXISTING CONDITIONS: WEEKDAY AM AND PM PEAK HOUR INTERSECTION LOS

#	Intersection	Control Type	AM Peak Hour			PM Peak Hour		
			Delay	LOS	Warrant Met	Delay	LOS	Warrant Met
1	Cedar Boulevard/Balentine Drive	Signal	32.4	C	---	20.7	C	---
2	Mowry School Road/Balentine Drive	Signal	9.8	A	---	11.8	B	---
3	Mowry School Road/Cedar Boulevard	Signal	8.5	A	---	10.5	B	---
4	Stevenson Boulevard/I-880 NB Off-Ramp	Signal	15.1	B	---	14.8	B	---
5	Stevenson Boulevard/I-880 SB Off-Ramp	Signal	10.0	B	---	15.3	B	---
6	Stevenson Boulevard/Albrae St.-Balentine Dr.	Signal	28.4	C	---	28.4	C	---
7	Stevenson Boulevard/Cedar Boulevard	Signal	30.7	C	---	27.8	C	---
8	Mowry School Road/Office-Project Access	TWSC	8.4	A	No	9.0	A	No

Legend: TWSC = Two-Way-Stop Control

Intersection LOS is expressed in seconds of vehicle delay based on HCM 2000 Operations methodology.

The California MUTCD indicates that the installation of a traffic signal should be considered only if one or more of the eight signal warrants are met. The results of the included signal warrant analyses may indicate that a traffic signal could be beneficial to the operations of an intersection. The final decision to install a traffic signal should, however, be based upon further studies utilizing additional warrants as presented in the California MUTCD. Based on MUTCD's peak hour Warrant 3 criteria, the Mowry School Road/Office-Project Access driveway intersection would not qualify for signalization with existing traffic volumes during the weekday peak hours.⁴

NEAR-TERM (APPROVED/PENDING) PROJECTS METHODOLOGY

Near-term (no project) conditions represent approved/pending projects approved by the City of Newark prior to proposed project development combined with increases in regional traffic growth. This would represent a 2–year period consistent with previous studies. The proposed project development would likely represent a 1–2 year horizon. However, near-term (no project) conditions are conservative in nature. Approved/pending projects likely to affect traffic flows in the general study areas were identified from the recent studies conducted for the City of Newark General Plan Tune Up EIR.⁵

Based on overall growth projections discussed in the EIR Transportation and Traffic section, buildout of the Plan would include an increase of 16,580 residents, 6,208 housing units, and 2,882 jobs over existing Year 2012 base levels. Using these growth estimates, the Alameda County Transportation Commission (ACTC) transportation model was updated to provide Year 2035 traffic volume forecasts.⁶ Using the difference between existing Year 2012 baseline volumes and Year 2035 model volumes at each study intersection, existing volumes were increased by a two-year growth ratio based on the uniform 23-year increase in model volumes.

⁴ California Manual on Uniform Traffic Control Design (MUTCD), Peak Hour Warrant #3, Part 4 – Highway Traffic Signal, 2012.

⁵ Planning Center / DC&E, General Plan Tune Up EIR, Chapter 4, Transportation and Traffic, City of Newark, 2013

⁶ The Planning Center / DC&E, General Plan Tune Up EIR, Ibid... ..

NEAR-TERM (NO PROJECT) TRAFFIC VOLUMES

AM and PM peak-hour near-term (no project) volumes have been added to existing intersection volumes based on trip assignments established in the General Plan Tune Up EIR.

AM and PM peak-hour near-term (no project) traffic volumes have been shown in Figure 3 for the weekday peak hours.

NEAR-TERM (NO PROJECT) INTERSECTION/ROADWAY IMPROVEMENTS

Based on discussions with the City of Newark Engineering staff, there are no immediate circulation improvements planned in the study area (that would be completed in a one–two year horizon period).⁷ However, the City of Fremont is planning to modify the existing unsignalized intersection between Cedar Boulevard and Balentine Drive-Albrae Street serving “The Globe” development. This would involve modifications to existing median and a new traffic signal.

NEAR-TERM (NO PROJECT) INTERSECTION OPERATION

With near-term (no project) traffic added to existing peak-hour traffic volumes, baseline intersection LOS have been calculated and are shown in Table 3. With near-term (no project) volumes, all study intersections would be operating at acceptable levels (LOS C or better) during both the AM and PM peak hours.

NEAR-TERM (NO PROJECT) SIGNAL WARRANT ANALYSIS

Based on peak-hour minimum volume criteria (MUTCD #3), the Mowry School Road/Office-Project Access intersection would not qualify for signalization under near-term (no project) conditions.

TABLE 3
EXISTING AND NEAR-TERM (NO PROJECT) CONDITIONS: INTERSECTION LEVELS-OF-SERVICE
WEEKDAY AM AND PM PEAK HOUR

#	Intersection	Control Type	Wkdy. AM LOS/Delay		Wkdy. PM LOS/Delay	
			Existing (No Project)	Near-Term (No Project)	Existing (No Project)	Near-Term (No Project)
1	Cedar Boulevard/Balentine Drive	Signal	C 32.4	C 33.5	C 20.7	C 21.1
2	Mowry School Road/Balentine Drive	Signal	A 9.8	A 9.8	B 11.8	B 11.8
3	Mowry School Road/Cedar Boulevard	Signal	A 8.5	A 8.5	B 10.5	B 10.1
4	Stevenson Blvd/I-880 NB Off-Ramp	Signal	A 15.1	B 15.1	B 14.8	B 14.9
5	Stevenson Blvd/I-880 SB Off-Ramp	Signal	B 10.0	B 10.2	B 15.3	B 15.3
6	Stevenson Blvd/Albrae St.-Balentine Dr.	Signal	C 28.4	C 31.6	C 28.4	C 29.1
7	Stevenson Boulevard/Cedar Boulevard	Signal	C 30.7	C 31.9	C 27.8	C 28.4
8	Mowry School Rd/Office-Project Access	TWSC	A 8.4	A 9.1	A 9.0	A 9.2

Based on Highway Capacity Manual (HCM) 2000, Operations methodology for stop-sign controlled (non-signalized) intersections using Synchro-Simtraffic software. Intersection calculation yields an LOS and vehicle delay in seconds. Stated LOS refers to the minor street (stop-sign) controlled movement.

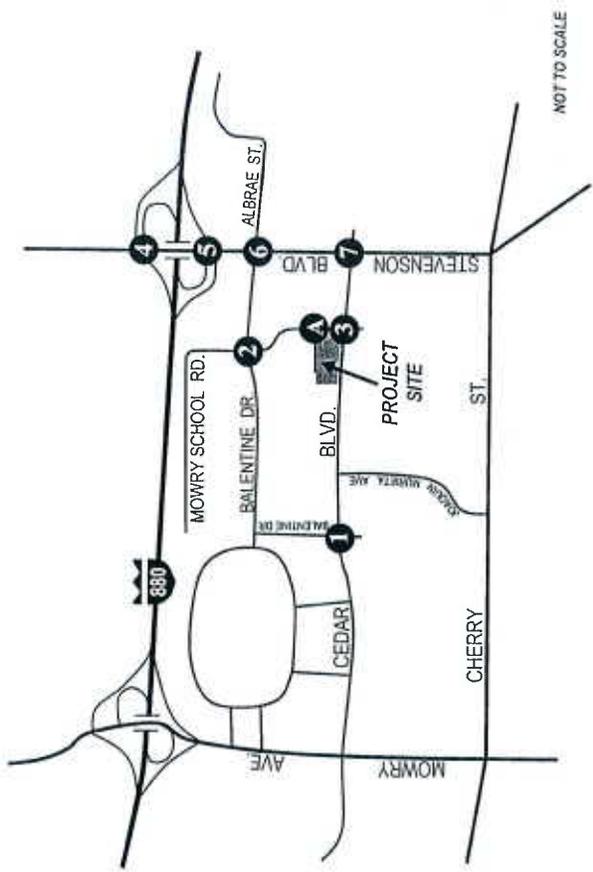
⁷ Mr. Soren Fajaeu, City Engineer, City of Newark, Planned roadway improvements, Personal communication, January 2014.

1	<table border="1"> <tr> <td>←</td><td>26</td><td>(73)</td> <td>←</td><td>102</td><td>(17)</td> </tr> <tr> <td>←</td><td>163</td><td>(518)</td> <td>←</td><td>137</td><td>(21)</td> </tr> <tr> <td>←</td><td>5</td><td>(14)</td> <td>←</td><td>181</td><td>(51)</td> </tr> <tr> <td>←</td><td>14</td><td>(2)</td> <td>←</td><td>543</td><td>(366)</td> </tr> <tr> <td>←</td><td>13</td><td>(2)</td> <td>←</td><td>00</td><td>(0)</td> </tr> <tr> <td>←</td><td>00</td><td>(0)</td> <td>←</td><td>00</td><td>(0)</td> </tr> </table>	←	26	(73)	←	102	(17)	←	163	(518)	←	137	(21)	←	5	(14)	←	181	(51)	←	14	(2)	←	543	(366)	←	13	(2)	←	00	(0)	←	00	(0)	←	00	(0)
←	26	(73)	←	102	(17)																																
←	163	(518)	←	137	(21)																																
←	5	(14)	←	181	(51)																																
←	14	(2)	←	543	(366)																																
←	13	(2)	←	00	(0)																																
←	00	(0)	←	00	(0)																																

2	<table border="1"> <tr> <td>←</td><td>15</td><td>(20)</td> <td>←</td><td>5</td><td>(12)</td> </tr> <tr> <td>←</td><td>213</td><td>(341)</td> <td>←</td><td>23</td><td>(3)</td> </tr> <tr> <td>←</td><td>15</td><td>(40)</td> <td>←</td><td>127</td><td>(325)</td> </tr> <tr> <td>←</td><td>12</td><td>(16)</td> <td>←</td><td>5</td><td>(16)</td> </tr> </table>	←	15	(20)	←	5	(12)	←	213	(341)	←	23	(3)	←	15	(40)	←	127	(325)	←	12	(16)	←	5	(16)
←	15	(20)	←	5	(12)																				
←	213	(341)	←	23	(3)																				
←	15	(40)	←	127	(325)																				
←	12	(16)	←	5	(16)																				

A: Project Access	<table border="1"> <tr> <td>←</td><td>1</td><td>(3)</td> <td>←</td><td>0</td><td>(13)</td> </tr> <tr> <td>←</td><td>3</td><td>(1)</td> <td>←</td><td>0</td><td>(2)</td> </tr> <tr> <td>←</td><td>2</td><td>(10)</td> <td>←</td><td>1</td><td>(11)</td> </tr> </table>	←	1	(3)	←	0	(13)	←	3	(1)	←	0	(2)	←	2	(10)	←	1	(11)
←	1	(3)	←	0	(13)														
←	3	(1)	←	0	(2)														
←	2	(10)	←	1	(11)														

3	<table border="1"> <tr> <td>←</td><td>19</td><td>(20)</td> <td>←</td><td>32</td><td>(19)</td> </tr> <tr> <td>←</td><td>162</td><td>(535)</td> <td>←</td><td>2</td><td>(4)</td> </tr> <tr> <td>←</td><td>23</td><td>(71)</td> <td>←</td><td>17</td><td>(10)</td> </tr> <tr> <td>←</td><td>45</td><td>(42)</td> <td>←</td><td>685</td><td>(347)</td> </tr> <tr> <td>←</td><td>17</td><td>(25)</td> <td>←</td><td>17</td><td>(25)</td> </tr> </table>	←	19	(20)	←	32	(19)	←	162	(535)	←	2	(4)	←	23	(71)	←	17	(10)	←	45	(42)	←	685	(347)	←	17	(25)	←	17	(25)
←	19	(20)	←	32	(19)																										
←	162	(535)	←	2	(4)																										
←	23	(71)	←	17	(10)																										
←	45	(42)	←	685	(347)																										
←	17	(25)	←	17	(25)																										



4	<table border="1"> <tr> <td>←</td><td>387</td><td>(633)</td> <td>←</td><td>1901</td><td>(660)</td> </tr> <tr> <td>←</td><td>384</td><td>(241)</td> <td>←</td><td>660</td><td>(603)</td> </tr> <tr> <td>←</td><td>1625</td><td>(1103)</td> <td>←</td><td>910</td><td>(497)</td> </tr> </table>	←	387	(633)	←	1901	(660)	←	384	(241)	←	660	(603)	←	1625	(1103)	←	910	(497)
←	387	(633)	←	1901	(660)														
←	384	(241)	←	660	(603)														
←	1625	(1103)	←	910	(497)														

5	<table border="1"> <tr> <td>←</td><td>1589</td><td>(485)</td> <td>←</td><td>435</td><td>(413)</td> </tr> <tr> <td>←</td><td>636</td><td>(446)</td> <td>←</td><td>276</td><td>(933)</td> </tr> <tr> <td>←</td><td>226</td><td>(282)</td> <td>←</td><td>1586</td><td>(957)</td> </tr> </table>	←	1589	(485)	←	435	(413)	←	636	(446)	←	276	(933)	←	226	(282)	←	1586	(957)
←	1589	(485)	←	435	(413)														
←	636	(446)	←	276	(933)														
←	226	(282)	←	1586	(957)														

6	<table border="1"> <tr> <td>←</td><td>117</td><td>(521)</td> <td>←</td><td>249</td><td>(312)</td> </tr> <tr> <td>←</td><td>17</td><td>(80)</td> <td>←</td><td>1036</td><td>(645)</td> </tr> <tr> <td>←</td><td>40</td><td>(160)</td> <td>←</td><td>519</td><td>(266)</td> </tr> <tr> <td>←</td><td>19</td><td>(37)</td> <td>←</td><td>174</td><td>(391)</td> </tr> <tr> <td>←</td><td>686</td><td>(1055)</td> <td>←</td><td>65</td><td>(44)</td> </tr> <tr> <td>←</td><td>226</td><td>(80)</td> <td>←</td><td>22</td><td>(31)</td> </tr> </table>	←	117	(521)	←	249	(312)	←	17	(80)	←	1036	(645)	←	40	(160)	←	519	(266)	←	19	(37)	←	174	(391)	←	686	(1055)	←	65	(44)	←	226	(80)	←	22	(31)
←	117	(521)	←	249	(312)																																
←	17	(80)	←	1036	(645)																																
←	40	(160)	←	519	(266)																																
←	19	(37)	←	174	(391)																																
←	686	(1055)	←	65	(44)																																
←	226	(80)	←	22	(31)																																

7	<table border="1"> <tr> <td>←</td><td>2</td><td>(60)</td> <td>←</td><td>246</td><td>(449)</td> </tr> <tr> <td>←</td><td>1</td><td>(31)</td> <td>←</td><td>19</td><td>(1)</td> </tr> <tr> <td>←</td><td>1</td><td>(6)</td> <td>←</td><td>242</td><td>(86)</td> </tr> <tr> <td>←</td><td>62</td><td>(211)</td> <td>←</td><td>449</td><td>(246)</td> </tr> <tr> <td>←</td><td>410</td><td>(890)</td> <td>←</td><td>19</td><td>(1)</td> </tr> <tr> <td>←</td><td>4</td><td>(4)</td> <td>←</td><td>242</td><td>(86)</td> </tr> </table>	←	2	(60)	←	246	(449)	←	1	(31)	←	19	(1)	←	1	(6)	←	242	(86)	←	62	(211)	←	449	(246)	←	410	(890)	←	19	(1)	←	4	(4)	←	242	(86)
←	2	(60)	←	246	(449)																																
←	1	(31)	←	19	(1)																																
←	1	(6)	←	242	(86)																																
←	62	(211)	←	449	(246)																																
←	410	(890)	←	19	(1)																																
←	4	(4)	←	242	(86)																																



Near Term Without Project A.M. and (P.M.) Peak Hour Volumes



figure 3

SIGNIFICANCE CRITERIA

The following standards of significance criteria have been used in this transportation analysis:

- A reduction in intersection service levels below LOS D for signalized intersections. This is based on the City of Newark standard for Level of Service included in the Transportation Element of the General Plan;
- For those intersections operating below LOS D (pre-project), an increase of 1% or more of project-related traffic to an already congested intersection would be considered a significant impact;
- Based on Alameda County Congestion Management Agency (ACCMA) guidelines, should the proposed Cedar Townhome project generate over 100 PM peak hour trips, a comprehensive traffic analysis will be conducted on all MTS routes in the study area. The Congestion Management Plan (CMP) requires conducting a supplemental traffic analysis using the latest Countywide Transportation Demand Model for projection years 2015 and 2030.

PROPOSED PROJECT IMPACTS

PROJECT DESCRIPTION

The proposed project would be a residential development made up of 85 multi-family units. The project site would be located on the northeast quadrant of the Cedar Boulevard/Mowry School Road intersection (see Project Site Plan – Figure 6). Proposed vehicle access to the project site would be gained at one main driveway off of Mowry School Road; an existing, full-access mid-block driveway serving existing office uses. A second project driveway off Mowry School Road located approximately 35-40 feet east of Cedar Boulevard would be limited to emergency vehicle access only.

PROJECT TRIP GENERATION

Daily and peak hour vehicle trip generation for the proposed project has been based on accepted rates found in the Institute of Transportation Engineers (ITE) trip research manual for multi-family dwelling units.⁸ ITE has conducted extensive research on the trip generation characteristics of residential units (apartment) uses. Consequently, established rates for proposed project uses are an industry standard used by both consultants and public agencies for measuring the impacts of residential uses.

Vehicle trip generation for the proposed project is broken down by daily vehicle trips and “peak hour” vehicle trips. Daily trips are the total vehicle trips generated by the project over a 24-hour period. The peak hour trips are typically generated during the highest hour of the morning (7:00-9:00 a.m.) and evening (4:00-6:00 p.m.) commute periods when weekday traffic is significant. The peak hour rates reflect the amount of traffic that would be generated by the proposed project during the “peak hour of adjacent street traffic.” However, it is possible the proposed project could generate a higher amount of trips during some other period during the day. Regardless, the combination of peak hour project trips combined with the peak hour of adjacent street traffic commonly yields a “worst case” scenario for measuring project impacts and vehicle congestion. Typically, the PM peak hour period yields the greatest combination of project trip generation and vehicle congestion.

Daily and peak hour proposed project trip generation is shown in Table 4. As calculated, the proposed project is expected to generate 565 daily trips with 43 AM peak hour trips and 53 PM peak hour trips.

⁸ *Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition, Apartments, (land use #220), 2012.*

TABLE 4
PROPOSED PROJECT TRIP GENERATION; DAILY, AM, AND PM PEAK HOUR

Land Use Category	Unit	Daily Trip	AM Peak Hour Trip Rate/Unit			PM Peak Hour Trip Rate/Unit		
		Rate	Total	In %	Out %	Total	In %	Out%
Apartment (#220)	D.U.	6.65	0.51	20	80	0.62	65	35
Proposed Uses	Size	Daily	AM Peak Hour Trips			PM Peak Hour Trips		
	DU	Trips	Total	In	Out	Total	In	Out
Apartment	85	565	43	9	34	53	35	18
Net New Project Trips		565	43	9	34	53	35	18
<i>Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition, Apartment (#220), Daily and peak hour generation based on average trip rates.</i>								

PROJECT TRIP ASSIGNMENT

Peak hour trip distribution has been based on existing peak hour traffic volumes at key intersections around the site, area demographics, and previous/recent transportation studies for other residential development in the surrounding area.^{9 10} Consideration was also given to project access driveways, access to Interstate 880, and adjacent intersections. Based on these factors, the project's peak hour trip distribution is estimated as follows:

Interstate 880 to/from the north:	15%
Interstate 880 to/from the south:	15%
Cedar Boulevard to/from the south:	25%
Stevenson Blvd. east of I-880:	15%
Stevenson Blvd to/from the west:	10%
Cedar Boulevard to/from the north:	40%
Mowry Blvd. to/from the east:	10%
Mowry Blvd. to/from the west:	10%
Cedar Blvd. north of Mowry Blvd.:	20%
Balentine Drive to/from the north:	<u>5%</u>
 Total:	 100%

AM and PM peak hour project trips have been added to existing intersection volumes and are shown in Figure 4.

EXISTING PLUS PROJECT INTERSECTION OPERATIONS

With AM and PM peak hour project trips added to existing (no project) traffic volumes, study intersection LOS have been calculated and are shown in Table 5. With existing plus project volumes, all eight project study intersections would be operating at acceptable levels (LOS C or better) during the AM and PM peak hours. There would be slight increases in vehicle delays at specific intersections. However, all intersections would continue to operate at acceptable levels.

⁹ Omni-Means, Ltd., Traffic Analysis for the Proposed Newark Mixed-Use Project, City of Newark, 2006.

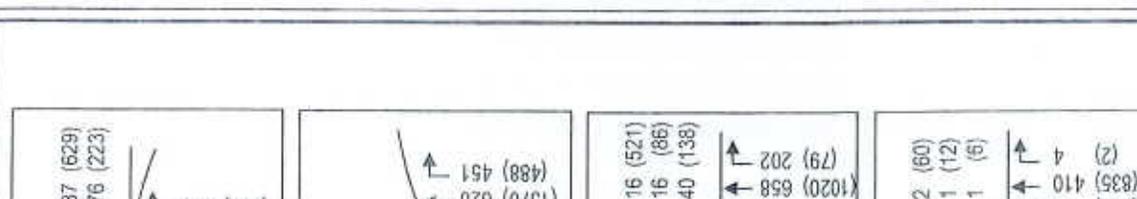
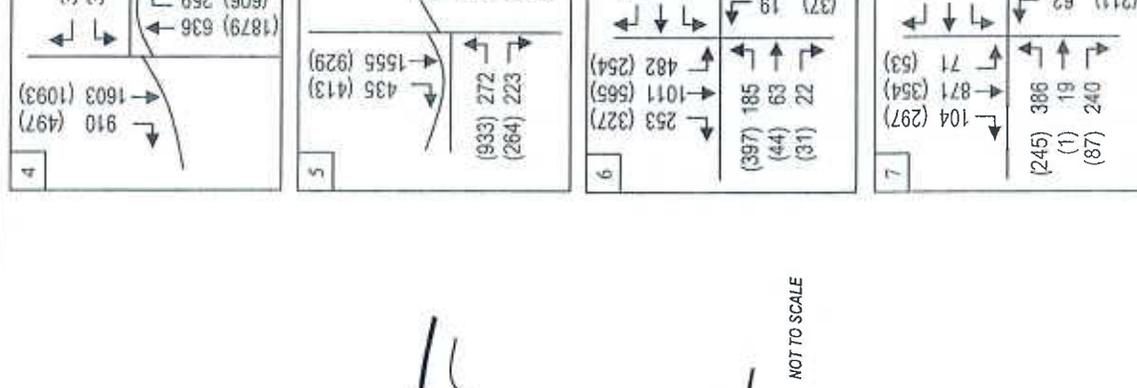
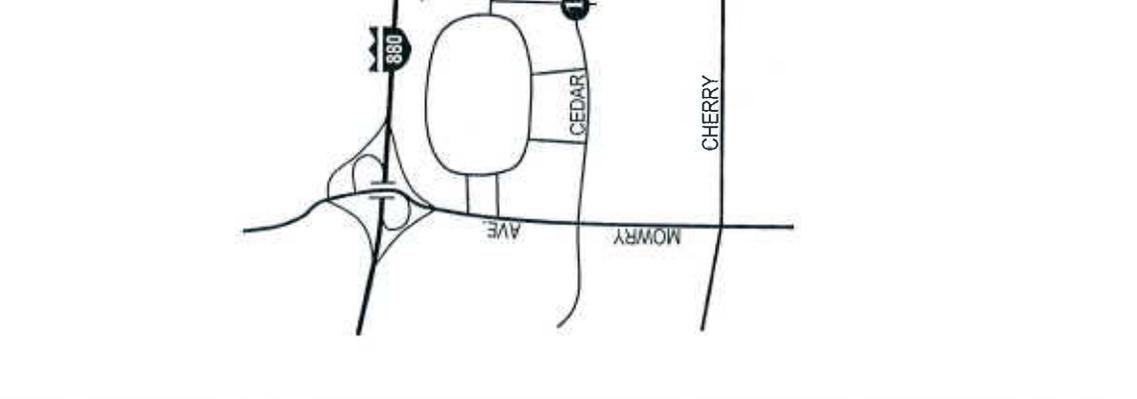
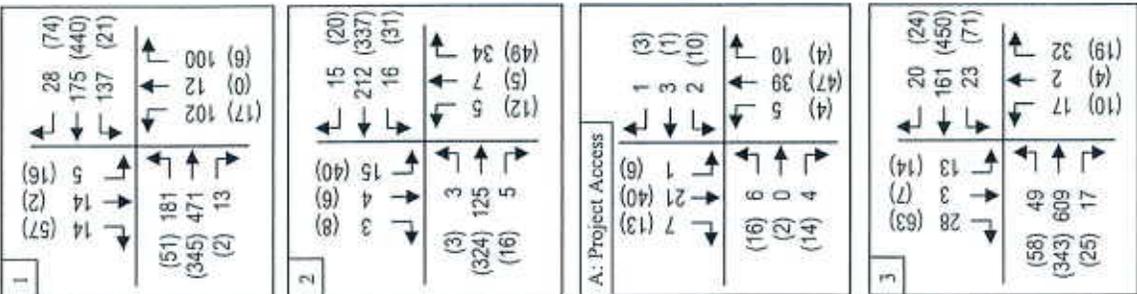
¹⁰ Planning Center / DC&E, General Plan Turn UP EIR, Chapter 4, Transportation and Traffic, City of Newark, 2013



Existing + Project A.M. and (P.M.) Peak Hour Volumes



figure 4



NOT TO SCALE

TABLE 5
EXISTING AND EXISTING PLUS PROJECT CONDITIONS: INTERSECTION LEVELS-OF-SERVICE
WEEKDAY AM AND PM PEAK HOUR

#	Intersection	Control Type	Wkdy. AM LOS/Delay		Wkdy. PM LOS/Delay	
			Existing (No Project)	Existing Plus Project	Existing (No Project)	Existing Plus Project
1	Cedar Boulevard/Balentine Drive	Signal	C 32.4	C 32.5	C 20.7	C 20.9
2	Mowry School Road/Balentine Drive	Signal	A 9.8	B 12.6	B 11.8	B 12.7
3	Mowry School Road/Cedar Boulevard	Signal	A 8.5	A 9.2	B 10.5	B 11.2
4	Stevenson Blvd/I-880 NB Off-Ramp	Signal	A 15.1	B 15.2	B 14.8	B 14.8
5	Stevenson Blvd/I-880 SB Off-Ramp	Signal	B 10.0	B 10.0	B 15.3	B 15.3
6	Stevenson Blvd/Albrae St.-Balentine Dr.	Signal	C 28.4	C 28.4	C 28.4	C 28.4
7	Stevenson Boulevard/Cedar Boulevard	Signal	C 30.7	C 30.8	C 27.8	C 27.9
8	Mowry School Rd/Office-Project Access	TWSC	A 8.4	A 8.8	A 9.0	A 9.2

Based on Highway Capacity Manual (HCM) 2000, Operations methodology for stop-sign controlled (non-signalized) intersections using Synchro-Simtraffic software. Intersection calculation yields an LOS and vehicle delay in seconds. Stated LOS refers to the minor street (stop-sign) controlled movement.

EXISTING PLUS PROJECT SIGNAL WARRANTS

All non-signalized project intersections were analyzed for peak hour signal warrant satisfaction (MUTCD warrant #3) with existing plus project volumes. As under existing plus project conditions, non-signalized project study intersections would not qualify for signalization under MUTCD peak hour warrant #3.

NEAR-TERM PLUS PROJECT INTERSECTION OPERATIONS

Figure 5 shows AM and PM peak hour project trips added to near-term (no project) traffic volumes. Table 6 shows near-term plus project study intersection LOS. With near-term plus project volumes, all eight study intersections would be operating at acceptable levels (LOS C or better) during the AM and PM peak hours. As with existing plus project conditions, there would be slight increases in vehicle delays at selected intersections. The adjacent project intersection of Mowry School Road/Balentine Drive would change from LOS A (9.8 seconds of delay) to LOS B (12.5 seconds of delay). However, the addition of proposed project trips would not be considered significant in nature.

NEAR-TERM PLUS PROJECT SIGNAL WARRANTS

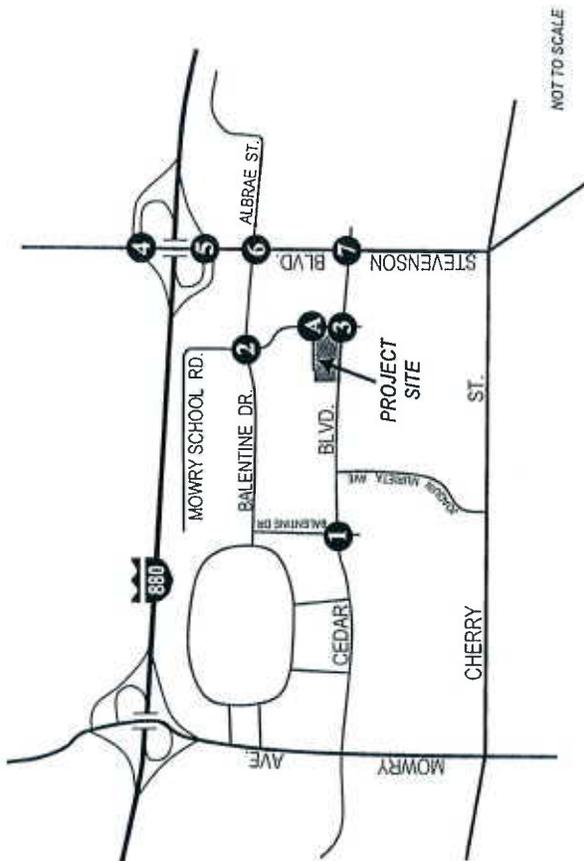
With proposed project trips, the Mowry School Road/Office-Project Driveway access intersection was analyzed for peak hour signal warrant satisfaction (MUTCD warrant #3). As under existing plus project conditions, the project study intersection would not qualify for signalization under MUTCD peak hour warrant #3.

1	<table border="1"> <tr> <td>←</td> <td>28</td> <td>(74)</td> <td>→</td> <td>←</td> <td>17</td> <td>(102)</td> <td>→</td> </tr> <tr> <td>←</td> <td>176</td> <td>(525)</td> <td>→</td> <td>←</td> <td>9</td> <td>(100)</td> <td>→</td> </tr> <tr> <td>←</td> <td>137</td> <td>(21)</td> <td>→</td> <td>←</td> <td>5</td> <td>(16)</td> <td>→</td> </tr> <tr> <td>←</td> <td>5</td> <td>(14)</td> <td>→</td> <td>←</td> <td>14</td> <td>(57)</td> <td>→</td> </tr> <tr> <td>←</td> <td>51</td> <td>181</td> <td>→</td> <td>←</td> <td>2</td> <td>13</td> <td>→</td> </tr> <tr> <td>←</td> <td>380</td> <td>547</td> <td>→</td> <td>←</td> <td></td> <td></td> <td>→</td> </tr> <tr> <td>←</td> <td>(2)</td> <td></td> <td>→</td> <td>←</td> <td></td> <td></td> <td>→</td> </tr> </table>	←	28	(74)	→	←	17	(102)	→	←	176	(525)	→	←	9	(100)	→	←	137	(21)	→	←	5	(16)	→	←	5	(14)	→	←	14	(57)	→	←	51	181	→	←	2	13	→	←	380	547	→	←			→	←	(2)		→	←			→
←	28	(74)	→	←	17	(102)	→																																																		
←	176	(525)	→	←	9	(100)	→																																																		
←	137	(21)	→	←	5	(16)	→																																																		
←	5	(14)	→	←	14	(57)	→																																																		
←	51	181	→	←	2	13	→																																																		
←	380	547	→	←			→																																																		
←	(2)		→	←			→																																																		

2	<table border="1"> <tr> <td>←</td> <td>15</td> <td>(20)</td> <td>→</td> <td>←</td> <td>12</td> <td>5</td> <td>→</td> </tr> <tr> <td>←</td> <td>213</td> <td>(341)</td> <td>→</td> <td>←</td> <td>3</td> <td>3</td> <td>→</td> </tr> <tr> <td>←</td> <td>15</td> <td>(40)</td> <td>→</td> <td>←</td> <td>325</td> <td>127</td> <td>→</td> </tr> <tr> <td>←</td> <td>3</td> <td>(16)</td> <td>→</td> <td>←</td> <td>5</td> <td></td> <td>→</td> </tr> <tr> <td>←</td> <td>(3)</td> <td></td> <td>→</td> <td>←</td> <td></td> <td></td> <td>→</td> </tr> <tr> <td>←</td> <td>(49)</td> <td></td> <td>→</td> <td>←</td> <td></td> <td></td> <td>→</td> </tr> <tr> <td>←</td> <td>(5)</td> <td></td> <td>→</td> <td>←</td> <td></td> <td></td> <td>→</td> </tr> <tr> <td>←</td> <td>3</td> <td>(1)</td> <td>→</td> <td>←</td> <td></td> <td></td> <td>→</td> </tr> </table>	←	15	(20)	→	←	12	5	→	←	213	(341)	→	←	3	3	→	←	15	(40)	→	←	325	127	→	←	3	(16)	→	←	5		→	←	(3)		→	←			→	←	(49)		→	←			→	←	(5)		→	←			→	←	3	(1)	→	←			→
←	15	(20)	→	←	12	5	→																																																										
←	213	(341)	→	←	3	3	→																																																										
←	15	(40)	→	←	325	127	→																																																										
←	3	(16)	→	←	5		→																																																										
←	(3)		→	←			→																																																										
←	(49)		→	←			→																																																										
←	(5)		→	←			→																																																										
←	3	(1)	→	←			→																																																										

A: Project Access			
←	1	(3)	→
←	3	(1)	→
←	2	(10)	→
←	7	(13)	→
←	21	(48)	→
←	1	(6)	→
←	6	(16)	→
←	0	(2)	→
←	4	(14)	→
←	5	(4)	→
←	8	(10)	→
←	8	(27)	→

3	<table border="1"> <tr> <td>←</td> <td>20</td> <td>(24)</td> <td>→</td> </tr> <tr> <td>←</td> <td>162</td> <td>(535)</td> <td>→</td> </tr> <tr> <td>←</td> <td>13</td> <td>(7)</td> <td>→</td> </tr> <tr> <td>←</td> <td>23</td> <td>(71)</td> <td>→</td> </tr> <tr> <td>←</td> <td>28</td> <td>(83)</td> <td>→</td> </tr> <tr> <td>←</td> <td>49</td> <td>(58)</td> <td>→</td> </tr> <tr> <td>←</td> <td>685</td> <td>(347)</td> <td>→</td> </tr> <tr> <td>←</td> <td>17</td> <td>(25)</td> <td>→</td> </tr> <tr> <td>←</td> <td>17</td> <td>(10)</td> <td>→</td> </tr> <tr> <td>←</td> <td>33</td> <td>(5)</td> <td>→</td> </tr> <tr> <td>←</td> <td>33</td> <td>(19)</td> <td>→</td> </tr> </table>	←	20	(24)	→	←	162	(535)	→	←	13	(7)	→	←	23	(71)	→	←	28	(83)	→	←	49	(58)	→	←	685	(347)	→	←	17	(25)	→	←	17	(10)	→	←	33	(5)	→	←	33	(19)	→
←	20	(24)	→																																										
←	162	(535)	→																																										
←	13	(7)	→																																										
←	23	(71)	→																																										
←	28	(83)	→																																										
←	49	(58)	→																																										
←	685	(347)	→																																										
←	17	(25)	→																																										
←	17	(10)	→																																										
←	33	(5)	→																																										
←	33	(19)	→																																										



4	<table border="1"> <tr> <td>←</td> <td>387</td> <td>(633)</td> <td>→</td> </tr> <tr> <td>←</td> <td>385</td> <td>(246)</td> <td>→</td> </tr> <tr> <td>←</td> <td>666</td> <td>(606)</td> <td>→</td> </tr> <tr> <td>←</td> <td>259</td> <td>(1903)</td> <td>→</td> </tr> <tr> <td>←</td> <td>910</td> <td>(497)</td> <td>→</td> </tr> <tr> <td>←</td> <td>1626</td> <td>(1108)</td> <td>→</td> </tr> </table>	←	387	(633)	→	←	385	(246)	→	←	666	(606)	→	←	259	(1903)	→	←	910	(497)	→	←	1626	(1108)	→
←	387	(633)	→																						
←	385	(246)	→																						
←	666	(606)	→																						
←	259	(1903)	→																						
←	910	(497)	→																						
←	1626	(1108)	→																						

5	<table border="1"> <tr> <td>←</td> <td>435</td> <td>(413)</td> <td>→</td> </tr> <tr> <td>←</td> <td>1588</td> <td>(967)</td> <td>→</td> </tr> <tr> <td>←</td> <td>276</td> <td>(933)</td> <td>→</td> </tr> <tr> <td>←</td> <td>228</td> <td>(287)</td> <td>→</td> </tr> <tr> <td>←</td> <td>647</td> <td>(1594)</td> <td>→</td> </tr> <tr> <td>←</td> <td>451</td> <td>(488)</td> <td>→</td> </tr> </table>	←	435	(413)	→	←	1588	(967)	→	←	276	(933)	→	←	228	(287)	→	←	647	(1594)	→	←	451	(488)	→
←	435	(413)	→																						
←	1588	(967)	→																						
←	276	(933)	→																						
←	228	(287)	→																						
←	647	(1594)	→																						
←	451	(488)	→																						

6	<table border="1"> <tr> <td>←</td> <td>253</td> <td>(327)</td> <td>→</td> </tr> <tr> <td>←</td> <td>1036</td> <td>(645)</td> <td>→</td> </tr> <tr> <td>←</td> <td>519</td> <td>(266)</td> <td>→</td> </tr> <tr> <td>←</td> <td>185</td> <td>(397)</td> <td>→</td> </tr> <tr> <td>←</td> <td>65</td> <td>(44)</td> <td>→</td> </tr> <tr> <td>←</td> <td>22</td> <td>(31)</td> <td>→</td> </tr> <tr> <td>←</td> <td>19</td> <td>(37)</td> <td>→</td> </tr> <tr> <td>←</td> <td>691</td> <td>(1057)</td> <td>→</td> </tr> <tr> <td>←</td> <td>226</td> <td>(80)</td> <td>→</td> </tr> <tr> <td>←</td> <td>40</td> <td>(160)</td> <td>→</td> </tr> <tr> <td>←</td> <td>17</td> <td>(90)</td> <td>→</td> </tr> <tr> <td>←</td> <td>117</td> <td>(521)</td> <td>→</td> </tr> </table>	←	253	(327)	→	←	1036	(645)	→	←	519	(266)	→	←	185	(397)	→	←	65	(44)	→	←	22	(31)	→	←	19	(37)	→	←	691	(1057)	→	←	226	(80)	→	←	40	(160)	→	←	17	(90)	→	←	117	(521)	→
←	253	(327)	→																																														
←	1036	(645)	→																																														
←	519	(266)	→																																														
←	185	(397)	→																																														
←	65	(44)	→																																														
←	22	(31)	→																																														
←	19	(37)	→																																														
←	691	(1057)	→																																														
←	226	(80)	→																																														
←	40	(160)	→																																														
←	17	(90)	→																																														
←	117	(521)	→																																														

7	<table border="1"> <tr> <td>←</td> <td>105</td> <td>(354)</td> <td>→</td> </tr> <tr> <td>←</td> <td>894</td> <td>(395)</td> <td>→</td> </tr> <tr> <td>←</td> <td>73</td> <td>(57)</td> <td>→</td> </tr> <tr> <td>←</td> <td>454</td> <td>(248)</td> <td>→</td> </tr> <tr> <td>←</td> <td>19</td> <td>(1)</td> <td>→</td> </tr> <tr> <td>←</td> <td>245</td> <td>(88)</td> <td>→</td> </tr> <tr> <td>←</td> <td>63</td> <td>(215)</td> <td>→</td> </tr> <tr> <td>←</td> <td>410</td> <td>(890)</td> <td>→</td> </tr> <tr> <td>←</td> <td>4</td> <td>(4)</td> <td>→</td> </tr> <tr> <td>←</td> <td>1</td> <td>(31)</td> <td>→</td> </tr> <tr> <td>←</td> <td>1</td> <td>(6)</td> <td>→</td> </tr> <tr> <td>←</td> <td>2</td> <td>(60)</td> <td>→</td> </tr> </table>	←	105	(354)	→	←	894	(395)	→	←	73	(57)	→	←	454	(248)	→	←	19	(1)	→	←	245	(88)	→	←	63	(215)	→	←	410	(890)	→	←	4	(4)	→	←	1	(31)	→	←	1	(6)	→	←	2	(60)	→
←	105	(354)	→																																														
←	894	(395)	→																																														
←	73	(57)	→																																														
←	454	(248)	→																																														
←	19	(1)	→																																														
←	245	(88)	→																																														
←	63	(215)	→																																														
←	410	(890)	→																																														
←	4	(4)	→																																														
←	1	(31)	→																																														
←	1	(6)	→																																														
←	2	(60)	→																																														



Near Term Plus Project A.M. and (P.M.) Peak Hour Volumes

Omni-means

figure 5



TABLE 5
NEAR-TERM (NO PROJECT) AND NEAR-TERM PLUS PROJECT CONDITIONS:
INTERSECTION LEVELS-OF-SERVICE
WEEKDAY AM AND PM PEAK HOUR

#	Intersection	Control Type	Wkdy. AM LOS/Delay		Wkdy. PM LOS/Delay	
			Near-Term (No Project)	Near-Term Plus Project	Near-Term (No Project)	Near-Term Plus Project
1	Cedar Boulevard/Balentine Drive	Signal	C 33.5	C 33.7	C 21.1	C 21.3
2	Mowry School Road/Balentine Drive	Signal	A 9.8	B 12.5	B 11.8	B 12.7
3	Mowry School Road/Cedar Boulevard	Signal	A 8.5	A 8.9	B 10.1	B 10.7
4	Stevenson Blvd/I-880 NB Off-Ramp	Signal	B 15.1	B 15.1	B 14.9	B 14.9
5	Stevenson Blvd/I-880 SB Off-Ramp	Signal	B 10.2	B 10.2	B 15.3	B 15.3
6	Stevenson Blvd/Albrae St.-Balentine Dr.	Signal	C 31.6	C 31.7	C 29.1	C 29.1
7	Stevenson Boulevard/Cedar Boulevard	Signal	C 31.9	C 32.0	C 28.4	C 28.5
8	Mowry School Rd/Office-Project Access	TWSC	A 9.1	A 9.3	A 9.2	A 9.3

Based on Highway Capacity Manual (HCM) 2000, Operations methodology for stop-sign controlled (non-signalized) intersections using Synchro-Simtraffic software. Intersection calculation yields an LOS and vehicle delay in seconds. Stated LOS refers to the minor street (stop-sign) controlled movement.

PROJECT ACCESS/CIRCULATION

The proposed project site would be served by an existing, full-access mid-block driveway located off Mowry School Road. A second project driveway would be located 35-40 feet east of Cedar Boulevard would serve emergency vehicle access only (see Project Site Plan---Figure 6). The existing mid-block driveway off of Mowry School Road is located approximately 460 feet east of Cedar Boulevard and currently serves existing office uses located east and north of the project site. A dedicated eastbound left-turn lane on Mowry School Road serves this driveway. The driveway itself has a raised, landscaped median that divides two-way traffic flow in and out of the existing office site. A median break allows access into the proposed project driveway that extends approximately 30 feet into the site. The existing driveway is not controlled where it intersects Mowry School Road (nor is an existing retail driveway located directly to the south (opposite) serving Balentine Plaza). The outbound driveway lane can accommodate separate turning movements (27 feet wide), but is not striped as such. In addition, the landscaped median has a tall hedge that limits vehicle sight distance.

It is noted that the short (30-feet) access driveway into the project site from the mid-block driveway off Mowry School Road does not align with the existing median break that serves office parking areas as shown in the current project site plan (Figure 6). The project driveway alignment is shown off-set to the north towards the existing office traffic circle (approximately 12-18 feet). This would cause inbound residents to the project site to travel around the traffic circle to access the driveway and/or attempt non-standard left-turn movements into the project driveway leading to potential vehicle conflicts with outbound traffic from office areas.

The second project driveway proposed off of Mowry School Road would allow full-access in/out of the project site for emergency vehicles (only). One of the main reasons for limited access at this driveway is the location is only 35-40 feet east of Cedar Boulevard. Resident's making left-turns into or out of the project site would be required to turn across three lanes of traffic; the westbound left, through, and right-turn lanes on Mowry School Road at Cedar Boulevard. For this reason, the vehicle access at this project driveway is limited to emergency vehicles only bound/outbound only to prevent left-turn vehicle conflicts.

Site Area

Area 1	10,000
Area 2	10,000
Area 3	10,000
Area 4	10,000
Area 5	10,000
Area 6	10,000
Area 7	10,000
Area 8	10,000
Area 9	10,000
Area 10	10,000
Area 11	10,000
Area 12	10,000
Area 13	10,000
Area 14	10,000
Area 15	10,000
Area 16	10,000
Area 17	10,000
Area 18	10,000
Area 19	10,000
Area 20	10,000
Area 21	10,000
Area 22	10,000
Area 23	10,000
Area 24	10,000
Area 25	10,000
Area 26	10,000
Area 27	10,000
Area 28	10,000
Area 29	10,000
Area 30	10,000
Area 31	10,000
Area 32	10,000
Area 33	10,000
Area 34	10,000
Area 35	10,000
Area 36	10,000
Area 37	10,000
Area 38	10,000
Area 39	10,000
Area 40	10,000
Area 41	10,000
Area 42	10,000
Area 43	10,000
Area 44	10,000
Area 45	10,000
Area 46	10,000
Area 47	10,000
Area 48	10,000
Area 49	10,000
Area 50	10,000
Area 51	10,000
Area 52	10,000
Area 53	10,000
Area 54	10,000
Area 55	10,000
Area 56	10,000
Area 57	10,000
Area 58	10,000
Area 59	10,000
Area 60	10,000
Area 61	10,000
Area 62	10,000
Area 63	10,000
Area 64	10,000
Area 65	10,000
Area 66	10,000
Area 67	10,000
Area 68	10,000
Area 69	10,000
Area 70	10,000
Area 71	10,000
Area 72	10,000
Area 73	10,000
Area 74	10,000
Area 75	10,000
Area 76	10,000
Area 77	10,000
Area 78	10,000
Area 79	10,000
Area 80	10,000
Area 81	10,000
Area 82	10,000
Area 83	10,000
Area 84	10,000
Area 85	10,000
Area 86	10,000
Area 87	10,000
Area 88	10,000
Area 89	10,000
Area 90	10,000
Area 91	10,000
Area 92	10,000
Area 93	10,000
Area 94	10,000
Area 95	10,000
Area 96	10,000
Area 97	10,000
Area 98	10,000
Area 99	10,000
Area 100	10,000

PROPOSED UNIT MIXTURE

100% Single-Family Detached
 100% Single-Family Attached
 100% Multi-Family Detached
 100% Multi-Family Attached

MOWRY SCHOOL ROAD



CEDAR BOULEVARD

NEWARK - ATRIUM SITE
 Newark, CA



OVERALL ARCHITECTURAL SITE PLAN (FOR PRELIMINARY PLAN REVIEW)

A0



Project Site Plan



omni-means

figure 6

INTERNAL CIRCULATION

From the project's main access driveway off Mowry School Road, motorists would turn west into the site's main driveway. After traveling a short distance (30 feet), motorists would turn either north or south to access the site's residential units and internal drive aisles. There would be two main north-south drive aisles that would connect in a loop fashion with east-west internal drive aisles. There would also be two additional east-west "alleys" between the residential buildings connecting the north-south drive aisles. With the exception of the east-west drive aisles on either end of project site, all drive aisles would be 20-feet in travel width. None of the internal project study intersections are controlled by yield or stop-signs.

With regard to vehicle access and site circulation, the following measures are recommended to improve vehicle circulation and safety:

- Install stop-sign control for southbound traffic exiting the existing driveway at Mowry School Road. Re-stripe the outbound travel lane for one (1) shared left-through lane and one (1) right-turn lane. (If possible, install stop-sign for northbound traffic at existing Balentine Plaza Center driveway directly opposite project driveway). Install painted directional flow arrows on the Mowry School Road driveway indicating north and south traffic flows;
- Trim hedge/foliage on raised median dividing the Mowry School Road driveway to improve vehicle sight distance;
- At the internal median break on the Mowry School Road main driveway, install stop-sign controls for both the new eastbound (outbound) movement from the proposed project driveway and existing westbound movement from current office parking lot. In addition, the project driveway connecting to the mid-block driveway (from Mowry School Road) should be re-aligned to the existing median break to prevent inbound left-turn conflicts. Multi-Way-Stop- Control (MWSC) should be installed where the east-west project driveway intersects the project's internal north-south drive aisle;
- Install stop-sign control for all internal east-west drive aisles to aid vehicle sight distance and avoid R-O-W conflicts with north-south internal traffic;
- Limit vehicle access at the proposed secondary project driveway at Mowry School Road (35-40 feet east of Cedar Boulevard) to emergency vehicles only inbound/outbound to prevent left-turn conflicts on Mowry School Road.

PARKING

The proposed project's parking supply would be provided by both on-site surface (guest) parking and residential garage parking (for each unit). Perpendicular surface parking would be provided at both the north and south sides of the project site along the 24-foot east-west drive aisles. Parallel parking would also be located along the north-south drive aisle (east side) adjacent to residential buildings.

A total of 182 off-street parking spaces would be supplied that includes 148 garage spaces and 34 uncovered surface spaces. Of the 34 uncovered surface spaces, two (2) would be handicapped accessible.

Based on the City of Newark's municipal code parking requirements, multi-family residential developments with two or more bedrooms (consistent with proposed project) require two (2) parking spaces per unit. Multi-family developments containing more than 10 dwelling units shall provide at least one covered space for each dwelling unit. The number of guest spaces in the development shall be one (1) space plus twenty percent of

the total number of units in the development.¹¹ Using these City code requirements, the proposed project's parking requirements have been calculated below:

85 dwelling units x 2 spaces/unit	= 170 spaces
85 dwelling units x 20% (+ 1 space)	= <u>18 spaces</u>
Total Required Parking:	= 188 spaces

Based on an overall supply of 182 parking spaces, there would be a deficit of six (6) parking spaces based on City code requirements. Given adjacent existing on-street parking (20-24 parallel spaces) along Cedar Boulevard (west project site frontage), a six space parking deficit would not be considered significant in nature.

CUMULATIVE (YEAR 2035) TRAFFIC CONDITIONS

METHODOLOGY

Cumulative Year 2035 (no project) traffic conditions have been evaluated based on the following source:¹²

- Year 2035 AM and PM peak hour study intersection volumes supplied by recent City of Newark General Plan Tune Up EIR.

Cumulative year 2035 (no project) volumes for the study area were taken directly from the transportation and traffic section performed for the City of Newark General Plan Tune Up EIR.¹³ As noted in the near-term (no project) section, future volume projections were based on City of Newark buildout projections associated with residents, housing units, and jobs. The Alameda County Transportation Commission (ACTC) transportation model was then updated to reflect these buildout projections from the City of Newark for the 2035 horizon year.

Since cumulative year 2035 (no project) volumes contain land uses on the project site consistent with current zoning (neighborhood retail-commercial), proposed residential project trips would likely be less than the maximum development potential of the site and assumed in the City's General Plan buildout projections. Therefore, proposed project trips were subtracted from Year 2035 volume projections to produce cumulative year 2035 (no project) volumes.

AM and PM peak hour cumulative year 2035 (no project) intersection volumes are shown in Figure 7.

CUMULATIVE YEAR 2035 (NO PROJECT) CIRCULATION IMPROVEMENTS

The transportation analysis conducted for the City of Newark General Plan Tune Up EIR assumed the transportation network for Year 2035 would be same as described under Existing Conditions.

CUMULATIVE YEAR 2035 (NO PROJECT) CONDITIONS

With Year 2035 cumulative (no project) traffic volumes, four of the eight project study intersections would be operating at LOS D during either the AM or PM peak hour. These would include the following:

¹¹ City of Newark, Code of Ordinances, Supplemental History Table, Title 17, Zoning, Chapter 17.60—Off-Street Parking and Loading, Article II, Off-Street Parking, Specific requirements, Multi-family dwellings, 2014.

¹² Planning Center / DC&E, General Plan Tune UP EIR, Chapter 4, Transportation and Traffic, City of Newark, 2013

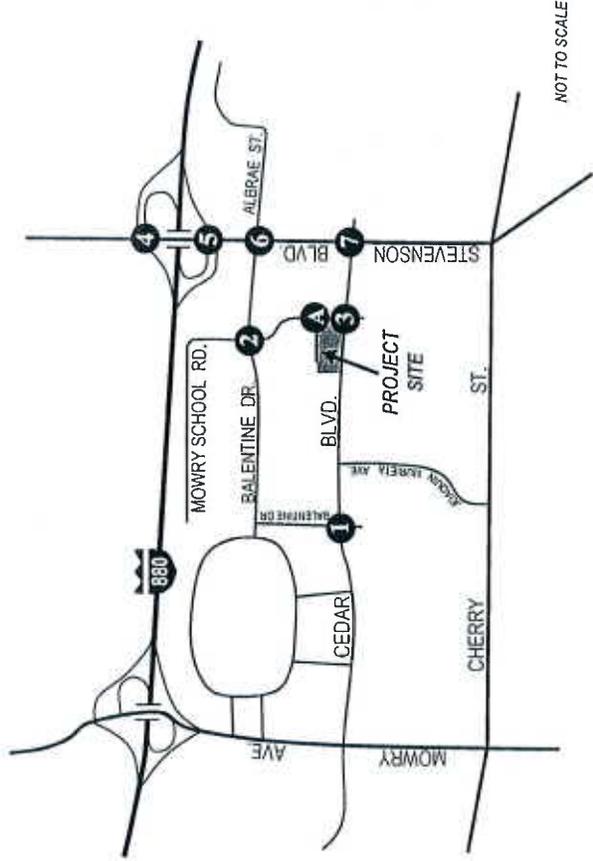
¹³ Planning Center / DC&E, General Plan Tune UP EIR, Chapter 4, Transportation and Traffic, City of Newark, 2013

1	<table border="0"> <tr> <td>←</td><td>17</td><td>(70)</td> <td>→</td><td>117</td><td>(28)</td> </tr> <tr> <td>←</td><td>159</td><td>(1347)</td> <td>→</td><td>187</td><td>(42)</td> </tr> <tr> <td>←</td><td>10</td><td>(16)</td> <td>→</td><td>1307</td><td>(401)</td> </tr> <tr> <td>←</td><td>16</td><td>(52)</td> <td>→</td><td>10</td><td>(0)</td> </tr> </table>	←	17	(70)	→	117	(28)	←	159	(1347)	→	187	(42)	←	10	(16)	→	1307	(401)	←	16	(52)	→	10	(0)
←	17	(70)	→	117	(28)																				
←	159	(1347)	→	187	(42)																				
←	10	(16)	→	1307	(401)																				
←	16	(52)	→	10	(0)																				

2	<table border="0"> <tr> <td>←</td><td>15</td><td>(20)</td> <td>→</td><td>12</td><td>(16)</td> </tr> <tr> <td>←</td><td>217</td><td>(383)</td> <td>→</td><td>147</td><td>(332)</td> </tr> <tr> <td>←</td><td>15</td><td>(40)</td> <td>→</td><td>5</td><td>(16)</td> </tr> <tr> <td>←</td><td>3</td><td>(3)</td> <td>→</td><td>147</td><td>(332)</td> </tr> </table>	←	15	(20)	→	12	(16)	←	217	(383)	→	147	(332)	←	15	(40)	→	5	(16)	←	3	(3)	→	147	(332)
←	15	(20)	→	12	(16)																				
←	217	(383)	→	147	(332)																				
←	15	(40)	→	5	(16)																				
←	3	(3)	→	147	(332)																				

A: Project Access	<table border="0"> <tr> <td>←</td><td>1</td><td>(3)</td> <td>→</td><td>3</td><td>(1)</td> </tr> <tr> <td>←</td><td>3</td><td>(1)</td> <td>→</td><td>2</td><td>(10)</td> </tr> <tr> <td>←</td><td>0</td><td>(13)</td> <td>→</td><td>0</td><td>(2)</td> </tr> <tr> <td>←</td><td>0</td><td>(2)</td> <td>→</td><td>1</td><td>(11)</td> </tr> </table>	←	1	(3)	→	3	(1)	←	3	(1)	→	2	(10)	←	0	(13)	→	0	(2)	←	0	(2)	→	1	(11)
←	1	(3)	→	3	(1)																				
←	3	(1)	→	2	(10)																				
←	0	(13)	→	0	(2)																				
←	0	(2)	→	1	(11)																				

3	<table border="0"> <tr> <td>←</td><td>19</td><td>(20)</td> <td>→</td><td>17</td><td>(10)</td> </tr> <tr> <td>←</td><td>177</td><td>(1428)</td> <td>→</td><td>45</td><td>(42)</td> </tr> <tr> <td>←</td><td>5</td><td>(10)</td> <td>→</td><td>1490</td><td>(390)</td> </tr> <tr> <td>←</td><td>23</td><td>(71)</td> <td>→</td><td>17</td><td>(25)</td> </tr> </table>	←	19	(20)	→	17	(10)	←	177	(1428)	→	45	(42)	←	5	(10)	→	1490	(390)	←	23	(71)	→	17	(25)
←	19	(20)	→	17	(10)																				
←	177	(1428)	→	45	(42)																				
←	5	(10)	→	1490	(390)																				
←	23	(71)	→	17	(25)																				



4	<table border="0"> <tr> <td>←</td><td>395</td><td>(486)</td> <td>→</td><td>1057</td><td>(2714)</td> </tr> <tr> <td>←</td><td>327</td><td>(627)</td> <td>→</td><td>1100</td><td>(927)</td> </tr> <tr> <td>←</td><td>503</td><td>(254)</td> <td>→</td><td>435</td><td>(413)</td> </tr> <tr> <td>←</td><td>1212</td><td>(1413)</td> <td>→</td><td>490</td><td>(864)</td> </tr> </table>	←	395	(486)	→	1057	(2714)	←	327	(627)	→	1100	(927)	←	503	(254)	→	435	(413)	←	1212	(1413)	→	490	(864)
←	395	(486)	→	1057	(2714)																				
←	327	(627)	→	1100	(927)																				
←	503	(254)	→	435	(413)																				
←	1212	(1413)	→	490	(864)																				

5	<table border="0"> <tr> <td>←</td><td>1689</td><td>(530)</td> <td>→</td><td>492</td><td>(502)</td> </tr> <tr> <td>←</td><td>485</td><td>(446)</td> <td>→</td><td>492</td><td>(502)</td> </tr> </table>	←	1689	(530)	→	492	(502)	←	485	(446)	→	492	(502)
←	1689	(530)	→	492	(502)								
←	485	(446)	→	492	(502)								

6	<table border="0"> <tr> <td>←</td><td>70</td><td>(457)</td> <td>→</td><td>25</td><td>(47)</td> </tr> <tr> <td>←</td><td>28</td><td>(160)</td> <td>→</td><td>808</td><td>(1297)</td> </tr> <tr> <td>←</td><td>21</td><td>(381)</td> <td>→</td><td>154</td><td>(597)</td> </tr> <tr> <td>←</td><td>666</td><td>(333)</td> <td>→</td><td>63</td><td>(73)</td> </tr> <tr> <td>←</td><td>249</td><td>(312)</td> <td>→</td><td>41</td><td>(22)</td> </tr> </table>	←	70	(457)	→	25	(47)	←	28	(160)	→	808	(1297)	←	21	(381)	→	154	(597)	←	666	(333)	→	63	(73)	←	249	(312)	→	41	(22)
←	70	(457)	→	25	(47)																										
←	28	(160)	→	808	(1297)																										
←	21	(381)	→	154	(597)																										
←	666	(333)	→	63	(73)																										
←	249	(312)	→	41	(22)																										

7	<table border="0"> <tr> <td>←</td><td>1</td><td>(13)</td> <td>→</td><td>69</td><td>(207)</td> </tr> <tr> <td>←</td><td>5</td><td>(216)</td> <td>→</td><td>304</td><td>(1309)</td> </tr> <tr> <td>←</td><td>11</td><td>(0)</td> <td>→</td><td>36</td><td>(3)</td> </tr> <tr> <td>←</td><td>90</td><td>(153)</td> <td>→</td><td>173</td><td>(114)</td> </tr> <tr> <td>←</td><td>952</td><td>(868)</td> <td>→</td><td>1046</td><td>(273)</td> </tr> <tr> <td>←</td><td>111</td><td>(913)</td> <td>→</td><td>36</td><td>(3)</td> </tr> </table>	←	1	(13)	→	69	(207)	←	5	(216)	→	304	(1309)	←	11	(0)	→	36	(3)	←	90	(153)	→	173	(114)	←	952	(868)	→	1046	(273)	←	111	(913)	→	36	(3)
←	1	(13)	→	69	(207)																																
←	5	(216)	→	304	(1309)																																
←	11	(0)	→	36	(3)																																
←	90	(153)	→	173	(114)																																
←	952	(868)	→	1046	(273)																																
←	111	(913)	→	36	(3)																																



Cumulative Year 2035 Without Project A.M. and (P.M.) Peak Hour Volumes



figure 7

**TABLE 6
CUMULATIVE YEAR 2035 (NO PROJECT) AND PLUS PROJECT CONDITIONS:
INTERSECTION LEVELS-OF-SERVICE
WEEKDAY AM AND PM PEAK HOUR**

#	Intersection	Control Type	Wkdy. AM LOS/Delay		Wkdy. PM LOS/Delay	
			Year 2035 (No Project)	Year 2035 Plus Project	Year 2035 (No Project)	Year 2035 Plus Project
1	Cedar Boulevard/Balentine Drive	Signal	D 37.1	D 37.4	C 26.7	C 26.9
2	Mowry School Road/Balentine Drive	Signal	A 9.4	B 12.1	B 11.4	B 12.3
3	Mowry School Road/Cedar Boulevard	Signal	A 8.1	A 8.5	A 9.6	B 10.1
4	Stevenson Blvd/I-880 NB Off-Ramp	Signal	C 20.2	C 20.3	D 37.5	D 37.7
5	Stevenson Blvd/I-880 SB Off-Ramp	Signal	B 14.9	B 14.9	B 14.2	B 14.2
6	Stevenson Blvd/Albrae St.-Balentine Dr.	Signal	C 28.8	C 28.9	D 48.5	D 48.6
7	Stevenson Boulevard/Cedar Boulevard	Signal	D 50.5	D 50.8	D 36.7	D 36.9
8	Mowry School Rd/Office-Project Access	TWSC	A 9.1	A 9.3	A 9.2	A 9.6

Based on Highway Capacity Manual (HCM) 2000, Operations methodology for stop-sign controlled (non-signalized) intersections using Synchro-Simtraffic software. Intersection calculation yields an LOS and vehicle delay in seconds. Stated LOS refers to the minor street (stop-sign) controlled movement.

- Cedar Boulevard/Balentine Drive
- Stevenson Boulevard/I-880 Northbound Off-Ramp
- Stevenson Boulevard/Albrae Street-Balentine Drive
- Stevenson Boulevard/Cedar Boulevard

The study intersections listed above would experience significant increases in through-traffic on Cedar Boulevard and Stevenson Boulevard as a result of cumulative buildout related to the City's General Plan. However, all project study intersections would continue to operate within the City's acceptable threshold limits of LOS D or better during the AM and PM peak hour.

CUMULATIVE YEAR 2035 (NO PROJECT) SIGNAL WARRANTS

The non-signalized Mowry School Road/Office-Project Driveway Access intersection was analyzed for peak hour signal warrant satisfaction (MUTCD warrant #3) with cumulative year 2035 (no project) volumes. The intersection would not qualify for signalization based on minimum peak hour volume criteria #3.

CUMULATIVE YEAR 2035 PLUS PROJECT CONDITIONS

Figure 8 shows proposed project trips added to cumulative year 2035 (no project) volumes. With proposed project volumes, cumulative year 2035 intersection LOS would change from LOS A to LOS B at the adjacent project study intersections of Mowry School Road/Balentine Drive (AM peak hour) and Mowry School Road/Cedar Boulevard (PM peak hour). As shown in Table 6, all remaining project study intersections would continue to operate at LOS D or better during the AM and PM peak hours.

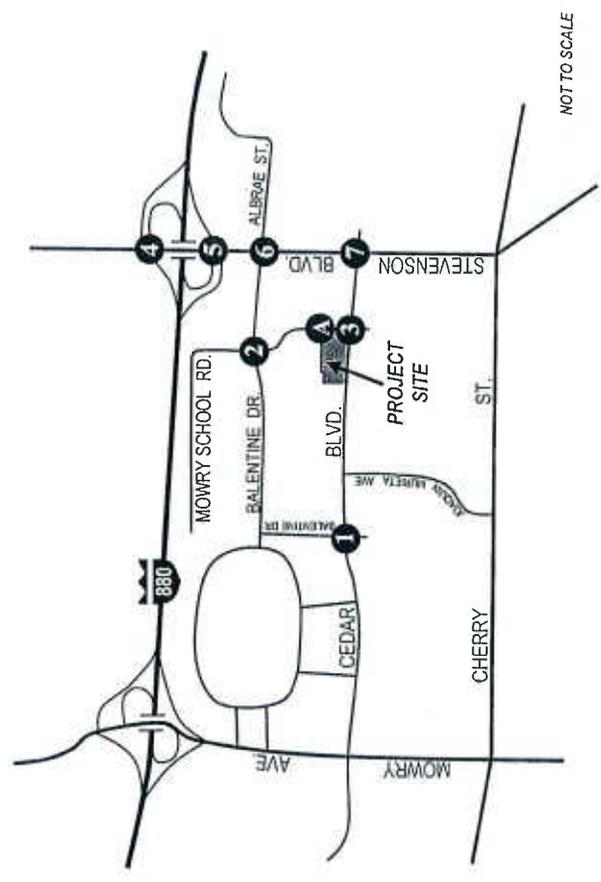


Cumulative Year 2035 + Project A.M. and (P.M.) Peak Hour Volumes



figure 8

1	<table border="1"> <tr> <td>← 19 (71)</td> <td>← 162 (1354)</td> <td>← 146 (14)</td> <td>← 117 (28)</td> <td>← 98 (4)</td> <td>← 95 (0)</td> </tr> <tr> <td>→ 16 (52)</td> <td>→ 17 (2)</td> <td>→ 146 (14)</td> <td>→ 10 (5)</td> <td>→ 117 (28)</td> <td>→ 98 (4)</td> </tr> <tr> <td>(42)</td> <td>187</td> <td>1311</td> <td>10</td> <td>98</td> <td>95</td> </tr> <tr> <td>(0)</td> <td>(0)</td> <td>(0)</td> <td>(0)</td> <td>(0)</td> <td>(0)</td> </tr> </table>	← 19 (71)	← 162 (1354)	← 146 (14)	← 117 (28)	← 98 (4)	← 95 (0)	→ 16 (52)	→ 17 (2)	→ 146 (14)	→ 10 (5)	→ 117 (28)	→ 98 (4)	(42)	187	1311	10	98	95	(0)	(0)	(0)	(0)	(0)	(0)	4	<table border="1"> <tr> <td>← 395 (486)</td> <td>← 328 (630)</td> <td>← 1063 (2716)</td> <td>← 254 (603)</td> <td>← 910 (497)</td> <td>← 1101 (932)</td> </tr> </table>	← 395 (486)	← 328 (630)	← 1063 (2716)	← 254 (603)	← 910 (497)	← 1101 (932)												
← 19 (71)	← 162 (1354)	← 146 (14)	← 117 (28)	← 98 (4)	← 95 (0)																																								
→ 16 (52)	→ 17 (2)	→ 146 (14)	→ 10 (5)	→ 117 (28)	→ 98 (4)																																								
(42)	187	1311	10	98	95																																								
(0)	(0)	(0)	(0)	(0)	(0)																																								
← 395 (486)	← 328 (630)	← 1063 (2716)	← 254 (603)	← 910 (497)	← 1101 (932)																																								
2	<table border="1"> <tr> <td>← 15 (20)</td> <td>← 217 (383)</td> <td>← 16 (31)</td> <td>← 34 (49)</td> <td>← 7 (5)</td> <td>← 34 (49)</td> </tr> <tr> <td>→ 15 (40)</td> <td>→ 15 (40)</td> <td>→ 16 (31)</td> <td>→ 34 (49)</td> <td>→ 7 (5)</td> <td>→ 34 (49)</td> </tr> <tr> <td>(3)</td> <td>3</td> <td>147</td> <td>5</td> <td>16</td> <td>16</td> </tr> <tr> <td>(332)</td> <td>(16)</td> <td>(16)</td> <td>(16)</td> <td>(16)</td> <td>(16)</td> </tr> </table>	← 15 (20)	← 217 (383)	← 16 (31)	← 34 (49)	← 7 (5)	← 34 (49)	→ 15 (40)	→ 15 (40)	→ 16 (31)	→ 34 (49)	→ 7 (5)	→ 34 (49)	(3)	3	147	5	16	16	(332)	(16)	(16)	(16)	(16)	(16)	5	<table border="1"> <tr> <td>← 1214 (1423)</td> <td>← 435 (413)</td> <td>← 490 (864)</td> <td>← 494 (507)</td> <td>← 541 (1694)</td> <td>← 446 (485)</td> </tr> </table>	← 1214 (1423)	← 435 (413)	← 490 (864)	← 494 (507)	← 541 (1694)	← 446 (485)												
← 15 (20)	← 217 (383)	← 16 (31)	← 34 (49)	← 7 (5)	← 34 (49)																																								
→ 15 (40)	→ 15 (40)	→ 16 (31)	→ 34 (49)	→ 7 (5)	→ 34 (49)																																								
(3)	3	147	5	16	16																																								
(332)	(16)	(16)	(16)	(16)	(16)																																								
← 1214 (1423)	← 435 (413)	← 490 (864)	← 494 (507)	← 541 (1694)	← 446 (485)																																								
A: Project Access	<table border="1"> <tr> <td>← 1 (3)</td> <td>← 3 (1)</td> <td>← 2 (10)</td> <td>← 6 (16)</td> <td>← 0 (2)</td> <td>← 4 (14)</td> </tr> <tr> <td>→ 1 (6)</td> <td>→ 1 (40)</td> <td>→ 2 (10)</td> <td>→ 6 (16)</td> <td>→ 0 (2)</td> <td>→ 4 (14)</td> </tr> <tr> <td>(7)</td> <td>(13)</td> <td>(10)</td> <td>(16)</td> <td>(2)</td> <td>(14)</td> </tr> </table>	← 1 (3)	← 3 (1)	← 2 (10)	← 6 (16)	← 0 (2)	← 4 (14)	→ 1 (6)	→ 1 (40)	→ 2 (10)	→ 6 (16)	→ 0 (2)	→ 4 (14)	(7)	(13)	(10)	(16)	(2)	(14)	6	<table border="1"> <tr> <td>← 70 (457)</td> <td>← 28 (160)</td> <td>← 21 (381)</td> <td>← 25 (47)</td> <td>← 813 (1299)</td> <td>← 380 (96)</td> </tr> <tr> <td>→ 666 (333)</td> <td>→ 971 (1522)</td> <td>→ 253 (327)</td> <td>→ 165 (603)</td> <td>→ 63 (73)</td> <td>→ 41 (22)</td> </tr> <tr> <td>(333)</td> <td>(1522)</td> <td>(327)</td> <td>(603)</td> <td>(73)</td> <td>(22)</td> </tr> </table>	← 70 (457)	← 28 (160)	← 21 (381)	← 25 (47)	← 813 (1299)	← 380 (96)	→ 666 (333)	→ 971 (1522)	→ 253 (327)	→ 165 (603)	→ 63 (73)	→ 41 (22)	(333)	(1522)	(327)	(603)	(73)	(22)						
← 1 (3)	← 3 (1)	← 2 (10)	← 6 (16)	← 0 (2)	← 4 (14)																																								
→ 1 (6)	→ 1 (40)	→ 2 (10)	→ 6 (16)	→ 0 (2)	→ 4 (14)																																								
(7)	(13)	(10)	(16)	(2)	(14)																																								
← 70 (457)	← 28 (160)	← 21 (381)	← 25 (47)	← 813 (1299)	← 380 (96)																																								
→ 666 (333)	→ 971 (1522)	→ 253 (327)	→ 165 (603)	→ 63 (73)	→ 41 (22)																																								
(333)	(1522)	(327)	(603)	(73)	(22)																																								
3	<table border="1"> <tr> <td>← 20 (24)</td> <td>← 177 (1428)</td> <td>← 23 (71)</td> <td>← 17 (10)</td> <td>← 32 (4)</td> <td>← 17 (10)</td> </tr> <tr> <td>→ 13 (7)</td> <td>→ 13 (7)</td> <td>→ 23 (71)</td> <td>→ 17 (10)</td> <td>→ 32 (4)</td> <td>→ 17 (10)</td> </tr> <tr> <td>(58)</td> <td>49</td> <td>1490</td> <td>17</td> <td>32</td> <td>17</td> </tr> <tr> <td>(390)</td> <td>(25)</td> <td>(25)</td> <td>(25)</td> <td>(390)</td> <td>(25)</td> </tr> </table>	← 20 (24)	← 177 (1428)	← 23 (71)	← 17 (10)	← 32 (4)	← 17 (10)	→ 13 (7)	→ 13 (7)	→ 23 (71)	→ 17 (10)	→ 32 (4)	→ 17 (10)	(58)	49	1490	17	32	17	(390)	(25)	(25)	(25)	(390)	(25)	7	<table border="1"> <tr> <td>← 1 (13)</td> <td>← 5 (216)</td> <td>← 11 (0)</td> <td>← 3 (20)</td> <td>← 304 (1309)</td> <td>← 70 (211)</td> </tr> <tr> <td>→ 90 (153)</td> <td>→ 952 (868)</td> <td>→ 111 (913)</td> <td>→ 1051 (275)</td> <td>→ 36 (3)</td> <td>→ 176 (116)</td> </tr> <tr> <td>(153)</td> <td>(868)</td> <td>(913)</td> <td>(275)</td> <td>(3)</td> <td>(116)</td> </tr> </table>	← 1 (13)	← 5 (216)	← 11 (0)	← 3 (20)	← 304 (1309)	← 70 (211)	→ 90 (153)	→ 952 (868)	→ 111 (913)	→ 1051 (275)	→ 36 (3)	→ 176 (116)	(153)	(868)	(913)	(275)	(3)	(116)
← 20 (24)	← 177 (1428)	← 23 (71)	← 17 (10)	← 32 (4)	← 17 (10)																																								
→ 13 (7)	→ 13 (7)	→ 23 (71)	→ 17 (10)	→ 32 (4)	→ 17 (10)																																								
(58)	49	1490	17	32	17																																								
(390)	(25)	(25)	(25)	(390)	(25)																																								
← 1 (13)	← 5 (216)	← 11 (0)	← 3 (20)	← 304 (1309)	← 70 (211)																																								
→ 90 (153)	→ 952 (868)	→ 111 (913)	→ 1051 (275)	→ 36 (3)	→ 176 (116)																																								
(153)	(868)	(913)	(275)	(3)	(116)																																								



NOT TO SCALE

CUMULATIVE YEAR 2035 PLUS PROJECT SIGNAL WARRANTS

With proposed project traffic, the non-signalized Mowry School Road/Office-Project Driveway Access intersection was analyzed for peak hour signal warrant satisfaction (MUTCD warrant #3) with cumulative year 2035 (no project) volumes. The intersection would not qualify for signalization based on minimum peak hour volume criteria #3. Minor street driveway volumes (and mainline volumes) would be well below the minimum volumes thresholds for signalization.