

- E.4 Hearing to consider the development of 15 single family lots with construction of a detached dwelling on each lot (Mission Peak Homes) at 38517 Birch Street, on the west side of Birch Street north of Moores Avenue (APN: 092A-2356-037). A private road would provide access to each lot. The existing church complex would be demolished: (1) Adopting a resolution making certain findings and approving E-13-30, an Initial Study/Mitigated Negative Declaration; (2) adopting a resolution making findings supporting the use of an alternative means of compliance with the Inclusionary Housing Ordinance; approving the Affordable Housing Implementation Agreement for the Birch Street project and authorizing the Mayor to sign the Affordable Housing Implementation Agreement; (3) By motion, approving P-13-29, a planned unit development, and U-13-28, a conditional use permit, and (4) adopting a resolution approving TTM-13-27, Tentative Tract Map 8165.– from Assistant City Manager Grindall
(RESOLUTIONS-3)(MOTION)**

Background/Discussion – Mission Peak Homes has submitted an application for the development of 15 single-family detached homes at 38517 Birch Street. Attached is Exhibit A, pages 1-24.

Project Description

The 1.82 acre site is currently developed with the Bay Area Baptist Church. The proposed project would require the demolition of the church buildings. The project site and its surrounding neighborhood have an R-7,000 (minimum lot size 7,000 square feet) zoning designation. The applicant's proposal to create 4,022 square-foot lots (average) would, therefore, require approval of a planned unit development and conditional use permit. The homes would range in size between approximately 1,900 and 2,500 square feet.

Vehicle access to the project site would be through a private court that would terminate in a cul-de-sac. Although the court is a private street, it has been designed to be consistent with City street standards. The court would be accessible to the public and would be maintained by the project's homeowners' association. Resident parking would be provided by a two-car attached garage at each home. A driveway apron would also be provided in front of each garage to provide two additional parking spaces for each dwelling. In addition, four uncovered parking spaces would be provided at the terminus of the cul-de-sac.

Architectural and Site Plan Review

Three floor plan types and two architectural styles are proposed for the dwellings, including two plan variations with enhancements and larger wrap porches for the homes closest to Birch Street. The two styles are "A" Craftsman and "B" Americana. The "A" Craftsman style offers classic Craftsman details such as corbels at gabled roofs and cantilevered areas, decorative columns at porches, and stylized window treatments with trim and window grids. The "B" Americana style offers hipped roofs, accent siding at roof gables, decorative columns at porches, and stylized window treatments with trim, window grids and shutters. The colors are rich and earthy and offer variety with two schemes between the three plans.

Neighborhood Meetings

The applicant held two well attended neighborhood meetings. Notification of the meetings was sent to all property owners with a 500-foot radius of the project site. Staff attended both of the neighborhood meetings. The first meeting, held on September 4, 2013, involved the presentation of concept development plans in the applicant's effort to obtain ideas and feedback from the community. The applicant then held a second follow up meeting on January 14, 2014 with the presentation of detailed plans and exhibits closely resembling the attached final plans (Exhibit A).

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. A total of two 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 paying an in-lieu fee as the alternate method of compliance. Staff supports this proposal because the fees would provide an avenue for the City to compile funding for the acquisition of property that can be made available to low-income residents in Newark.

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. 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 28, 2014. Staff did not receive any letters from the public.

Update – At its meeting of May 13, 2014, the Newark Planning Commission approved Resolution 1874, making certain findings and recommending City Council approval of E-13-30, an Initial Study/Mitigated Negative Declaration; and approved Resolution 1875 recommending that the City Council approve an alternative means of compliance with the Inclusionary Housing Ordinance for the Birch Street Project and making findings supporting the use of an alternative means of compliance.

On May 13, 2014 the Newark Planning Commission also passed by Motion: P-13-29, a planned unit development, and U-13-28, a conditional use permit with Exhibit A, pages 1-24; and recommended the City Council approve TTM-13-27, Tentative Tract Map 8165.

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 Birch Street Residential Project;
- (2) Adopt a resolution approving an alternative means of compliance with the Inclusionary Housing Ordinance for the Birch Street Project; making findings supporting the use of an alternative means of compliance, and authorizing the Mayor to sign the Affordable Housing Implementation Agreement;
- (3) By motion, approve P-13-29, a planned unit development, and U-13-28, a conditional use permit, and
- (4) Adopt a resolution approving Tentative Tract Map 8165.

(1) Adopt a resolution making certain findings and adopting an Initial Study/Mitigated Negative Declaration for the Birch Street Residential Project;

RESOLUTION NO.

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
NEWARK MAKING CERTAIN FINDINGS AND ADOPTING
AN INITIAL STUDY AND MITIGATED NEGATIVE
DECLARATION FOR THE BIRCH STREET RESIDENTIAL
PROJECT

WHEREAS, the Birch Street Project (“Project”), consists of the construction of 15 single family dwelling units on approximately 1.82 acres (APN 092A-2356-37); and

WHEREAS, the entitlements requested include Tentative Tract Map 8165 (TTM-13-27), a planned unit development, and conditional use permit; 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, hazards and hazardous materials; 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 April 8, 2014 and ending on April 28, 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 April 8, 2014; and

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

WHEREAS, on May 13, 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 13, 2014 meeting related to the proposed Project.

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 8165 (TTM-13-27), and the associated planned development permit, 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 is located in the Community Development Department at City Hall for the City of Newark, 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

**Birch Street Residential Project
Mitigation Monitoring and Reporting Program**

May 2014

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Monitoring Schedule	Verification
<p>Mitigation Measure AES-1. Street lights along Court A included project subdivision improvement plans shall be equipped with cut-off lenses to ensure that no light spills over onto project houses or onto adjacent streets or properties. Light levels shall meet the minimum illumination level required by the Newark Police Department.</p>	<p>Project Developer</p>	<p>Newark Planning Division and Police Department</p>	<p>Prior to issuance of a building permit</p>	
<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 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 	<p>Project Developer</p>	<p>Newark City Engineer or Building Official</p>	<p>During project construction</p>	

<p>public streets. e) Watering or covering of stockpiles of construction debris, soil, sand or other materials that can be blown by the wind..</p>	<p>Project Developer</p>	<p>Newark Planning Division</p>	<p>Prior to approval of the first building permit</p>	
<p>Mitigation Measure BIO-1. The following elements shall be included in the project landscape plan: a) Existing trees shall be retained to the extent feasible and protected during construction as outlined in the HortScience arborist report dated January 2014. b) Replacement trees shall be planted within the site at a ratio of 1 tree planted for each tree to be removed. Proposed trees shall be native drought trees to the fullest extent feasible.</p>	<p>Project Developer</p>	<p>Newark Planning Division</p>	<p>Prior to issuance of a grading permit</p>	
<p>Mitigation Measure HAZ-1. Prior to issuance of a demolition permit for the site, a licensed contractor shall determine the presence or absence of lead based paints or asbestos material on the site. If found in quantities at or above actionable levels as determined by the Alameda County Fire Department and Newark Building Department, these materials shall be safely removed consistent with OSHA and other applicable standards and disposed of in an appropriate location. Necessary permits and</p>	<p>Project Developer</p>	<p>Newark Planning Division</p>	<p>Prior to issuance of a grading permit</p>	

Mitigation Measure Implementing Responsibility Monitoring Responsibility Monitoring Schedule Verification

<p>approvals shall be secured from appropriate regulatory agencies.</p>	<p>Project Developer</p>	<p>Newark Building Division</p>	<p>During project construction</p>	
<p>Mitigation Measure NOISE-1. To reduce daytime noise impacts due to demolition and construction, the project developer shall implement the following measures:</p> <p>a) Equipment and trucks used for project demolition and 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).</p> <p>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</p>				

Mitigation Measure Implementing Responsibility Monitoring Responsibility Monitoring Schedule Verification

<p>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>				

Initial Study/ Mitigated Negative Declaration

Project:
Birch Street Residential Project

Lead Agency:
City of Newark

April 2014

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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

Mission Peak Homes, Inc.
47289 Mission Falls Court
Fremont CA 94539

Attn: John Wong
(510) 354 0888

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 Mowry Avenue. Specifically, the site is on the west side of Birch Street north of Moores Avenue. The site address is 38517 Birch Street. The Alameda County Assessors Parcel Number (APN) is 92A-2356-37.

Topographically, the site is flat with a gradual slope to the west, toward San Francisco Bay. The site contains approximately two acres of land and is developed with a church, associated church buildings, a paved parking lot and landscaping.

Surrounding land uses include a mix of detached and attached residential dwellings on all sides of the project site.

Exhibit 1 depicts the project site in relation to the City of Newark. **Exhibit 2** shows the project site in context of surrounding streets and other features.

Project Description

Overview. The proposed project would include demolition of the existing church buildings and associated improvements and construction of up to 15 detached two-story residences on the site. Related actions would include grading of the site to accommodate dwellings, construction of a main access roadway, extension of utilities to serve individual dwellings and landscaping of portions of the site. Implementation of the project would require rezoning of the site, a subdivision map to create individual lots and the roadway and Architectural and Site Plan review by the City of Newark. These features are described below.

Proposed Development Plan. Fifteen (15) individual detached single-family dwellings would be constructed on site, one dwelling on each proposed residential lot. **Exhibit 3** shows the proposed subdivision map. A non-residential parcel (Parcel "A") would be used for private roadway access into and out of the proposed subdivision. Each proposed lot would front on this private road (identified as "Court A" on the subdivision map).

Proposed lots would generally be rectangular in size and would range in size between 3,500 square feet (smallest) to 4,860 square feet (largest). Proposed dwellings would be of contemporary design to match adjacent neighborhoods and would have two stories. Dwellings would range in size between approximately 1,900 square feet 2,500 square feet. Each dwelling would have an attached two-car garage. **Exhibits 4a** through **4c** depict preliminary exterior dwelling elevations.

Circulation, Parking and Access. Vehicle access to the project site would be via proposed Court A from Birch Street that would terminate in a cul-de-sac. Driveways would each access Court A. Although a private street, Court A has been designed to be consistent with applicable City of Newark street standards. Court A would have no access restrictions for public uses but will be owned and maintained by the project homeowners' association.

Pedestrian access would be provided by sidewalks along both sides of Court A.

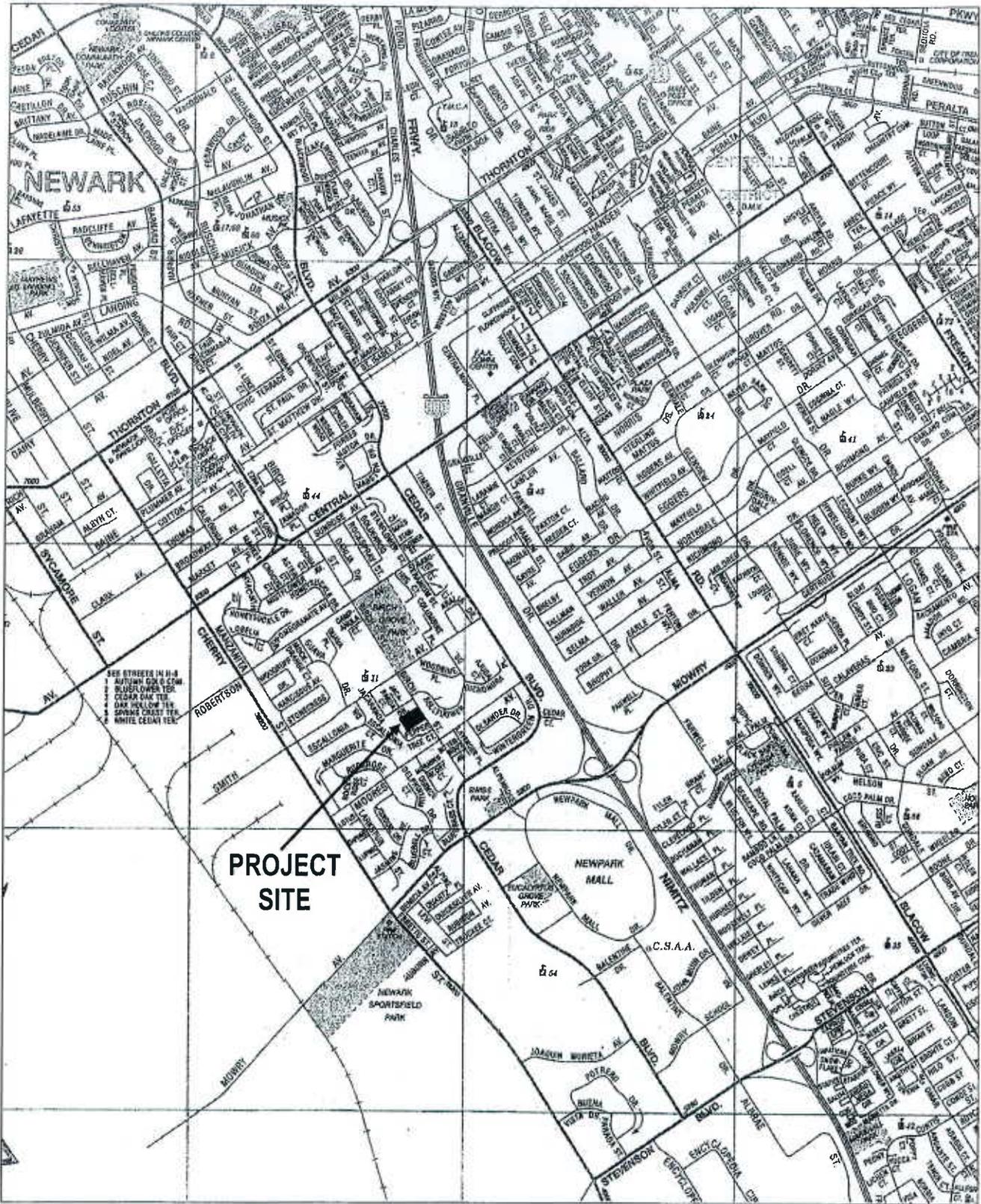
Parking would be provided by a two-car attached garage for each dwelling. Parking would also be available on two-car driveway aprons in front of each garage. Four parking spaces would be provided at the terminus of the Court A cul-de-sac as well as curbside on the private street.

Landscaping. The project entry at Birch Street and Court A would be landscaped with trees, shrubs and groundcover. Court A would narrow at the project entrance to provide larger spaces for entry plantings. This landscaping would be maintained by the project homeowners' association. **Exhibit 5** shows the preliminary landscape plan.

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, grassy swales and bio filters. Grading of the project site is proposed to improve site drainage and to allow construction of building pads, Court A and related improvements.

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

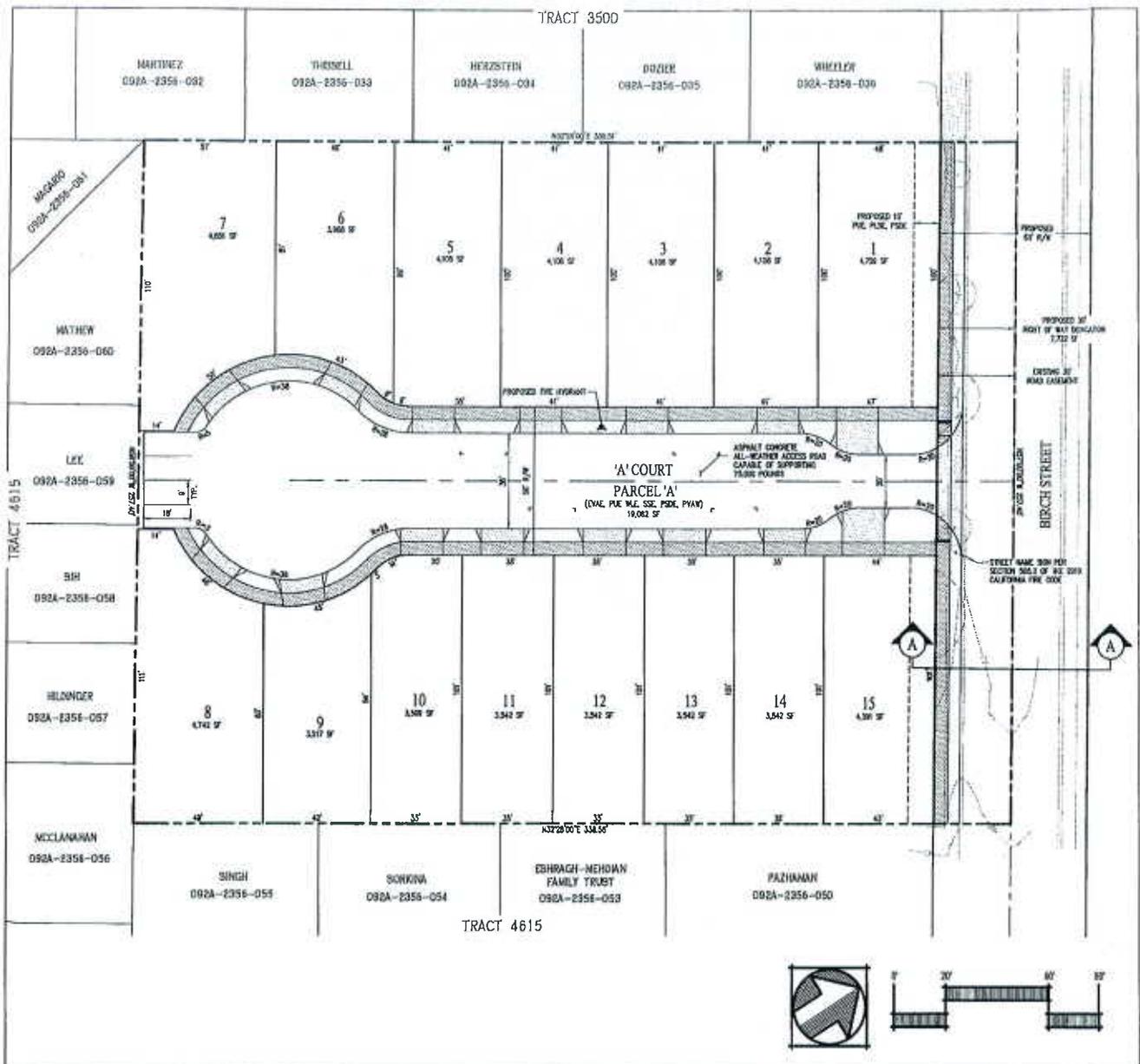
- *Planned Unit Development (PUD) & Conditional Use Permit (CUP).* These land uses will permit flexibility in lot sizes and dimensions.
- *Tentative and Final Subdivision Maps.* Tentative and Final subdivision maps will be required to create individual building lots.
- *Architectural & Site Plan Review.* 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.



SOURCE: Omni-Means.

**CITY OF NEWARK
 BIRCH STREET RESIDENTIAL PROJECT
 INITIAL STUDY**

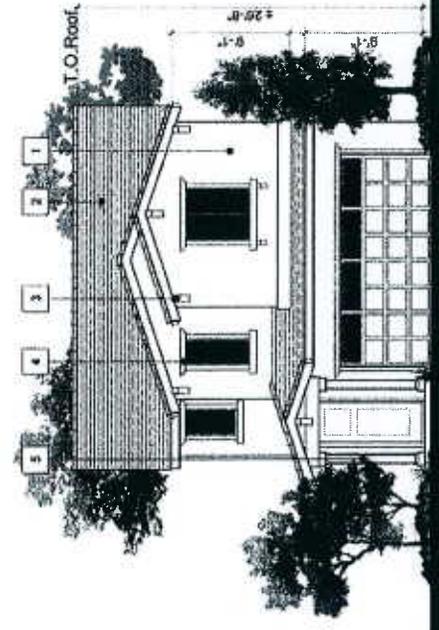
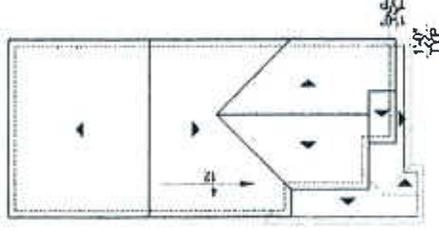
**Exhibit 2
 SITE CONTEXT**



SOURCE: cbg: Carlson, Barbee & Gibson, Inc., 21 February 2014.

CITY OF NEWARK
 BIRCH STREET RESIDENTIAL PROJECT
 INITIAL STUDY

Exhibit 3
 PROPOSED
 SUBDIVISION PLAN



- Material Legend**
1. Stucco with Screenshot
 2. Concrete Flat Roof tile
 3. Foam Corbels
 4. Foam Trim
 5. Wood Columns
 6. Decorative Shutters
 7. Fiber Cement Lap Siding

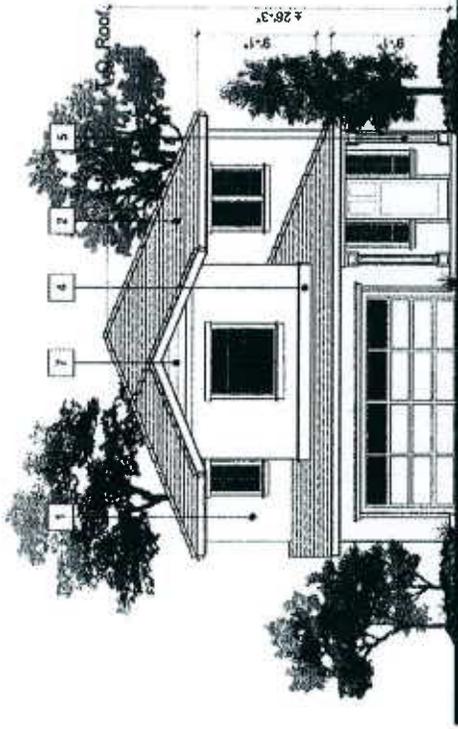


SOURCE: KTG Y Group, Inc., 4 January 2014.

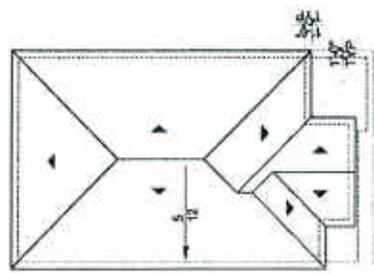
**CITY OF NEWARK
BIRCH STREET RESIDENTIAL PROJECT
INITIAL STUDY**

**Exhibit 4a
PLAN 1: 'A' EXTERIOR ELEVATIONS**

- Material Legend**
1. Stucco with Screed
 2. Concrete Flat Roof Tile
 3. Foam Corbels
 4. Foam Trim
 5. Wood Columns
 6. Decorative Shutters
 7. Fiber Cement Lap Siding



Front



Roof



Left

Rear

Right

SOURCE: KTGy Group, Inc., 4 January 2014.

Exhibit 4b
PLAN 2: 'B' EXTERIOR ELEVATIONS

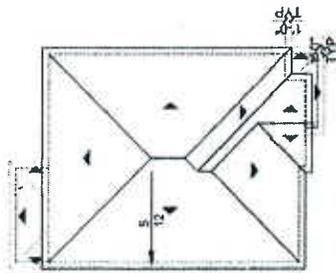
CITY OF NEWARK
BIRCH STREET RESIDENTIAL PROJECT
 INITIAL STUDY

Material Legend

1. Stucco with Screenshot
2. Concrete Flat Roof tile
3. Foam Corbels
4. Foam Trim
5. Wood Columns
6. Decorative Shutters
7. Fiber Cement Lap Siding



Front



Roof



Right

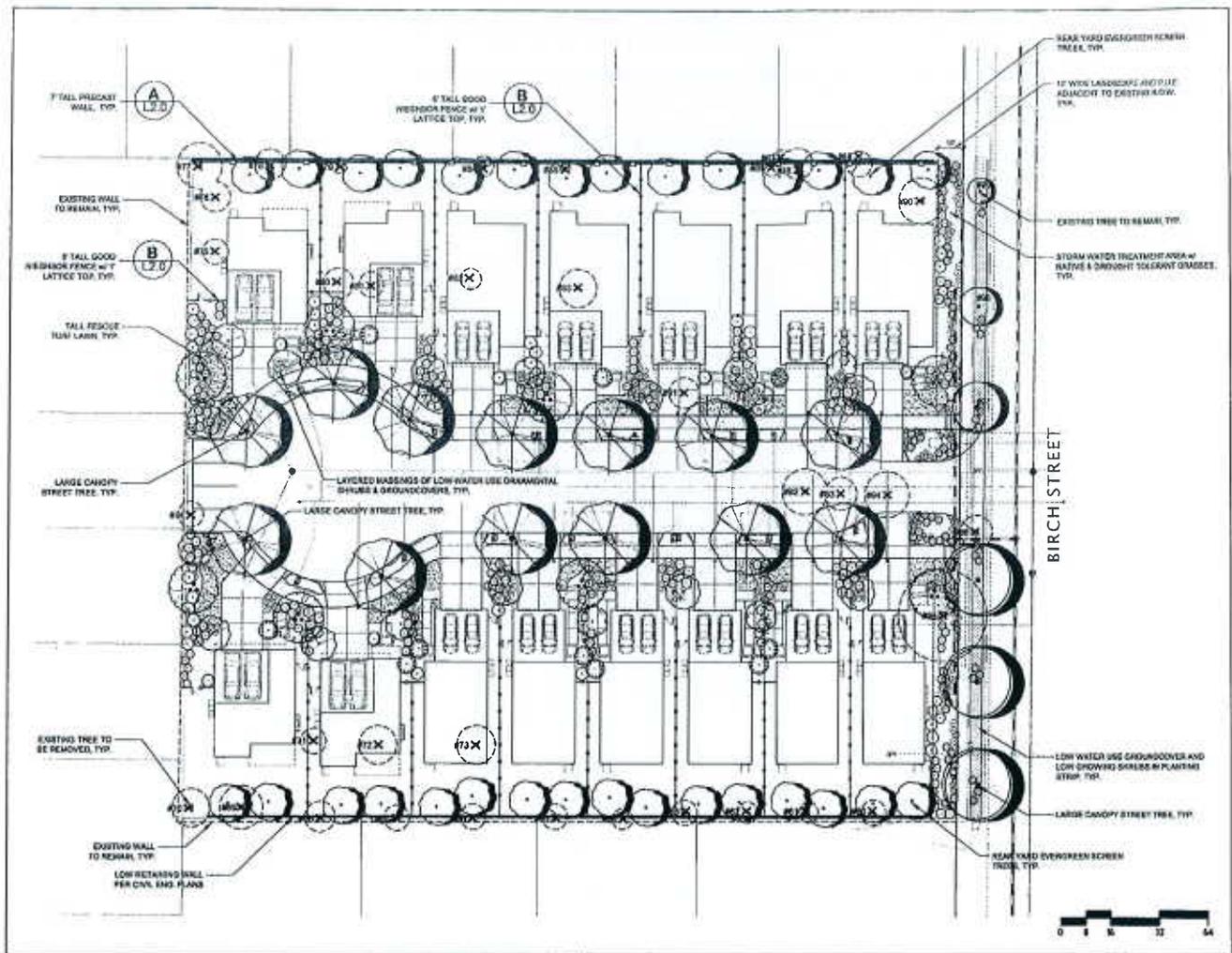
Rear

Left

SOURCE: KTG Group, Inc., 4 January 2014.

**CITY OF NEWARK
BIRCH STREET RESIDENTIAL PROJECT
INITIAL STUDY**

**Exhibit 4c
PLAN 3: 'B' EXTERIOR ELEVATIONS**



SOURCE: Van Dorn Abed Landscape Architects, Inc., 5 February 2014.

1. **Project description:** Consideration of a subdivision map to create up to 15 single family lots and construction of a detached dwelling on each lot. A private road would provide access to each lot. The existing church complex would be demolished. Requested City approvals include Planned Unit Development (PUD) and a Conditional Use Permit (CUP), a tentative and final subdivision map and Architectural and Site Plan Review (ASR).
2. **Lead agency:** City of Newark
3. **Contact person:** Yesenia Jimenez, Community Development Department
4. **Project location:** West side of Birch Street north of Moores Avenue, 38517 Birch Street (APN 92A-2356-37)
5. **Project sponsor:** Mission Peak Homes, Inc.
6. **General Plan designation:** LR-Low Density Residential
7. **Zoning:** R-7,000 (Low Density Residential)
8. **Other public agency required approvals:**
 - Demolition & Building Permits (City of Newark)
 - Encroachment 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)
 - Notice of Intent (State Water Resources Control Board)

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

Determination (to be completed by Lead Agency):

 I find that the proposed project **could not** have a significant effect on the environment and a **Negative Declaration** will be prepared.

 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." An **Environmental Impact Report** is required, but must only analyze the effects that remain to be addressed.

 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 all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed on the proposed project.

Signature: Terence Grudell (jw) Date: April 3, 2014
 Printed Name: Terence Grudell 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, 6)
- b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? (Source: 1, 6)
- c) Substantially degrade the existing visual character or quality of the site and its surroundings? (Source: 6)
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Source: 6)

2. Agricultural 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: 1)
- 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)

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). *Would the project:*

- a) Conflict with or obstruct implementation of the applicable air quality plan? (Source: 1)
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Source: 1)

Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
		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 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, 5)				X
e) Create objectionable odors affecting a substantial number of people? (Source: 5)				X
4. Biological Resources. Would the project				
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 Game or the U.S. Fish and Wildlife Service?(Source: 1, 6)				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 Game or the U.S. Fish and Wildlife Service? (Source: 1, 6)				X
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, 6)				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: 6)				X
e) Conflict with any local policies or ordinances protecting biological resources, such as tree protection ordinances? (Source: 1, 6)		X		

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
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)		X		
5. Cultural Resources. <i>Would the project</i>				
a) Cause a substantial adverse impact in the significance of a historical resource as defined in Sec. 15064.5? (Source: 1, 6)				X
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to Sec. 15064.5 (Source: 1, 6)			X	
c) Directly or indirectly destroy a unique paleontological resource, site or unique geologic feature? (Source: 1, 6)			X	
d) Disturb any human remains, including those interred outside of a formal cemetery? (1)			X	
6. Geology and Soils. <i>Would the project</i>				
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: 1, 2)				X
ii) Strong seismic ground shaking (1, 2)			X	
iii) Seismic-related ground failure, including liquefaction? (1, 2)			X	
iv) Landslides? (1, 2)				X
b) Result in substantial soil erosion or the loss of topsoil? (Source: 1)			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: 1, 2)			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: 2)			X	

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
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: 1, 2)				X
7. 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: 3, 7)			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: 3, 7)		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: 3, 7)				X
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: 7)				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)				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)				X
g) Impair implementation of or physically interfere with the adopted emergency response plan or emergency evacuation plan? (Source: 1)				X

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (Source: 1, 6)				X
8. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements? (Source: 1, 6)			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? (5, 6)				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: 5, 6)			X	
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: 5, 6)			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: 5, 6)				X
f) Otherwise substantially degrade water quality? (Source: 3, 5)			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: 5)			X	

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? (Source: 1, 5)			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? (7)			X	
j) Inundation by seiche, tsunami or mudflow? (1)				X
9. Land Use and Planning. Would the project:				
a) Physically divide an established community? (Source: 1, 6)				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, 6)				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan? (1)				X
10. 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, 6)				X
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, 6)				X
11. 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? (1, 6)			X	
b) Exposure of persons or to generation of excessive groundborne vibration or groundborne noise levels? (Source: 1, 6)				X
c) A substantial permanent increase in ambient noise levels in the project vicinity above existing levels without the project? (1, 6)			X	

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (1, 6)		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, 6)				X
12. 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, 6)				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (6)				X
c) Displace substantial numbers of people, necessitating the construction of replacement of housing elsewhere? (Source: 6)				X
13. 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: 5)				
Fire protection			X	
Police protection			X	
Schools				X
Parks			X	
Other public facilities				X
Solid Waste			X	

14. 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, 5)
- 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: 5, 7)

15. Transportation and Traffic. *Would the project:*

- a) 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? (1, 4)
- 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? (4)
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (4)
- d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses, such as farm equipment? (4)
- e) Result in inadequate emergency access? (4)
- 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? (4)

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

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
16. Utilities and Service Systems. <i>Would the project</i>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (5)			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? (5)			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? (5)			X	
d) Have sufficient water supplies available to serve the project from existing water entitlements and resources, or are new or expanded entitlements needed? (5)			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? (5)			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? (5)			X	
g) Comply with federal, state and local statutes and regulations related to solid waste? (5)				X
17. Mandatory Findings of Significance.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?				X

	Potentially Significant Impact	Less Than Significant With Mitigation	Less than Significant Impact	No Impact
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).				X
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X

Sources used to determine potential environmental impacts

1. General Plan Tune Up EIR (2013)
2. Project Geotechnical Analysis (2013)
3. Project Phase I ESA (2013)
4. Traffic Impact Analysis (2014)
5. Discussion with City staff or service provider
6. Site Visit
7. 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

1. Aesthetics

Environmental Setting

The project site is located in an urbanized, developed portion of Newark, near the central portion of the community. The subject site has been developed with a church and parking lot and contains no City parks, public playgrounds, public trails or other places of public gathering. No native trees, unusual rock outcroppings or historic structures exist on the site. Birch Street is not identified as a scenic highway by the City of Newark or the State of California (source: <http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm>).

Several sources of light and glare are present on adjacent sites, including building and parking lot lights associated with the existing church and lights from adjoining sites.

Project Impacts

- a) *Have a substantial adverse impact on a scenic vista?* **LS.** There are no public places on the project site for viewing scenic vistas; however, visitors to the church do have views of foothills lying south and east of Newark. Construction of the proposed residences on the site could restrict views of these foothills east for residents located 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 impacts to scenic vistas.
- 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 project be constructed. The site is also not located near any state or locally designated scenic highways. No impacts therefore, anticipated with regard to damage to scenic resources adjacent to a scenic highway.
- c) *Substantially degrade the existing visual character or quality of the site and its surroundings?* **LS.** The proposed project would allow conversion of a church to up to 15 single-family dwellings. 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. Although the visual character of the site would change, the scenic and

visual quality of the site would not significantly be degraded and his impact would be less-than-significant.

- d) *Create light or glare?* **LS/M.** Approval of the proposed project would add new light sources associated with the proposed development that would be in different locations and heights from existing parking lot fixtures. Specifically, there would be new lights along Court A that could result in glare onto new project dwellings and potentially into adjacent dwellings, depending on the height of the proposed light fixtures. 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. Street lights along Court A included project subdivision improvement plans shall be equipped with cut-off lenses to ensure that no light spills over onto project houses or onto adjacent streets or properties. Light levels shall meet the minimum illumination level required by the Newark Police Department.

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 (source; Newark Community Development Department, 2/4/14). Similarly, no forestry resources are present on the site.

Project 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 residential subdivision would therefore 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 airflow. 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 near the project site which include schools, hospitals, convalescent homes and senior-only residential complexes.

Project Impacts

- a) *Would the project conflict or obstruct implementation of an air quality plan?* **NI.** Approval and construction of the proposed project would be consistent with the Newark General Plan which designates the site for residential land use. The project's use and associated density has been included in the regional Clean Air Plan so that no impacts would result with regard to obstruction of or conflict with the regional air quality plan.
- 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 single-family attached and detached 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 Atrium complex would include a residential subdivision that would not emit significant odors.

4. Biological Resources

Environmental Setting

The project site is located in an urbanized, developed portion of Newark and contains an existing church and parking lot. Existing vegetation includes a turf lawn area and a number of ornamental trees, shrubs and other groundcover adjacent to buildings and within and adjacent to the parking lot. An arborist report has been prepared by the project applicant ("Tree Inventory Report, 38517 Birch Street, Newark," by HortScience Inc. dated January 2014). This report is hereby incorporated by reference into this Initial Study and is available for review during normal business hours at the Newark Community Development Department. The HortScience report documents the presence of 40 trees on the site, including a mix of introduced, non-native species, including blackwood acacia, silver maple, Italian alder, Chinese pistache, London Plan and pear. Of these, six are native coast redwood trees.

No wetlands or other waters have been observed on the site.

Figure 4-3-2 contained in the General Plan EIR does not identify the potential presence of sensitive biological resources on or near the project site.

Project Impacts

- a) *Have a substantial adverse impact on a candidate, sensitive, or special-status species?* **NI.** The area around the project site area is developed with buildings, paved parking areas and streets. Surrounding uses include residential development. No impacts to candidate, sensitive or special-status species are anticipated should the project be approved and implemented.
- 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.** The project site and surrounding areas are developed with residential 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?* **LS/M.** The site is not located within the boundaries of any Habitat Conservation Plan or Natural Community Conservation Plan so no impacts would result with respect to this topic. In terms of trees, development of the proposed site would remove all but one of the existing trees due to the location of the trees and required site grading. Loss of trees would be a significant impact and the applicant shall include the following measure into project landscaping plans.

Mitigation Measure BIO-1. The following elements shall be included in the project landscape plan:

- a) Existing trees shall be retained to the extent feasible and protected during construction as outlined in the HortScience arborist report dated January 2014.
- b) Replacement trees shall be planted within the site at a ratio of 1 tree planted for each tree to be removed. Proposed trees shall be native drought trees to the fullest extent feasible.

5. Cultural Resources

Environmental Setting

The project site contains a relatively modern church structure. Due to the recent construction of the buildings (under 50 years) they are not considered a historic resource.

The City of Newark is relatively flat and lies near San Francisco Bay. Based on the General Plan EIR, there is a moderate potential for encountering archeological, prehistoric and/or Native American artifacts during grading and trenching operations associated with the proposed project.

Project Impacts

- a) *Cause substantial adverse change to significant historic resources?* **NI.** Since the existing church is not considered a historic resource, the site contains no historic above ground resources. No impacts are, therefore, anticipated with respect to this topic.
- b, c) *Cause a substantial adverse impact or destruction to archeological or paleontological resources?* **LS.** Based information contained in the Newark General Plan EIR, there is a low to moderate probability of encountering buried archeological, paleontological or Native American artifacts on the project area. A condition of project approval will require that construction of the project be halted within a

50-foot wide radius of any discovery of historic, archeological or Native American artifacts by the project contractor. If this occurs, the City will select a qualified professional to evaluate such resources and prepare a resource protection plan that complies with CEQA standards; work could not be restarted until the resource protection plan is fully implemented. If human remains are encountered, the County Coroner will be immediately notified. Based on this condition of project approval, impacts to significant cultural resources will be less-than-significant.

- d) *Disturb any human remains, including those interred outside of a formal cemetery? LS.* Based on previous environmental documentation in the Newark area, there is low to moderate potential of encountering human remains as part of project construction and adherence to the condition of project approval outlines in section "b" and "c" above, this impact would be less-than-significant.

6. Geology and Soils

Environmental Setting

This section of the Initial Study is based on a report titled "Preliminary Geotechnical Investigation, Birch Street Residential Project, 38517 Birch Street, Newark CA" prepared by Cornerstone Earth Group dated January 10, 2014. 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. The Cornerstone geotechnical report notes that the site and area soils consist of generally gravelly and clayey sand.

No 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, Monte Vista-Shannon and Calaveras Faults.

Project 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, as documented in the General Plan EIR, the risk of ground rupture is considered low. With adherence to construction techniques identified in the California Building Code and other applicable State of California standards, 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 soils and geotechnical report prepared by an engineering professional to ensure that soil hazards would be reduced to a less-than-significant level. The Cornerstone geotechnical report contains recommended designs for building foundations and other improvements to ensure impacts

related to seismic ground shaking, liquefaction and related hazards will be less-than-significant. The Cornerstone report recommendations will be included in the applicant's building plans and specifications.

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 impact by adherence to standard Newark Engineering Division conditions that require conformance with Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) permit 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 Cornerstone geotechnical report contains site-specific recommendation to reduce lateral spreading, liquefaction and unstable soils conditions to a less-than-significant level. These recommendations will be included in final building plans and specifications.
- 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, therefore, 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 GHG 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.

Project 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 single family development with fewer than 56 dwellings do not significantly contribute to greenhouse gas emissions. Since the proposed project contains 15 dwellings, this impact would be less-than-significant.

8. Hazards and Hazardous Materials

Environmental Setting

This section of the Initial Study is based on a document entitled "Phase I Environmental Site Assessment and Soil Quality Evaluation, 38517 Birch Street, Newark California" prepared by Cornerstone Earth Group dated October 21, 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 Cornerstone Phase I Site Analysis identified the potential presence of lead based paint and asbestos containing building material within the existing church structure. The report also pesticides in some site soils but these have been removed from the site by a qualified contractor.

The project site is not listed as a Hazardous Materials site on Figure 4.7-1 of the General Plan EIR and is not listed as a contaminated site on the Cortese List of contaminated sites (http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm).

The site is not within an airport planning area of any public or private airport or airstrip.

Project 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 in sufficient quantity. These materials would be used for building and landscape maintenance, and handled by homeowners or their

contractors. 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?* **LS/M.** The Cornerstone Phase I report noted that demolition of the existing church building and other site buildings could be release lead based paint particles and asbestos containing materials into the atmosphere. This could be a potentially significant impact and will be reduced to a less-than-significant level through adherence to the following measure.

Mitigation Measure HAZ-1. Prior to issuance of a demolition permit for the site, a licensed contractor shall determine the presence or absence of lead based paints or asbestos material on the site. If found in quantities at or above actionable levels as determined by the Alameda County Fire Department and Newark Building Department, these materials shall be safely removed consistent with OSHA and other applicable standards and disposed of in an appropriate location. Necessary permits and approvals shall be secured from appropriate regulatory agencies.

- 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 James Bunker Elementary School, which is located more than one-quarter mile from the project site to the north. 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 7, 2014. No impacts are, therefore, anticipated.
- 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 conflict 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 Birch Street, which provides 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. 06001C0444G. No portions of the site are within a 100-year flood plain.

Project 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. 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 will result with regard to violation of water quality standards or waste discharge requirements (source: Al Bunyi, USD engineer, 2/25/14).
- b) *Substantially deplete groundwater recharge areas or lowering of water table?* **NI.** The existing church on the site is currently receiving domestic water provided by the Alameda County Water District (ACWD). Additional water would likely be required for the proposed 15 dwellings on the site. The ACWD obtains water from

a combination of sources including delivery of imported water during normal years supplemented by locally pumped groundwater. There would therefore be no covering of an existing groundwater recharge area or lowering of the water table.

- c) *Substantially alter drainage patterns, including streambed courses such that substantial siltation or erosion would occur?* **LS.** The project site is developed with a church building, outbuildings and a large paved parking lot. Construction of the proposed project would incrementally increase the amount of impervious surfaces on the site. The amount, velocity and rate of increased stormwater runoff from the site is unknown; however, the amount of increased runoff would likely not be significant, especially since the project will be required to comply with C.3 hydromodification requirements to meter peak runoff flows from the site. This impact would be less-than-significant.
- d) *Substantially alter drainage patterns or result in flooding, either on or off the project site?* **LS.** See item "c" above.
- e) *Create stormwater runoff that would exceed the capacity of drainage systems or add substantial amounts of polluted runoff?* **LS.** 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 Cornerstone geologic report, page 6). 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, or tsunamis since the project site is located a sufficiently large distance east of San Francisco Bay. The site and surrounding properties are relatively flat so there would be no impact with respect to mudflows.

10. Land Use and Planning

Environmental Setting

The project site is developed with a church and associated parking lot. The site has been planned and zoned for residential land uses by the City of Newark, which includes churches as conditionally permitted land uses in the R-7,000 zoning district.

Project Impacts

- a) *Physically divide an established community?* **NI.** The project site is presently developed with a church and is surrounded by existing residences. Approval of the proposed subdivision would result in a continuation of existing land uses in the neighborhood and would not result in disruption of an established community. There would be no impact with respect to this topic.
- b) *Conflict with any applicable land use plan, policy or regulation?* **NI.** The proposed project complies with the existing General Plan land use designations. No applications have been made to change or delete any City land use policy or regulation affecting environmental protection. There would be no impact with regard to land use regulatory conflicts.
- 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.

10. Mineral Resources

Environmental Setting

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

Project 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

The project site is bounded by Birch Street to the east. Birch Street provides the primary noise source on the site. Secondary noise sources include mechanical noise from nearby residences that border the site, noise from gardening equipment and normal and customary noise associated with low-density neighborhoods. No other major noise sources exist in the area, including but not limited to freeways, railroads or large industrial operations.

The City of Newark has adopted a standard of 60 decibels (CNEL or Ldn scale) as the normally acceptable exterior noise exposure level. Exterior noise exposure if up to 70 decibels is considered conditionally acceptable

Project Impacts

- a) *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?* **LS.** The project site is located well within an established neighborhood in Newark with no nearby freeways, railroads or industrial uses that would generate a significant noise source to impact the proposed subdivision. Limited noise from Birch Street would impact the site as well as intermittent noise from adjacent residential areas. This impact is anticipated to be less-than-significant.
- b) *Exposure of people to excessive groundborne vibration or groundborne noise levels?* **NI.** No major pile driving or other activities that would result in excessive groundborne vibration would be created as part of project construction. Once constructed, operation of the project would include typical retail commercial and office uses that would not result in vibration. No impacts are, therefore, anticipated related to groundborne vibration.
- c) *Substantial permanent increases in ambient noise levels?* **LS.** The site currently generates noise from church operations and associated vehicle traffic. Approval and construction of the proposed subdivision would increase vehicle trips to and from the site but likely not to a level that would exceed City exterior noise exposure levels. This impact is anticipated to 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.** Demolition and construction would likely occur in one phase. The noisiest phases would be site grading and foundation work. **Site preparation** efforts typically include use of heavy diesel powered machinery **such as** compactors, front loaders, backhoes, bulldozers, scrapers, graders, trucks and concrete equipment. Construction of the building, and may require a crane and other smaller equipment such as generators, compressors, power tools, and hand tools.

Construction noise would be clearly audible at the adjacent residential dwellings and could exceed the City's noise standard for this land use type. This would be a potentially significant impact and the following measure will assist in reducing construction noise to an acceptable level:

Mitigation Measure NOISE-1. To reduce daytime noise impacts due to demolition and construction, the project developer shall implement the following measures:

- a) Equipment and trucks used for project demolition and 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.
- 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 result.

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 developed as a church but the subject property is shown in the General Plan as residential.

Project Impacts

- a) *Induce substantial population growth in an area, either directly or indirectly?* NI. The proposed project would result in the construction of up to 15 single family detached dwellings on the site. Since the site is depicted for residential uses in the Newark General Plan the project would not result in a substantial population in this portion of the community. No impacts would result.

- b,c) *Would the project displace substantial numbers of existing housing units or people?* NI. The project site contains a church. No dwellings or residents would be displaced to accommodate the proposed project. No impacts would, therefore, result.

14. Public Services

Environmental Setting

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

Fire and Emergency Services: The City of Newark contracts with the Alameda County Fire department for fire suppression, emergency medical, fire inspection, hazardous materials response and similar services. The project site is served by Alameda County Fire Station No. 27, located at 39039 Cherry Street.

Police Services: Police and emergency **response** is provided by the Newark Police Department, headquartered at the Newark Civic Center.

Public Educational Service: The Newark Unified School District operates a number of K-12 schools within the community.

Solid Waste Collection and Disposal: Republic Services of Alameda County.

Project Impacts

- a) *Fire protection?* **LS.** The closest fire station to the project area is Alameda County Station No, 27 at the southwest corner of Cherry Street and Mowry Avenue. Approval of the proposed project would increase the number of calls for service to the Fire Department based on occupancy of additional dwellings on the site. 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 Guier, ACFD, 2/6/14). This would be less-than-significant.
- 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. On-site roads would be privately maintained.

- 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 offset 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.

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 Birch 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.

Project Impacts

- a) *Would the project increase the use of existing neighborhood or regional parks?* **LS.** The proposed project would add a permanent population to the City of Newark that could increase the need for local park and recreational facilities. Payment of park in-lieu fees charged by the City will offset 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?* **LS.** The proposed project does not include a recreational component. Once constructed, future occupants of dwellings could increase the use of local park and recreational facilities. Payment of required park in-lieu fees to the City will offset this impact.

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 1 to the Initial Study. The results of the traffic report are summarized below.)

Environmental Setting

The site is served by the following streets and roads.

Birch Street is a residential street that extends in a primarily north-south direction from Cedar Boulevard to Smith Avenue. It begins again one block north of Smith Avenue and extends north of Central Avenue where it ends in a cul-de-sac. There is a pedestrian sidewalk between the two Birch Street segments, but no vehicular access. Birch Street consists of two travel lanes with dashed yellow centerline striping which provides direct access to single-family

residential units on both sides of the street and to the existing church facility located on the west side of the street. On-street parking is allowed. Birch Street also functions as a collector street carrying some through trips which appear to be primarily associated with a nearby elementary school and commuter trips during the peak hours.

Smith Avenue is located north of the site and extends in a primarily east-west direction between Cedar Boulevard and Cherry Street. Smith Avenue is a two lane collector street that provides direct residential access to single-family units located on both sides of the street. It also provides access to the James L. Bunker Elementary School, Birch Grove Park, and Emmanuel Mission Church located on the north side of the street near the Smith Avenue intersection.

Moore Avenue is similar to Smith Avenue and is located south of the project site parallel to Smith Avenue, extending between Cedar Boulevard and Cherry Street. It also functions as a two lane collector street that provides direct residential access to single-family units located on both sides of the street.

Cedar Boulevard extends in an east-west direction south of the project site then curves to a north-south direction several blocks east of the project site. It is designated as an arterial street and consists of two to four lanes and provides access to residential, light-industrial and commercial areas along its length.

Regional access is provided by Interstate 880 (I-880), which is oriented in a north-south direction and is located approximately one-half mile east of the site. I-880 is a multi-lane facility providing access between San Jose and Oakland. Full access interchanges are located north and south of the project site at Thornton Avenue and Mowry Avenue, respectively.

Pedestrian sidewalks are located on both sides of each street in the project vicinity. A path also provides pedestrian access between the two segments of Birch Street north of Smith Avenue. Crosswalks (yellow school zone) are striped at the Birch Street/Smith Avenue intersection across the west and south approaches. Crosswalks are striped across all four approaches of the Birch Street/Moore Avenue intersection. As is typical of residential streets, there are no striped bicycle lanes.

Bus transit in the project study area is provided by the Alameda-Contra Costa Transit District (AC Transit).

Existing traffic operations. Intersection LOS provides a measure of operational performance ranging from LOS A-F. These ratings correspond to a volume/capacity (v/c) ratio and vehicle delay in seconds. LOS A represents free-flow conditions with little delay at intersections. LOS E represents unstable or unbalanced flow conditions with volumes at or near design capacity. LOS F represents a significantly congested condition where traffic flows can exceed design capacities resulting in long vehicle queues and delays from the minor-street approach. At unsignalized intersections, stated intersection LOS usually refers to the stop-sign controlled approach and yields a vehicle delay in seconds (LOS criteria and definitions are provided in Table A-1 in Attachment

1). The peak hour intersection LOS calculations have been calculated based on the *HCM 2000 methodology* using the Synchro/Simtraffic modeling software. (Level-of-service calculation worksheets are provided in Attachment 1.)

As shown in Table 1 of the full traffic report (see Attachment 1), project area study intersections are operating at LOS A or B conditions which represent very efficient traffic flows and minimal delays or vehicle queues.

Project Impacts

a,b) *Conflict with applicable plans related to the effectiveness of the circulation system, including all modes of travel, including intersections, streets, highways and other components or conflict with an applicable congestion management program, including level of service standards, travel demand measures and other applicable standard or 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.** Daily and peak hour vehicle trip generation for the proposed project has been based on established rates published in the Institute of Transportation Engineers (ITE) trip research manual for residential uses. Trip generation rates for single-family detached housing units (Land Use #210) have been used to develop the proposed project trip generation. The church facility on the site is generating existing vehicle trips that would be removed by the proposed project. As a result, vehicle trip generation for the proposed project would represent the net increase (or decrease) between the existing site and the proposed residential project development.

On weekdays when the church is less active, the proposed project would result in an increase of 111 daily trips, 8 a.m. peak hour trips, and 12 p.m. peak hour trips. Trips occurring later at night associated with church meetings would no longer occur, thus vehicle trips at night would be reduced by 10 to 35 trips.

On Sundays when the church is most active, the proposed project would result in a decrease of approximately 135 daily trips, 73 a.m. peak hour trips, and 33 p.m. peak hour trips. On Saturdays the church is moderately active. The proposed project would result in approximately 103 new daily trips. There would be a slight decrease in morning trips, with 6 fewer a.m. peak hour trips, and there would be a slight increase of 11 new trips during the p.m. peak hour.

The church generates higher vehicle trips outside of the adjacent street peak hours (Sundays and on some weekday nights). Vehicle trips at these times would decrease as a result of the proposed project. The project's trips would be distributed throughout the day, whereas most of the existing church trips occur within shorter time intervals before and after events.

With the proposed project traffic, LOS on adjacent roads and intersections would remain unchanged, with delays remaining the same or increasing slightly compared to existing conditions. The new project access road (stop control for the access road approach) would also operate at LOS A. Calculated vehicle queue

lengths are minimal and would not increase with the added project trips. Overall, 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 subdivision.
- d) *Substantially increase hazards due to a design feature or incompatible use?* **NI.** The Omni Means traffic analysis does not identify any impacts with respect to design hazards, including sight lines distances at Court A and Birch Street. No impacts are anticipated with respect to this topic.
- 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.
- f) *Conflict with adopted policies, plans or programs regarding public transit, pedestrian facilities or otherwise decrease the performance or safety of such facilities?* **NI.** No conflicts to plans, policies or programs that promote public transit, pedestrian use or similar features would occur for this project. City sidewalks exist along the site's Birch Street frontage and both pedestrians and bicyclists use Birch Street and would be able to access project residences via Court A.

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)

Public Educational Service: Newark Unified School District

Solid Waste Collection and Disposal: Republic Services

Project 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, 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. The existing church on the project site is connected to the ACWD system. 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, *less-than-significant* changes would result in terms of long-term water service (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*
Rob Tuma, Omni Means, *traffic and parking*
Peter Galloway, Omni Means, *traffic and parking*

Agencies and Organizations Consulted

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

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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
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References

Archaeological Records Search, Northwest Information Center, August 2006

CEQA Guidelines, Bay Area Air Quality Management District, May 2011

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-Traffic Analysis (Omni Means)

**TRAFFIC IMPACT ANALYSIS
FOR THE PROPOSED**

**BIRCH STREET RESIDENTIAL PROJECT
NEWARK, CA**

February 14, 2014

Prepared by:
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R1813TIA001 / 35-3526-29



**BIRCH STREET RESIDENTIAL PROJECT
TRAFFIC IMPACT ANALYSIS**

DRAFT REPORT

**PREPARED FOR:
THE CITY OF NEWARK**

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February 14, 2014

**35-3526-29
(R1813TIA001.DOC)**

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1. INTRODUCTION / SUMMARY

This report presents the results of a traffic impact analysis conducted by Omni-Means for the proposed Birch Street Residential project in the City of Newark. The proposed project would consist of 15 single-family residential units located on Birch Street between Smith Avenue and Moores Avenue. The proposed project would replace an existing church facility. Figure 1 illustrates the Project Location and Vicinity Map.

Based on discussions with City Transportation Engineering staff, the traffic issues for this development relate to the project's net vehicle trip generation and subsequent operations on Birch Street at primary intersections in the project vicinity as follows:

- Project vehicle trip generation and net change in trips from existing site use.
- Peak hour traffic operations at intersections in the project area.
- Project access to/from Birch Street.

The following scenarios have been analyzed as part of the transportation and circulation analysis:

- Existing Traffic Conditions: Represents existing traffic flow conditions collected through new field counts for the study intersections;
- Existing Plus Project Conditions: Proposed project trips added to existing traffic volumes.

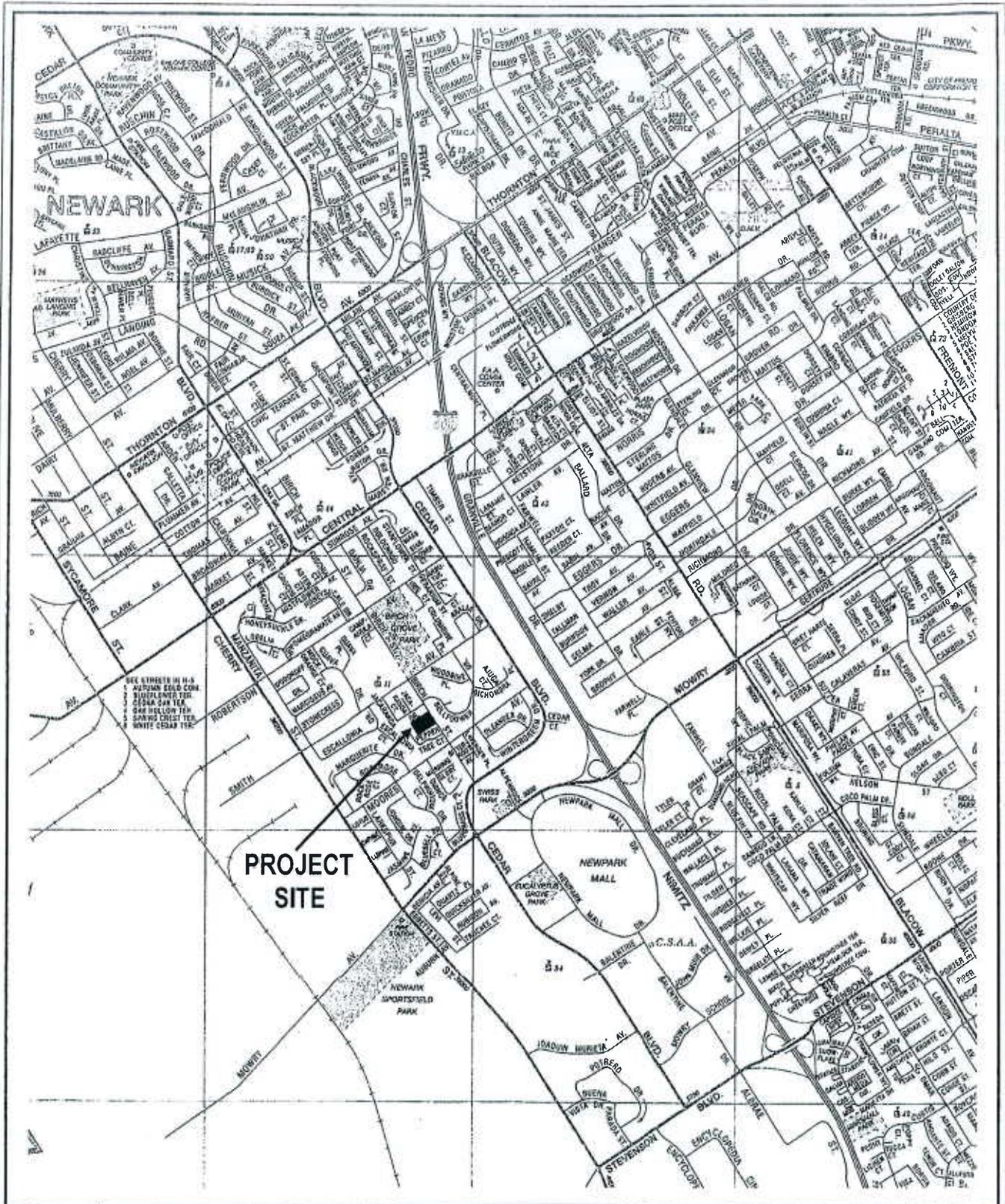
Given the number of residential units and the removal of the existing church trips, the net change in vehicle trips from existing conditions would be small during the weekday a.m. and p.m. peak hours of adjacent street traffic.

The proposed project was calculated to generate a total of 11-15 peak hour weekday trips. The existing church generates approximately three vehicle trips during the weekday a.m. and p.m. peak hours of adjacent street traffic. Therefore the project would result in 8-12 net new peak hour trips added to the street network.

The study intersections currently operate at LOS A or B levels-of-service, indicative of efficient operation with short delays. Conditions would remain very similar with the project. The intersections would continue to operate at the same levels of service as existing conditions, with no increase or very little increase in vehicle delays for the intersection approaches.

The project would generate approximately 143 total weekday daily trips or 111 net new weekday trips compared to the existing church on an average weekday. However, daily trips on Sunday would be lower with the project compared to the existing church. The church generates higher vehicle trips outside of the adjacent street peak hours, such as on Sundays and some weekday nights. At these times, vehicle trips would be lower with the proposed project than existing conditions. The project's trips would be distributed throughout the day, whereas most of the existing church trips occur within a shorter time-frame before and after events.

Other potential vehicle related issues were evaluated. A vehicle queuing analysis shows the intersections would continue to function similarly to existing conditions, with little or no vehicle queuing. Standard warrants for installation of turn lanes and signalized controls were also evaluated. None of the intersections require additional turn lanes or signal controls for existing or "plus project" conditions. The project access road would represent an appropriate design, meeting the City standards for vehicle and pedestrian access.



**PROJECT
SITE**



omni-means

Project Vicinity Map



figure 1

2. EXISTING CONDITIONS

Existing conditions describe the existing transportation facilities serving the project site.

EXISTING ROADWAYS

Roadways that provide primary circulation in the vicinity of the project site are as follows:

Birch Street; Birch Street is a residential street that extends in a primarily north-south direction from Cedar Boulevard to Smith Avenue. It begins again one block north of Smith Avenue and extends north of Central Avenue where it ends in a cul-de-sac. There is a pedestrian sidewalk between the two Birch Street segments, but no vehicular access. Birch Street consists of two travel lanes with dashed yellow centerline striping which provides direct access to single-family residential units on both sides of the street and to the existing church facility located on the west side of the street. On-street parking is allowed. Birch Street also functions as a collector street carrying some through trips which appear to be primarily associated with a nearby elementary school and commuter trips during the peak hours.

Smith Avenue; Smith Avenue is located north of the site and extends in a primarily east-west direction between Cedar Boulevard and Cherry Street. Smith Avenue is a two lane collector street that provides direct residential access to single-family units located on both sides of the street. It also provides access to the James L. Burke Elementary School, Birch Grove Park, and Emmanuel Mission Church located on the north side of the street near the Smith Avenue intersection.

Moore's Avenue; Moore's Avenue is similar to Smith Avenue and is located south of the project site parallel to Smith Avenue, extending between Cedar Boulevard and Cherry Street. It also functions as a two lane collector street that provides direct residential access to single-family units located on both sides of the street.

Cedar Boulevard; Cedar Boulevard extends in an east-west direction south of the project site then curves to a north-south direction several blocks east of the project site. It is designated as an arterial street and consists of two to four lanes and provides access to light-industrial and commercial areas along its length.

Regional access is provided by **Interstate 880 (I-880)**, which is oriented in a north-south direction and is located approximately one-half mile east of the site. I-880 is a multi-lane facility providing access between San Jose and Oakland. Full access interchanges are located north and south of the project site at Thornton Avenue and Mowry Avenue, respectively.

PEDESTRIAN AND BICYCLE FACILITIES

Pedestrian sidewalks are located on both sides of each street in the project vicinity. A path also provides pedestrian access between the two segments of Birch Street north of Smith Avenue. Crosswalks (yellow school zone) are striped at the Birch Street/Smith Avenue intersection across the west and south approaches. Crosswalks are striped across all four approaches of the Birch Street/Moore's Avenue intersection. As is typical of residential streets, there are no striped bicycle lanes.

TRANSIT FACILITIES

Bus transit in the project study area is provided by the Alameda-Contra Costa Transit District (AC Transit).¹ The three routes closest to the project site travel along Cedar Boulevard:

AC Route 200: This route extends from the Fremont BART station through the City of Newark to the Union City BART station. Nearest the project site, the route travels along Mowry Avenue and Cedar Boulevard with bus stops located at the Cedar Boulevard/Birch Street intersection. Buses operate weekdays between 6:08 a.m. and 12:52 a.m. and on weekends between 7:00 a.m. and 7:53 p.m. with headways of approximately 30 minutes.

AC Route 232: This route extends from the Newpark Mall through the City of Newark and on to Union City and Fremont BART stations. In the project area the route travels along Cedar Boulevard with the closest bus stops located at the Birch Street intersection. Buses operate weekdays between 5:30 a.m. and 8:22 p.m. and on weekends between 7:32 a.m. and 9:19 p.m. with headways of approximately 60 minutes.

AC Route SB: This route travels through the City of Newark from Stevenson Boulevard to San Francisco. This route travels closest to the project site on Cedar Boulevard. Operation is on weekdays only, to San Francisco in the morning between 5:25 a.m. and 9:00 a.m., and from San Francisco in the evening between 4:00 p.m. and 8:00 p.m. with headways of approximately 30 minutes.

Two other routes are located further away from the project site on Mowry Avenue:

AC Route 212: This route travels from the Newpark Mall along Mowry Avenue then continues to the Fremont BART Station via Cedar Boulevard south of Mowry Avenue. Bus stops are located near the Mowry Avenue/Cedar Boulevard intersection. Buses operate weekdays between 6:16 a.m. and 12:51 a.m. and on weekends between 6:58 a.m. and 7:28 p.m. with headways of approximately 30 minutes.

AC Route 216: This route travels along Mowry Avenue between Newpark Mall and Ohlone College then continues east of I-880 via Stevenson Boulevard to the City of Fremont. Bus stops are located near the Mowry Avenue/Cedar Boulevard intersections. Buses operate between 6:10 a.m. and 8:00 p.m. on weekdays and 7:02 a.m. and 7:49 p.m. on weekends with headways of approximately 60 minutes.

Located on Cherry Street is **AC Route 251:** This route extends between the Ohlone College Newark Campus and Silliman Recreation Center along Cherry Street through Newark to the Fremont BART station. On weekdays, buses operate between the college and BART station between 6:13 a.m. and 8:07 p.m.. On weekends, buses operate between the college and Silliman Recreation Center to the BART station between 6:40 a.m. and 7:34 p.m. with headways of approximately 60 minutes.

EXISTING INTERSECTION CONDITIONS

The following intersections were chosen by City staff for analysis during the AM and PM peak periods of adjacent street traffic flows:

Birch Street / Smith Avenue	All-way Stop Sign Control
Birch Street / Moores Avenue	All-way Stop Sign Control
Birch Street / Existing Church Access (Proposed Project Access)	Minor-Street Stop Sign Control
Birch Street / Jacaranda Dr.-Bellflower Dr.	Minor-Street Stop Sign Control
Birch Street / Peppertree Court	Minor-Street Stop Sign Control

¹ AC-Transit, *Maps and Schedules*, AC Transit website (actransit.org), January 2014.

Vehicle counts were conducted at the study intersections during weekday AM and PM peak periods.^{2,3} From those counts, the highest peak hour volumes were utilized for the traffic analysis. The existing peak hour traffic volumes are shown in Figure 2.

The existing church parking lot is accessed via a primary driveway which carries most of the trips and a secondary driveway which carries a low volume of trips (no trips were observed using the secondary driveway during the counts). The project would replace the two existing driveways with a single new access road extending west from Birch Street.

Intersection Level-of-Service (LOS) Concept

Intersection LOS provides a measure of operational performance ranging from LOS A-F. These ratings correspond to a volume/capacity (v/c) ratio and vehicle delay in seconds. LOS A represents free-flow conditions with little delay at intersections. LOS E represents unstable or unbalanced flow conditions with volumes at or near design capacity. LOS F represents a significantly congested condition where traffic flows can exceed design capacities resulting in long vehicle queues and delays from the minor-street approach. At unsignalized intersections, stated intersection LOS usually refers to the stop-sign controlled approach and yields a vehicle delay in seconds (LOS criteria and definitions are provided in Table A-1 in the Appendix). The peak hour intersection LOS calculations have been calculated based on the *HCM 2000 methodology* using the Synchro/Simtraffic modeling software.⁴ (Level-of-service calculation worksheets are provided in the Appendix.)

Existing Operating Conditions

As shown in Table 1, the study intersections are operating at LOS A or B conditions which represent very efficient traffic flows and minimal delays or vehicle queues.

**TABLE 1
EXISTING CONDITIONS: INTERSECTION LEVELS-OF-SERVICE**

#	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			LOS	Delay	LOS	Delay
1	Birch Street / Smith Avenue	AWSC	A	8.3" NB	A	7.5" WB
2	Birch Street / Moores Avenue	AWSC	A	8.7" WB	A	7.8" NB
3	Birch Street / Church Access	MSSC	A	0.0" EB	A	8.9" EB
4	Birch Street / Jacaranda-Bellflower	MSSC	B	10.9" WB	A	9.5" WB
5	Birch Street / Peppertree Court	MSSC	A	9.5" EB	A	9.1" EB

*Legend: AWSC = All Way Stop Control.; MSSC = Minor Street Stop Control
Listed LOS represents approach with highest delay. Vehicle delay is expressed in seconds.*

² *Omni-Means, Weekday AM (7:00-9:00 a.m.) and PM (4:00-6:00 p.m.) peak period intersection counts, January 29-30, 2014, and Weekend Sunday (9:00 a.m.-12:00 p.m.) count, January 26, 2014.*

³ *Baymetrics, AM and PM (7:00-9:00 a.m. and 4:00-6:00 p.m.) peak period intersection counts, January 15, 2014.*

⁴ *Transportation Research Board (TRB), 2000 Highway Capacity Manual, Intersection Operations, Chapters 16 & 17.*

During our field surveys we observed Birch Street experiences some vehicle through-trips in addition to local residential trips. Weekday mornings the elementary school on Smith Avenue attracts school-related trips. Out of approximately 250 total two-way a.m. peak hour trips on Birch Street, approximately 150 trips appeared to be through trips. These trips are concentrated within the time period just before school begins, then decrease substantially. In the p.m. peak hour, approximately 50 trips out of 150 trips appeared to be through trips (presumably commuter trips). Although the proportion of through trips to local trips is high, the total volume of trips is relatively low and, as noted above, operating conditions are very efficient.

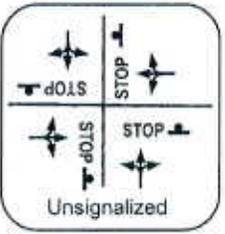
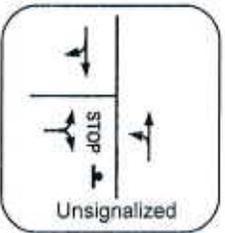
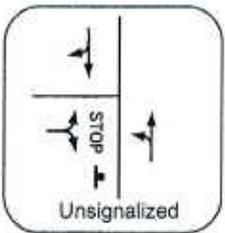
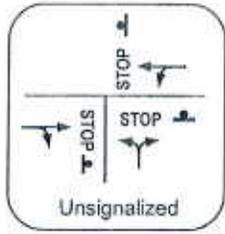
Signal Warrants

To determine another level of “significance” associated with unsignalized intersection operations, a traffic signal “warrant” analysis has also been completed. The term “signal warrants” refers to established criteria used quantitatively to justify or ascertain the need for installation of a traffic signal at an otherwise unsignalized intersection location. This study employs the signal warrant criteria presented in the Manual on Uniform Traffic Control Devices (*California MUTCD*).⁵ Specifically, this study utilized the Peak Hour Warrant for the traffic signal analysis.

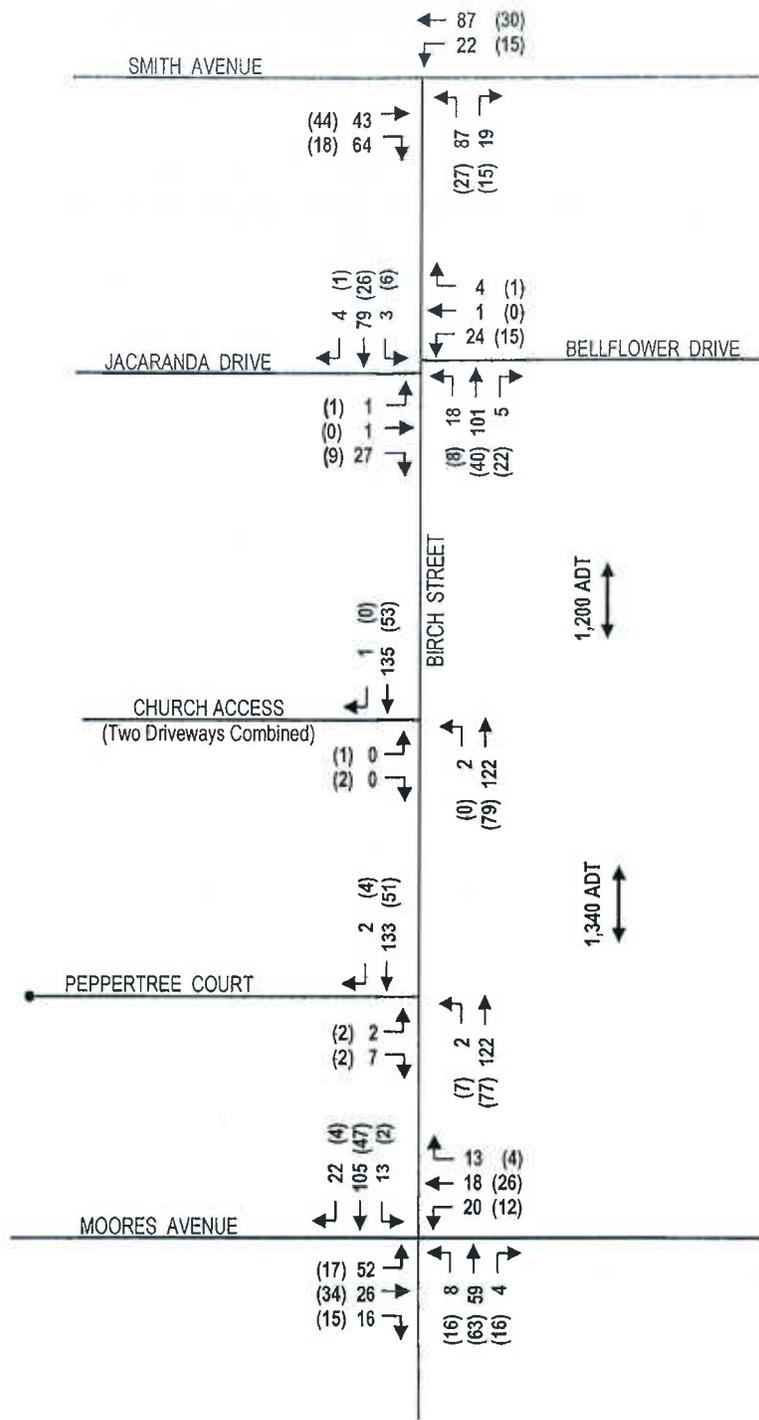
The peak hour signal warrant criteria were applied to the study intersections. None of the intersections qualify for signalization under the peak hour criteria (signal warrant worksheets are provided in the Appendix).

⁵ California Department of Transportation, *Manual on Uniform Traffic Control Devices*, 2012 Edition.

GEOMETRIES / CONTROLS



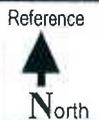
Existing geometries assumed for all future volume scenarios.



NOT TO SCALE



Existing Weekday AM and (PM) Peak Hour Volumes



3. PROPOSED PROJECT

PROJECT DESCRIPTION

The proposed Birch Street project would consist of 15 single-family residential units. The project would replace an existing church facility (Bay Area Baptist Church) consisting of a sanctuary, offices, and off-street parking lot. The site is located on the west side of Birch Street. The residential units would be located around the perimeter of the property and accessed by a short road ending in a cul-de-sac. A project site plan is illustrated in Figure 5 on page 16.

PROJECT TRIP GENERATION

Daily and peak hour vehicle trip generation for the proposed project has been based on established rates published in the Institute of Transportation Engineers (ITE) trip research manual for residential uses.⁶ Trip generation rates for single-family detached housing units (Land Use #210) have been used to develop the proposed project trip generation. The church facility on the site is generating existing vehicle trips that would be removed by the proposed project. As a result, vehicle trip generation for the proposed project would represent the net increase (or decrease) between the existing site and the proposed residential project development.

The residential project's trip generation is shown in Table 2. The existing church trips are shown in Table 3 and the net change in trips is shown in Table 4. On weekdays when the church is less active, the proposed project would result in an increase of 111 daily trips, 8 a.m. peak hour trips, and 12 p.m. peak hour trips. Trips occurring later at night associated with church meetings would no longer occur, thus vehicle trips at night would be reduced by 10-35 trips.

On Sundays when the church is most active, the proposed project would result in a decrease of approximately 135 daily trips, 73 a.m. peak hour trips, and 33 p.m. peak hour trips. On Saturdays the church is moderately active. The proposed project would result in approximately 103 new daily trips. There would be a slight decrease in morning trips, with 6 fewer a.m. peak hour trips, and there would be a slight increase of 11 new trips during the p.m. peak hour.

The church generates higher vehicle trips outside of the adjacent street peak hours (Sundays and on some weekday nights). Vehicle trips at these times would decrease as a result of the proposed project. The project's trips would be distributed throughout the day, whereas most of the existing church trips occur within shorter time intervals before and after events.

PROJECT TRIP ASSIGNMENT

The project trips were distributed onto the street network based on the turning movement counts conducted for this study, the project's location relative to commercial areas, and access to regional transportation facilities such as Interstate 880. The turning movement counts and field observations indicate that directional distributions are different for the a.m. and p.m. peak periods. The proximity of the elementary school on Smith Avenue results in a higher percentage of vehicles to/from the north in the morning compared to the evening. During the p.m. period, a higher percentage of trips are to/from the south, which is most likely due to the presence of commercial areas and freeway access located to the south. Based on these factors, the proposed project trips were assigned in the morning with 40% to/from the north and 60% to/from the south. For the p.m. period, 30% were assigned to/from the north and 70% to/from the south. The change in trips with the project is shown in Figure 3 and the existing plus project volumes are shown in Figure 4.

⁶ Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 9th Edition, Single-Family Detached Housing (Land Use 210), 2012.

**TABLE 2
PROJECT VEHICLE TRIP GENERATION
15 UNITS SINGLE-FAMILY DETACHED HOUSING**

15 Units	Time Period	Trip Rate	Vehicle Trips
Weekday	Daily: AM Pk. Hr. of Adjacent Street: PM Pk. Hr. of Adjacent Street:	9.52 trips/unit 0.75 trips/unit (25% in, 75% out) 1.00 trips/unit (63% in, 37% out)	143 11 (3 in, 8 out) 15 (10 in, 5 out)
Saturday	Daily: Pk. Hr. of Generator:	9.91 trips/unit 0.93 trips/unit (54% in, 46% out)	149 14 (7 in, 7 out)
Sunday	Daily: Pk. Hr. of Generator:	8.62 trips/unit 0.86 trips/unit (53% in, 47% out)	129 13 (7 in, 6 out)

*Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012.
Average rates for Single-Family Detached Housing, Land Use #210.*

**TABLE 3
EXISTING CHURCH FACILITY VEHICLE TRIP GENERATION**

Day	Activity	Time Period	Average Attendance	Vehicle Trips
Weekdays (closed Tue.)	Office Open	9 am - 5 pm	3 employees 3 visitors	Daily: 12 trips Weekday A.M. Peak Hour: 3 (3 in, 0 out) Weekday P.M. Peak Hour: 3 (0 in, 3 out)
Wednesday Night	Bible Classes	7 p.m.	65 people	Wednesday Night: 37 trips before & after class
Thursday Night	Bible Classes	7 p.m.	20 people	Thursday Night: 12 trips before & after class
Saturday	Office Open, Outreach Meeting	9 am -5 pm, 10 a.m.	6 people, 15 people	Daily: 46 trips Saturday Morning: 12 peak hour trips
Sunday	Services / Sunday School	10:30 a.m. & 6 p.m.	150 people 80 people	Daily: 264 trips Sunday Morning: 86 trips before & after mass Sunday Night: 46 trips before & after mass
Twice per Year	Conference (3 nights)	7 p.m.	140 people	80 trips before & after conference

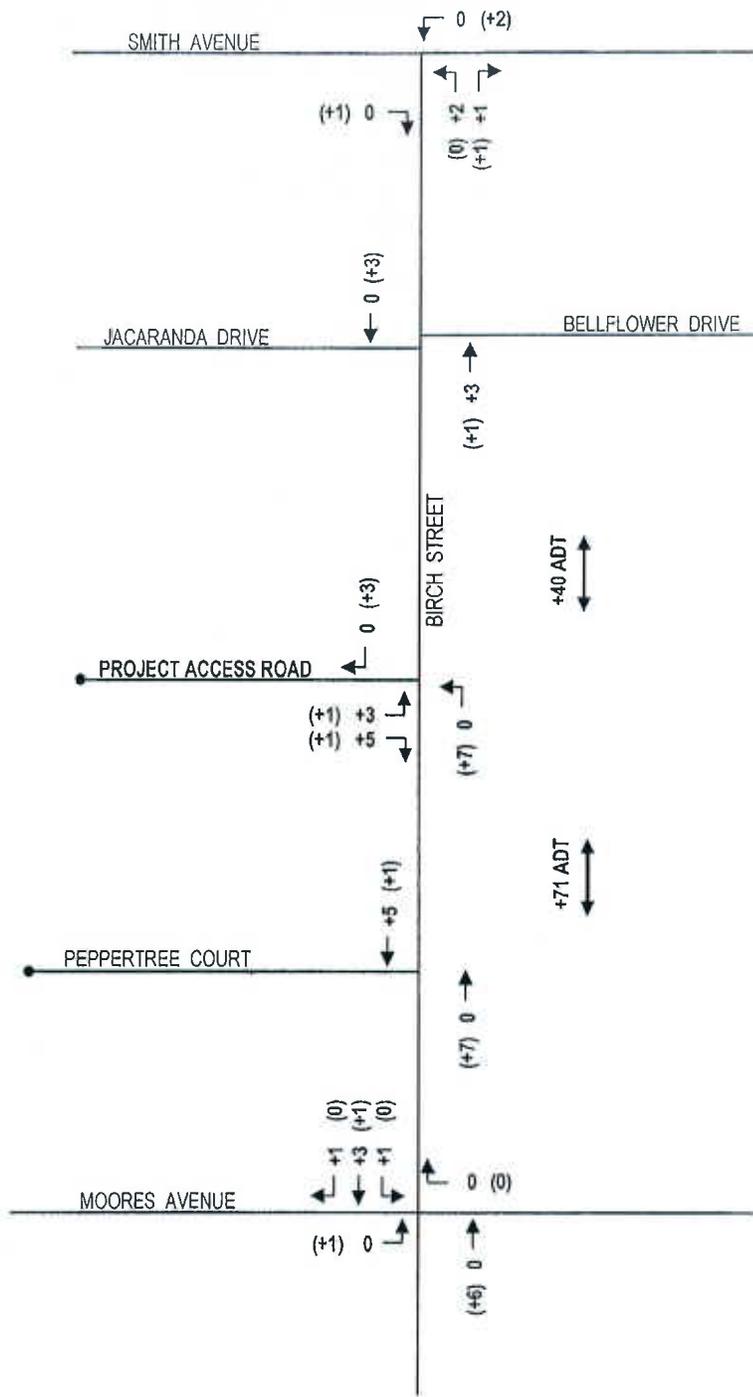
Vehicle Trips based on existing church counts conducted by Omni-Means weekday AM & PM peak hours & Sunday morning, attendance figures provided by church personnel, and surveyed average vehicle occupancy of 1.75 people per vehicle.

**TABLE 4
NET CHANGE IN VEHICLE TRIPS WITH PROJECT**

Weekday	Daily	A.M. Peak Hour	P.M. Peak Hour
Existing Church:	12 (6, 6)	3 (3, 0)	3 (0, 3)
Proposed Residential Project:	<u>143 (72, 71)</u>	<u>11 (3, 8)</u>	<u>15 (10, 5)</u>
Net Trips (+/-):	+111 (+66, +65)	+8 (0, +8)	+12 (+10, +2)
*A reduction of 10-35 trips would also occur later at night without the church meetings.			
Sunday			
Existing Church:	264 (132, 132)	86 (86, 0)	46 (46, 0)
Proposed Residential Project:	<u>129 (65, 64)</u>	<u>13 (7, 6)</u>	<u>13 (7, 6)</u>
Net Trips (+/-):	-135 (-67, -68)	-73 (-79, +6)	-33 (-39, +6)
Saturday			
Existing Church:	46 (23, 23)	20 (20, 0)	3 (0, 3)
Proposed Residential Project:	<u>149 (75, 74)</u>	<u>14 (7, 7)</u>	<u>14 (7, 7)</u>
Net Trips (+/-):	+103 (+52, +51)	-6 (-13, +7)	+11 (+7, +4)

PROJECT TRIP GENERATION

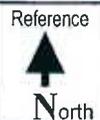
WEEKDAY;	AM Pk. Hr.	PM Pk. Hr.
Existing Church:	3 (3, 0)	3 (0, 3)
Project:	<u>11 (3, 8)</u>	<u>15 (10, 5)</u>
Net Trips (+/-):	+8 (0, +8)	+12 (+10, +2)

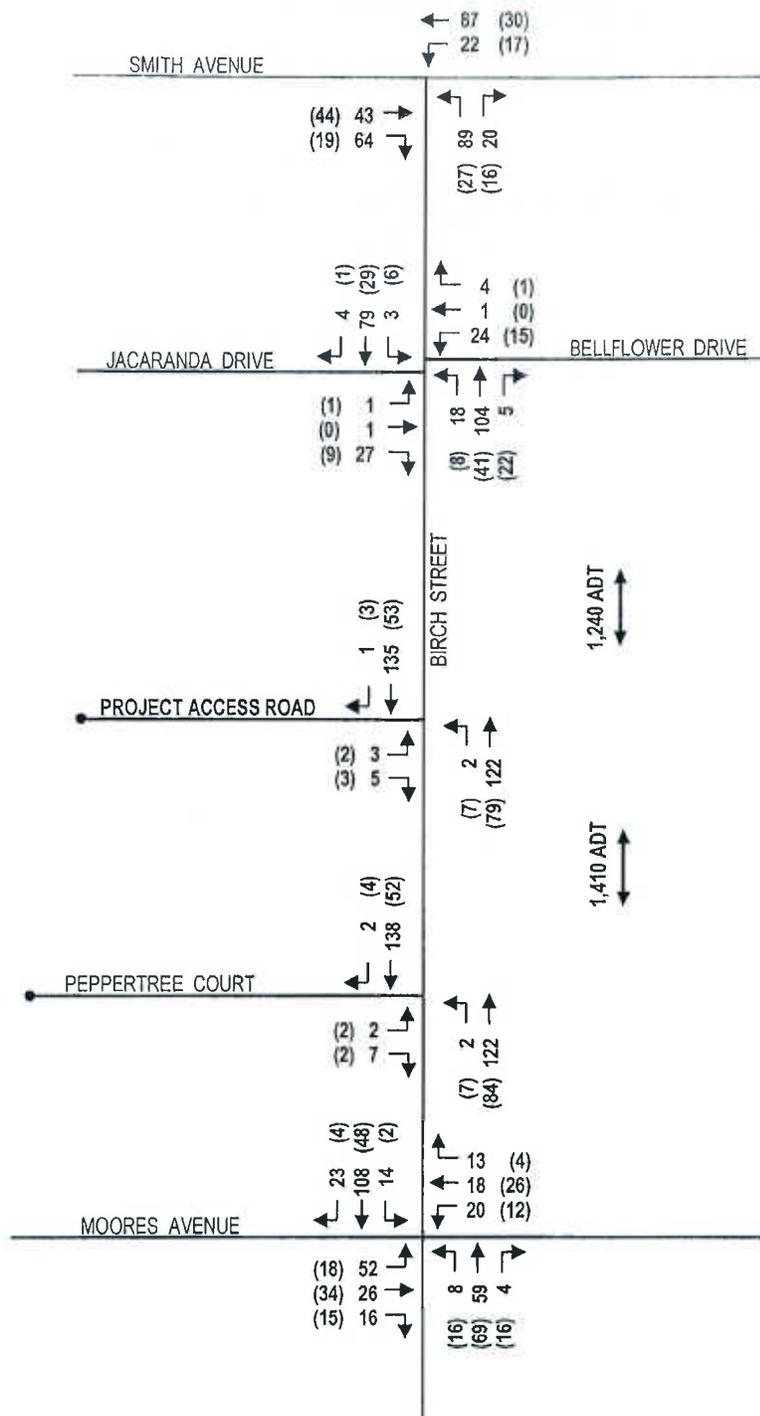


NOT TO SCALE



Net Project Weekday AM and (PM) Peak Hour Trips

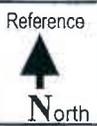




NOT TO SCALE



Existing + Project Weekday AM and (PM) Peak Hour Volumes



4. EXISTING PLUS PROJECT CONDITIONS

SIGNIFICANCE CRITERIA

The following standards of significance criteria have been used in this transportation analysis based on the City of Newark's standard for intersection LOS included in the Transportation Element of the General Plan:

- If an intersection operation degrades from an acceptable LOS under existing conditions to below LOS D under proposed project conditions; or
- If an intersection is operating at LOS E or LOS F under existing conditions and the addition of the proposed project causes the average delay at the intersection to increase by four or more seconds.

Other significance criteria based on City guidelines identify a project having a significant impact if it would:

Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

Conflict with an applicable congestion management program, including, but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designed roadways or highways.

Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

EXISTING PLUS PROJECT INTERSECTION CONDITIONS

With the net change in a.m. and p.m. peak hour project trips added to existing traffic volumes, LOS were calculated at the study intersections and are shown in Table 5. The LOS with the project would remain unchanged from current conditions at all of the existing study intersections. Delays would remain unchanged or increase slightly (approximately one-tenth of a second).

The new Birch Street/Project Access intersection is proposed to be stop sign controlled for the project access approach and remain free for the Birch Street approaches. The access road would be approximately 350 feet long and end in a cul-de-sac. The project access intersection with Birch Street would operate at LOS A. Since there were zero outbound trips from the existing Church Driveway in the morning, delays would increase from zero seconds to approximately 10 seconds for the new project access road approach.

TABLE 5
EXISTING AND EXISTING PLUS PROJECT CONDITIONS: INTERSECTION LEVELS-OF-SERVICE

Intersection	Control	AM Peak Hour LOS & Delay		PM Peak Hour LOS & Delay	
		Existing	Existing +Project	Existing	Existing + Project
Birch Street / Smith Avenue	AWSC	A 8.3" NB	A 8.3" NB	A 7.5" WB	A 7.5" WB
Birch Street / Moores Avenue	AWSC	A 8.7" WB	A 8.8" SB	A 7.8" NB	A 7.8" NB
Birch Street / Project Access	MSSC	A 0" EB	A 9.7" EB	A 8.9" EB	A 9.0" EB
Birch Street / Jacaranda Bellflower	MSSC	B 10.9" WB	B 11.0" WB	A 9.5" WB	A 9.5" WB
Birch Street / Peppertree Court	MSSC	A 9.5" EB	A 9.5" EB	A 9.1" EB	A 9.1" EB

*Legend: AWSC = All Way Stop Control.; MSSC = Minor Street Stop Control
Listed LOS represents approach with highest delay. Vehicle delay is expressed in seconds.*

Vehicle Queuing

A vehicle queuing analysis was conducted to calculate vehicle queue lengths, including the access road's stopped outbound approach to Birch Street. (Queuing calculation worksheets are provided in the Appendix.)

The Birch Street/Smith Avenue and Birch Street/Moores Avenue intersections have calculated 95th-percentile vehicle queue lengths of 50-60 feet (2-3 vehicles) for existing peak conditions. The Birch Street/Jacaranda-Bellflower and Birch Street/Peppertree Court intersections have calculated existing queue lengths of approximately 30-45 feet (2 vehicles). With the added project trips, the calculated queue lengths remain essentially the same as existing conditions, with no anticipated increase in the number of queued vehicles.

The Birch Street/Project Access intersection queues were calculated to be 26 feet (one vehicle) or less with the project. This would be accommodated without impacting vehicle access to housing units.

Signal Warrants

With the proposed project volumes added to the existing volumes, peak hour signal warrant criteria have been evaluated for each intersection. None of the study intersections would qualify for signalization under existing plus project conditions.

Turn Lane Warrants

The project access intersection volumes were compared to Caltrans design guidelines regarding installation of separate turn lanes. For left turn lanes, peak hour traffic volumes are utilized by comparing the advancing and opposing volumes on Birch Street with the percentage of left turning vehicles into the project access road.⁷ The volumes associated with the project conditions are well below the Caltrans minimum thresholds, therefore a left turn lane would not be warranted (left turn lane warrant graphs are provided in the Appendix).

The projected right turn volumes at the project access are also well below minimum thresholds at which right turn lanes would be required (right turn lane warrant graphs are included in the Appendix.)⁸

⁷ California Department of Transportation, *Guidelines for Reconstruction of Intersections*, August 1985.

⁸ Transportation Research Board, *National Cooperative Highway Research Program Report 279, "Intersection Channelization Design Guide"*, November 1985.

PROJECT ACCESS

Vehicle Access

The existing church has a parking lot with two driveways. Most vehicles utilize the north driveway. The project would have a single access road ending in a cul-de-sac. The project would reduce the number of turning locations to/from Birch Street from two locations to one location, which is generally considered a beneficial improvement by reducing vehicle and pedestrian interface areas. The new access road would be positioned opposite existing residential unit driveways on Birch Street. This configuration is commonly found at other intersections in the area, including Peppertree Court located just south of the project site.

Sight Distance

Existing sight distances were measured from the proposed access road location on Birch Street. Sight distances were compared to recommended guidelines as defined in the California Department of Transportation (Caltrans) Highway Design Manual.⁹ For public road intersections Caltrans recommends maintaining “corner” sight distance if possible. The sight distance guidelines are based on the speeds of approaching vehicles on the major street (higher speeds require longer stopping distance).

As a residential street, Birch Street has a prima facie speed limit of 25 mph (there are no speed limit signs between Smith Avenue and Moores Avenue). Radar speed measurements were conducted in order to determine the prevailing speeds.¹⁰ The 85th-percentile speed (the speed at which 85% of the surveyed vehicles are traveling at or below) is the standard threshold used for speed-related calculations. The 85th-percentile speeds were 30.8 mph for the northbound approach and 31.4 mph for the southbound approach.

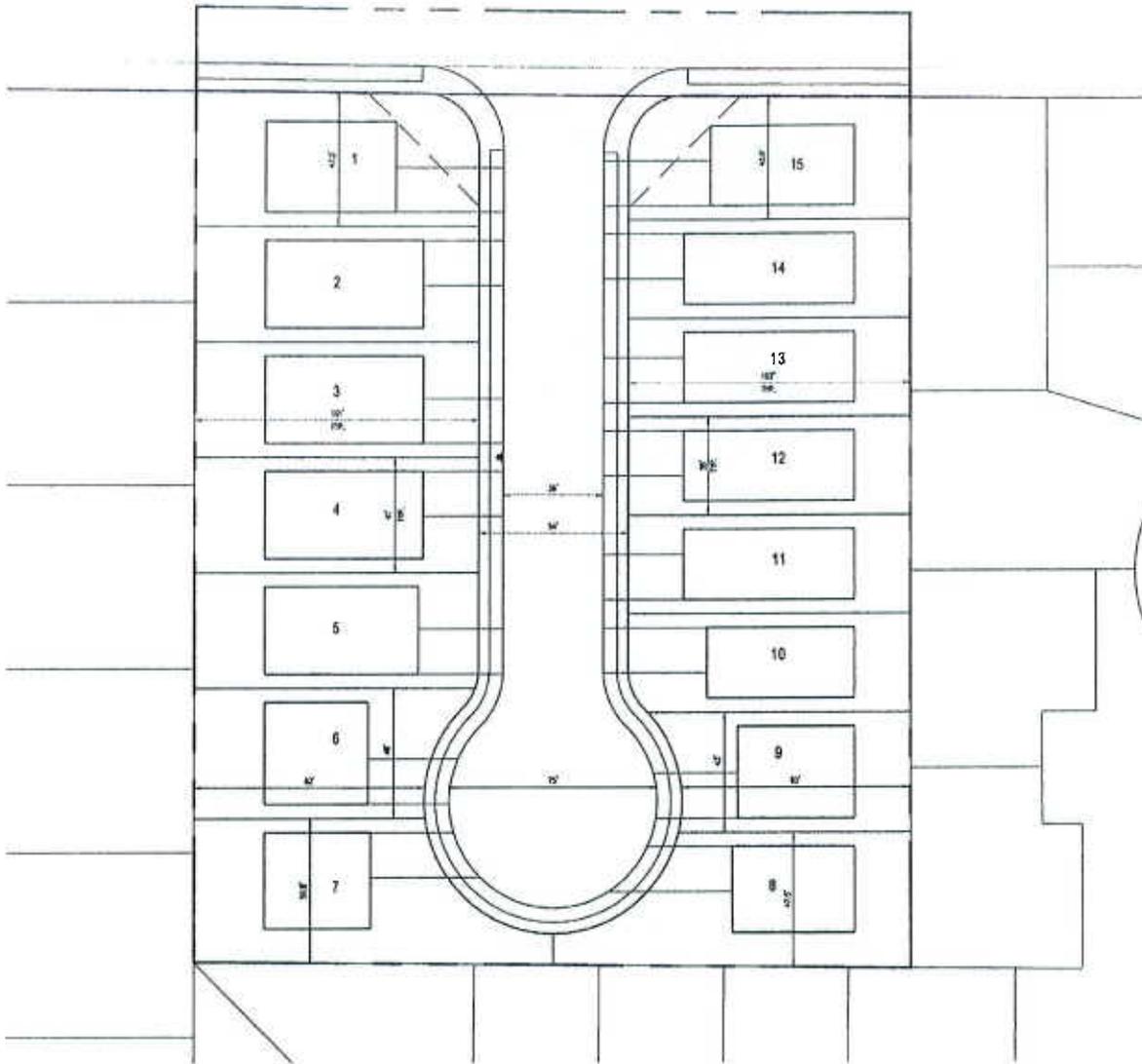
The recommended sight distance based on the surveyed speeds is approximately 360 feet. The sight distances were measured to be longer than 360 feet, therefore exceeding the recommended distance. There are currently no significant visual obstructions from a standard setback and sight distances reach to Smith Avenue to the north and beyond Moores Avenue to the south. It is noted that on-street parking is allowed on Birch Street and sight distance could be reduced if vehicles are parked near the project access intersection. For existing conditions, our field observations identified low on-street parking demand in front of the project site.

Pedestrian and Bicycle Access

With the proposed project development, a pedestrian sidewalk would be constructed around the entire perimeter of the access road and connect with the existing sidewalk on Birch Street. This would provide unobstructed pedestrian access to all of the residential units. With minor street stop control, right-of-way would be provided for pedestrians and bicyclists on Birch Street crossing the access road approach.

⁹ California Department of Transportation, *Highway Design Manual*, Chapter 400, Topic 405, *Intersection Design Standards*, July 1, 2008.

¹⁰ Omni-Means Engineers & Planners, *Radar speed surveys on Birch Street approaches to the project site*, January 26-30, 2014.



CONCEPTUAL SITE PLAN
BIRCH STREET

CITY OF NEWARK CONTRA COSTA COUNTY CALIFORNIA



SCALE: 1" = 20'



DATE: OCTOBER 30, 2013



Carlson, Barber & Olson, Inc.
CIVIL ENGINEERS - SURVEYORS - PLANNERS

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Project Site Plan

Reference  North

omni-means

figure 5