Appendix A

Notice of Preparation, Responses to Notice of Preparation, Draft Infill Environmental Checklist

City of Berkeley

2211 Harold Way Mixed-Use Project

Draft

Infill Environmental Checklist

September 2014

rincon

Environmental Scientists Planners Engineers

2211 Harold Way Mixed-Use Project

Draft
Infill Environmental Checklist

Prepared for:
City of Berkeley
Planning Department, Land Use Division
2120 Milvia Street, 2nd Floor
Berkeley, California 94704

Contact:
Aaron Sage, Senior Planner
(510) 981-7425
Email: asage@ci.berkeley.ca.us

Prepared by:
Rincon Consultants, Inc.
180 Grand Avenue, Suite 400
Oakland, California 94612

September 2014

This report is printed on 30% recycled paper.

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***NOTE**: Technical appendices to this Infill Environmental Checklist are provided on a CD attached to this printed EIR.*

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INFILL ENVIRONMENTAL CHECKLIST

NOTE: This form is intended to assist lead agencies in assessing infill projects according to the procedures provided in Section 21094.5 of the Public Resources Code. The content satisfies the requirements in Section 15183.3 of the CEQA Guidelines, which are included in Appendix H to this report for reference.

1. Project title:

2211 Harold Way Mixed-Use Project

2. Lead agency name and address:

City of Berkeley Planning Department, Land Use Division
2120 Milvia Street, 2nd Floor
Berkeley, California 94704

3. Contact person and phone number:

Aaron Sage, Senior Planner, (510) 981-7425

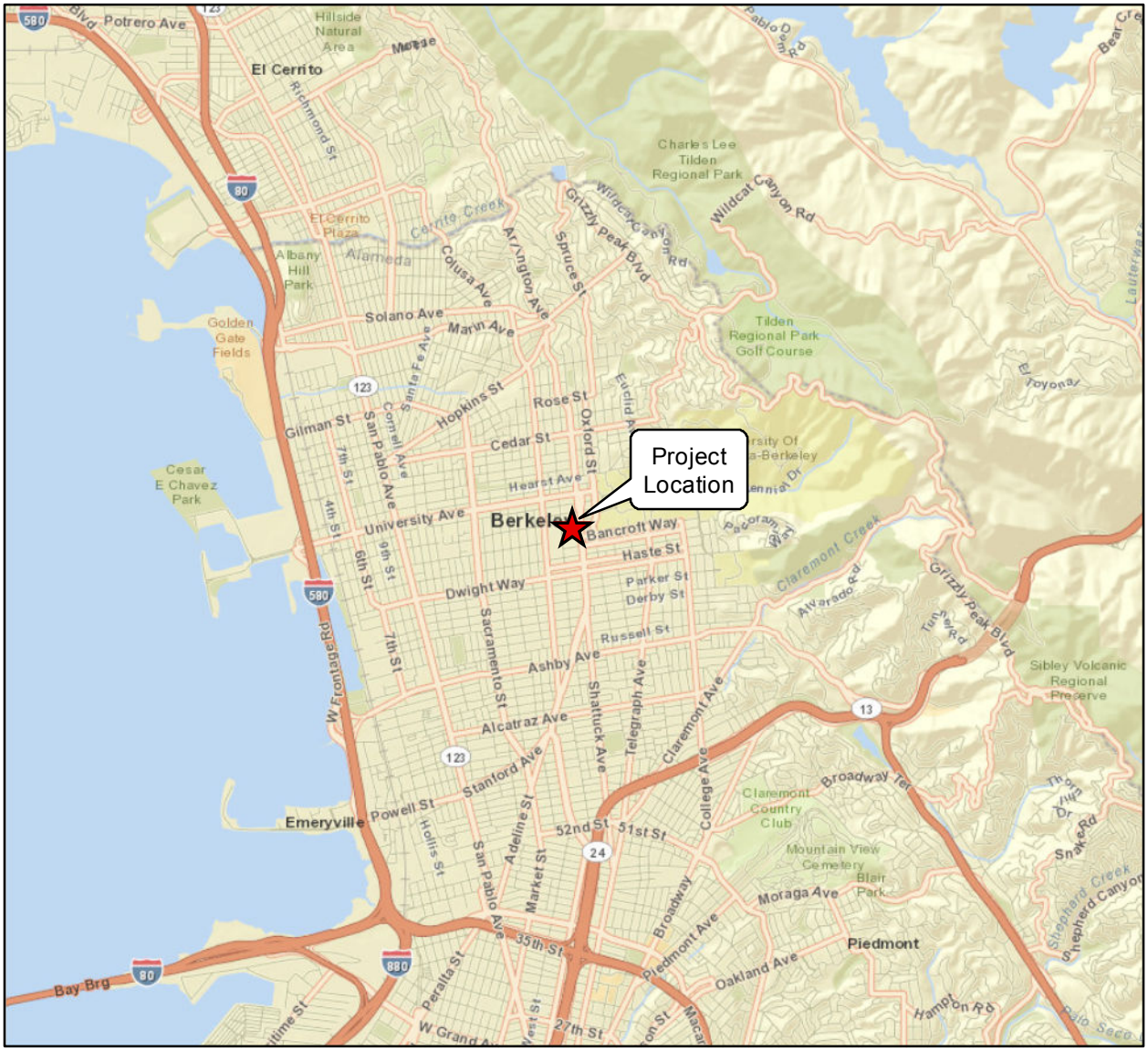
4. Project location:

The project site is a portion of an irregularly shaped but generally square 1.63-acre larger property forming one city block in Downtown Berkeley, bounded by and fronting Shattuck Avenue to the east, Kittredge Street to the south, Harold Way to the west, and Allston Way to the north. The assessor's parcel numbers for the larger property are 057-2027-00600, -00700, -00800, and -00900. The larger property has multiple addresses; the primary address in the assessor's records and in the City's parcel database is 2060 Allston Way. The project site itself – the primary area of proposed new development – is a 34,800 square-foot (0.8-acre), generally "L" shaped portion of the larger property, with frontage on Allston Way, Harold Way and Kittredge Street, and also includes a portion of the basement level of the adjacent Hotel Shattuck Plaza (commonly referred to as the Shattuck Hotel) building beneath its existing retail space and movie theater entrance. The address for the project site is 2211 Harold Way. Figure 1 shows the location of the project site within the region and Figure 2 shows the location of the project site within the vicinity. Figure 3 shows the general configuration of existing development on the larger property.

5. Project sponsor's name and address:

Joseph Penner
HSR Berkeley Investments, LLC

c/o Rhoades Planning Group
1611 Telegraph Avenue, Suite 200
Oakland, California 94612



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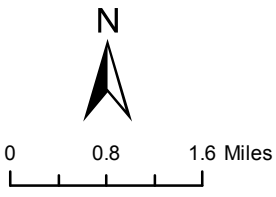
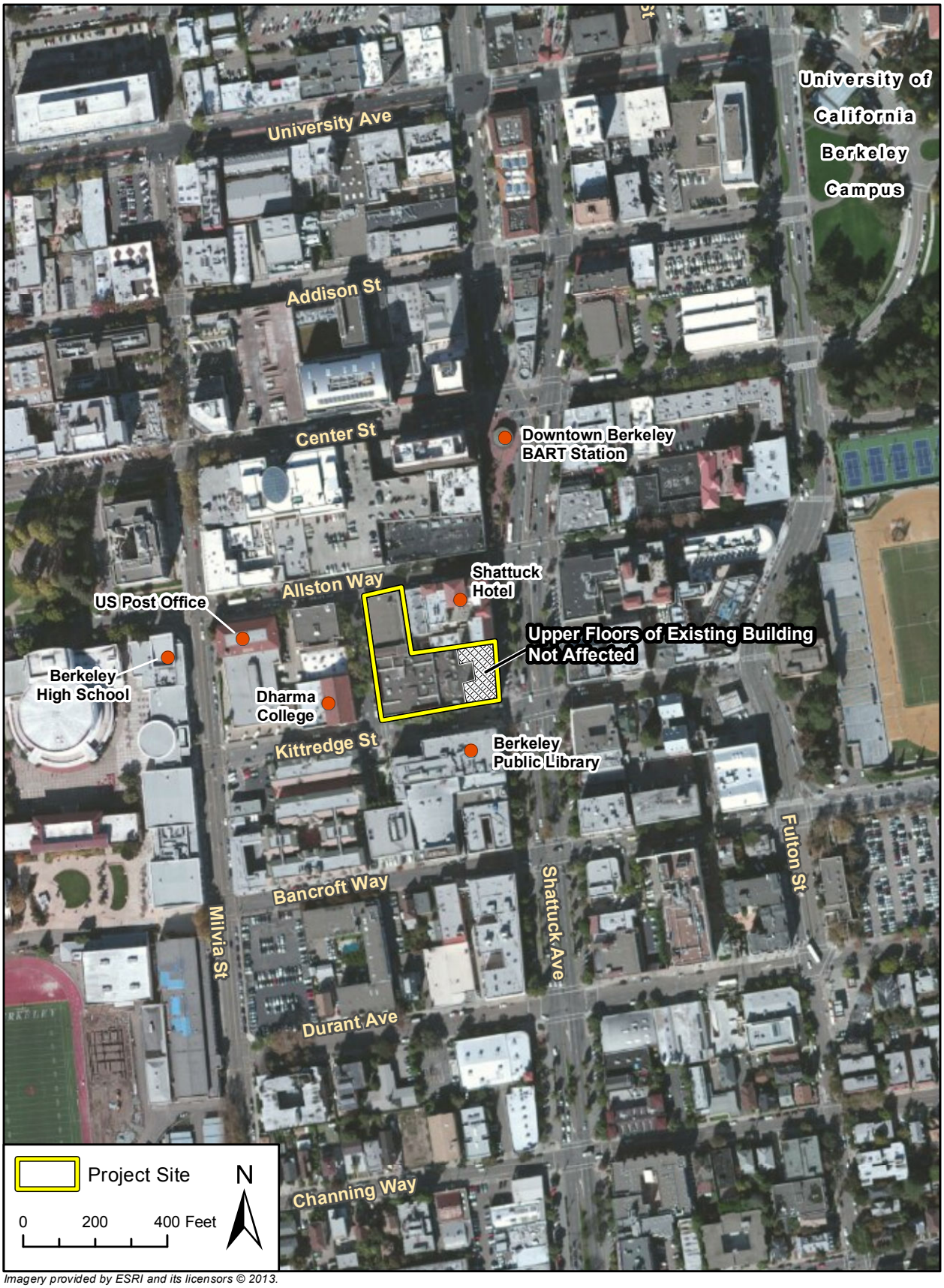


Regional Location Map

Figure 1



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Project Location Map

Figure 2

Imagery provided by ESRI and its licensors © 2014.

Existing Project Site Development

Figure 3

6. General Plan designation:

Downtown (DT); Downtown Area Plan, Core Area

7. Zoning:

Downtown Mixed Use District (C-DMU), Core Area

8. Prior Environmental Document(s) Analyzing the Effects of the Infill Project (including State Clearinghouse Number if assigned):

Final Environmental Impact Report, Berkeley Downtown Area Plan, April 2009, State Clearinghouse Number 2008102032

9. Location of Prior Environmental Document(s) Analyzing the Effects of the Infill Project:

City of Berkeley Planning Department, Land Use Division, 2120 Milvia Street, 2nd Floor, Berkeley, California 94704

10. Description of project:

Project Overview and Design.

The 2211 Harold Way Mixed Use Project is a proposed residential and commercial mixed-use development in Downtown Berkeley. The project's primary street frontage would be along Harold Way, although it would also front on portions of Allston Way and Kittredge Street. The existing structures on the project site would be altered or demolished to accommodate the project, as detailed further below under Site Preparation and Construction. (Please see figures 17 through 20 for the location and extent of proposed alteration and demolition of existing structures.)

The proposed project would have components of various heights, the highest portion reaching 180 feet in 18 stories. The project would maintain a generally continuous street wall at the edge of the abutting streets up to where the building would step back toward the interior of the site. The proposed building would step down to 54 feet (5 stories) along the street fronts, and at the street fronts would be about 10 feet shorter than the adjacent Shattuck Hotel, but would be about three feet taller than the heights of the public library across Kittredge Street and Armstrong College across Harold Way. Building step backs would occur primarily just above the fifth and 13th floors. Proposed materials are predominantly brick veneer panels, pre-cast concrete panels, glass, and glass spandrels.

The ground floor is proposed to accommodate retail and/or restaurant uses, in addition to residential lobby and amenity areas. A six-theater cinema complex would be located on the ground floor and below-ground levels. Parking would be provided in a three-level subterranean garage. The proposed project includes the following components:

- 302 apartment/condominium units (including 28 affordable units) with an average unit size of 729 square feet
- 1,499 square feet of lobby area

- A 1,403 square-foot community room available to be reserved by the residents for parties and other social events (not be available to the general public)
- Residential open space, consisting of 14,535 square feet of shared rooftop terraces and 11,045 square feet of private balconies and decks
- An AC Transit pass for each apartment/condominium unit and every employee for a duration defined during the City's Approval process
- Six new movie theaters to replace the existing Shattuck cinemas, totaling 21,641 square feet
- 10,535 square feet of retail and/or restaurant commercial floor area fronting Allston and Harold Ways and Kittredge Street
- 1,872 square feet of privately owned, publicly accessible open space at the corner of Kittredge Street and Harold Way with improvements including special paving and amenities, and street improvements along Harold and Allston ways including a speed table (please see the discussion below under Offsite Public Improvements for further details)
- 171 parking spaces in a three–level, subterranean parking structure accessed from Kittredge Street, including 11 electric vehicle charging stations and 6 spaces reserved for carsharing vehicles
- 100 secured bicycle storage spaces within the building, including spaces on the first level as well as in the parking garage
- Seismic reinforcement of the basement and ground levels of the existing Shattuck Avenue retail spaces (no exterior modifications). These areas are located below the Shattuck Hotel
- Roof-top solar energy and hot water production
- LEED Gold or equivalent environmental performance

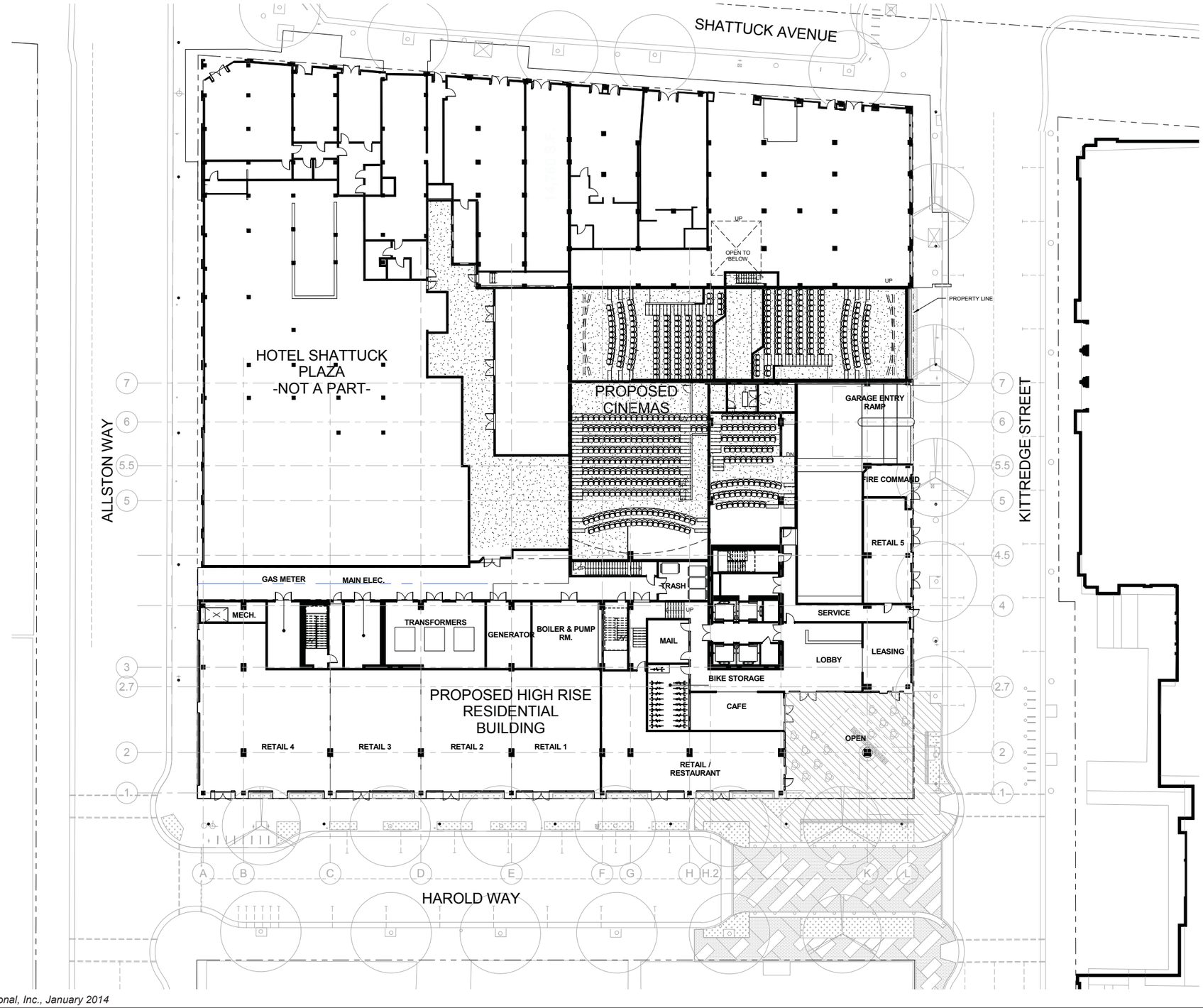
Table 1 summarizes the basic project components.

Table 1
Project Summary

Use	Gross Floor Area (Square Feet)	Units
Residential	278,185 (includes 57,893 square feet for residential circulation)*	302
Retail or Restaurant	10,535	n/a
Cinema	21,641	665 seats
Parking	79,109	171 auto 100 bike
Max. Building Height: 180 feet/18 stories		

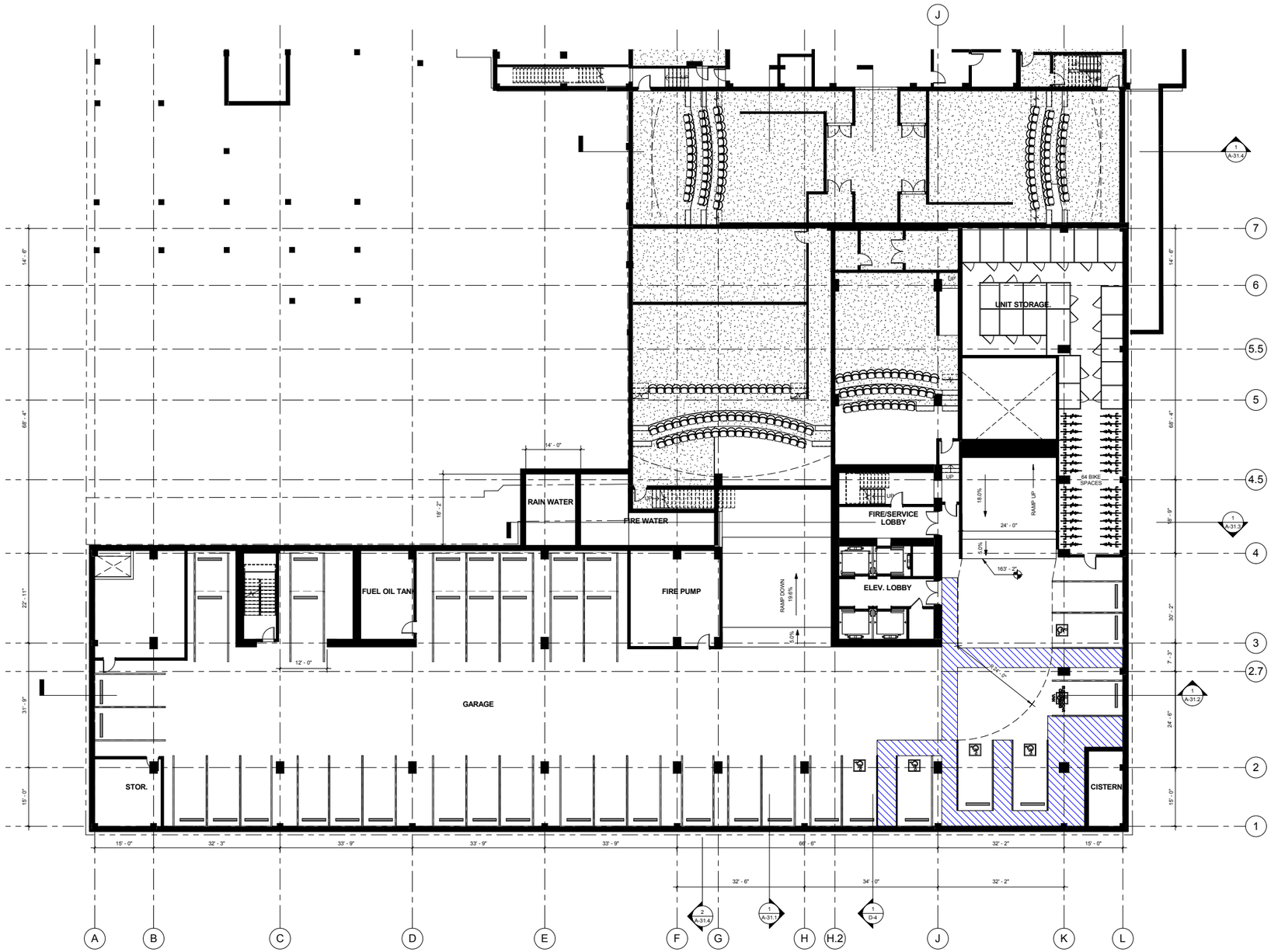
Sources: Rhoades Planning Group and MVE Institutional, Inc., Jan. 2014
** Residential circulation (includes residential core, circulation, amenities, storage, and ancillary spaces at ground floor such as the lobby, leasing office, fire command and bike storage)*

The proposed site plan, selected floor plans and conceptual elevations are shown on Figures 4 through 16.



Proposed Site Plan

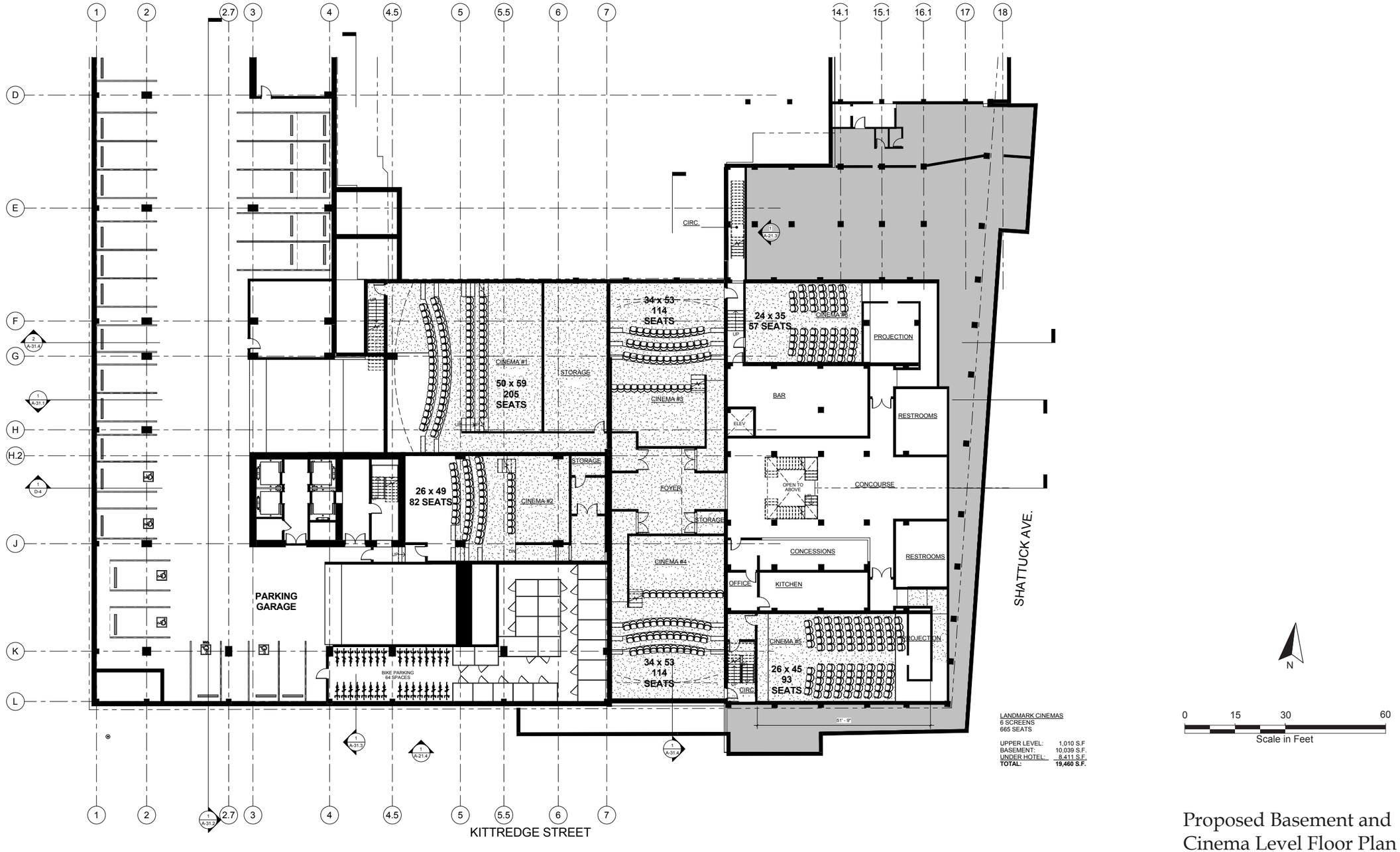
Source: MVEI Institutional, Inc., January 2014



Proposed First Basement Level Floor Plan

Source: MVEI Institutional, Inc., January 2014

Figure 5



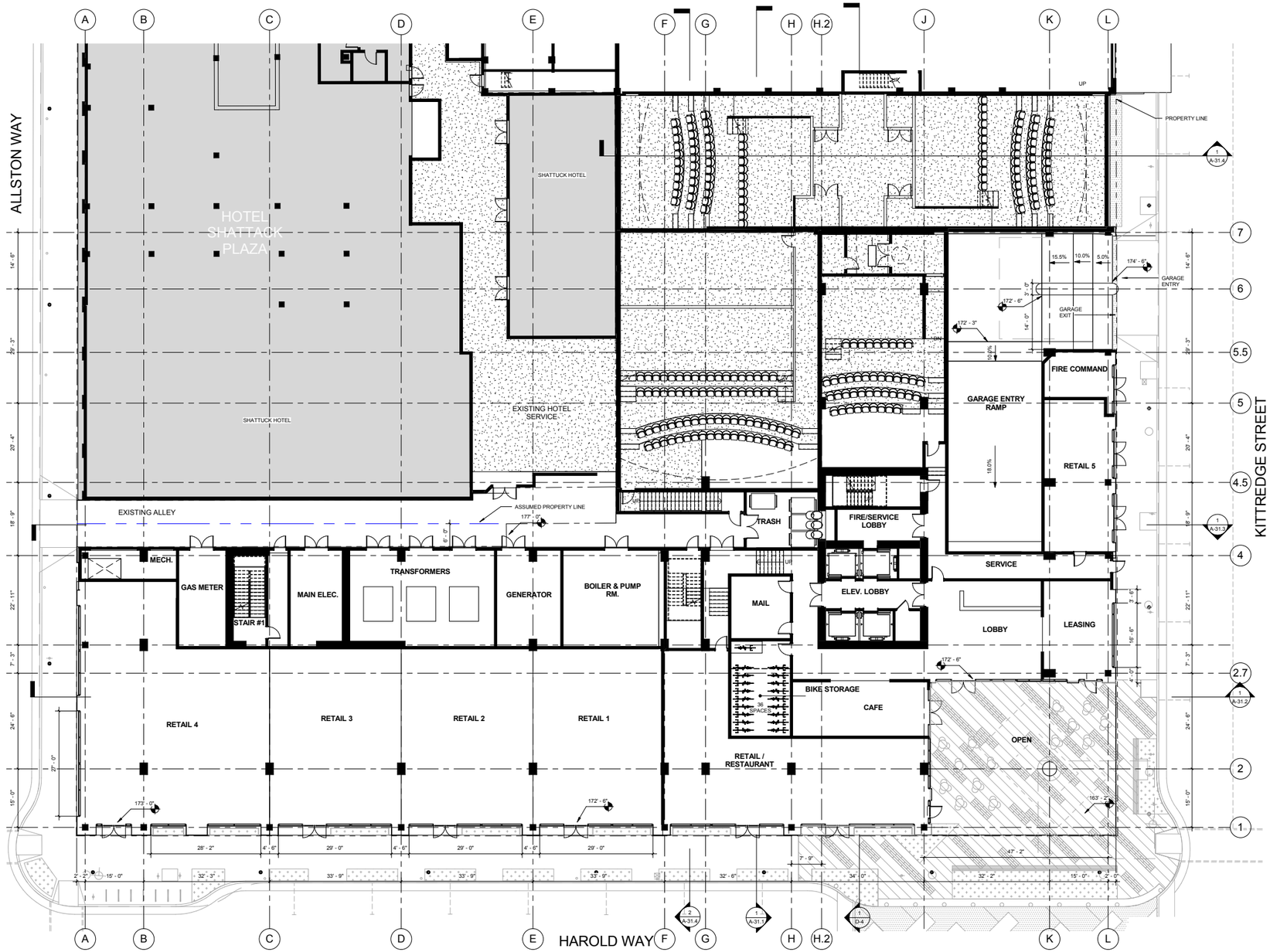
LANDMARK CINEMAS
6 SCREENS
665 SEATS

UPPER LEVEL:	1,010 S.F
BASEMENT:	10,039 S.F.
UNDER HOTEL:	8,411 S.F.
TOTAL:	**19,460 S.F.**

Proposed Basement and Cinema Level Floor Plan

Source: MVEI Institutional, Inc., January 2014

Figure 6



Proposed Ground Floor Plan

Source: MVEI Institutional, Inc., January 2014

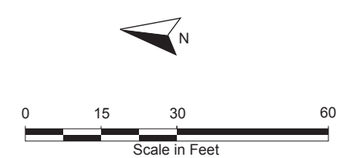
Figure 7

City of Berkeley

Proposed Level 2 Floor Plan

Source: MVEI Institutional, Inc., January 2014

Figure 8
City of Berkeley



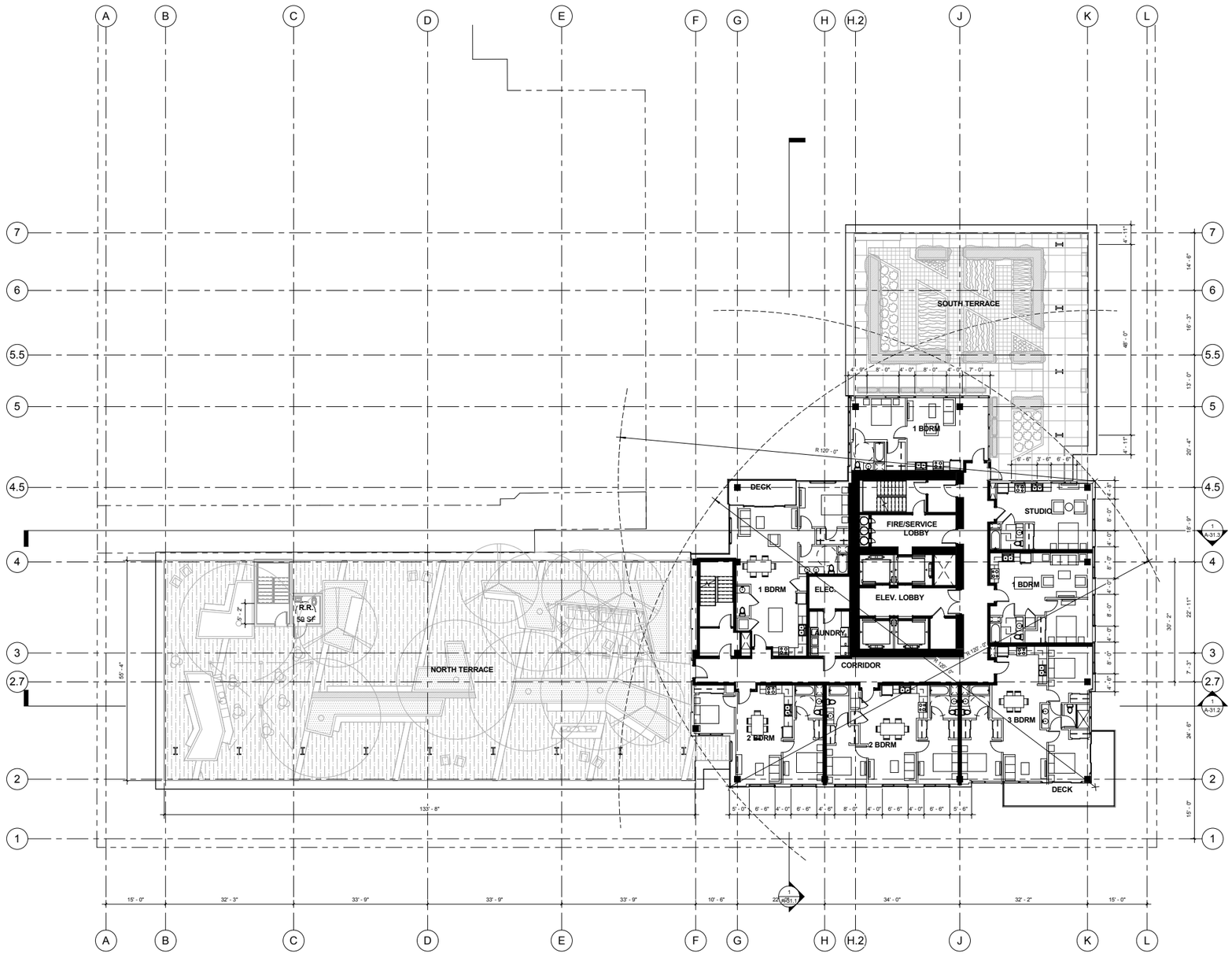
Proposed Level 3 Floor Plan

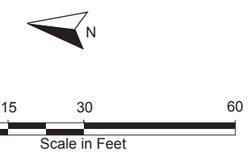
Source: MVEI Institutional, Inc., January 2014

Proposed Levels
9-12 Floor Plan

Source: MVEI Institutional, Inc., January 2014

Figure 10



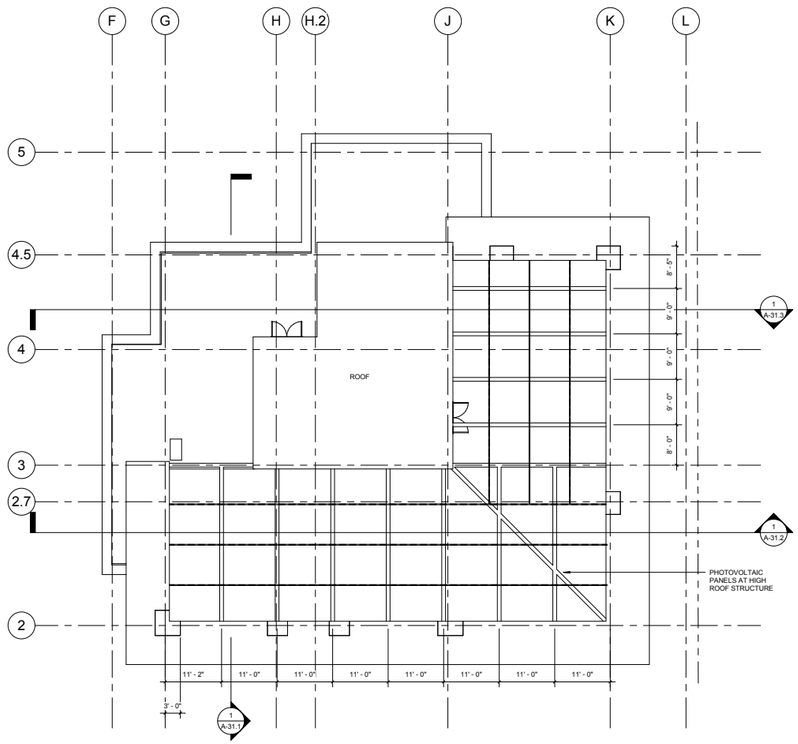


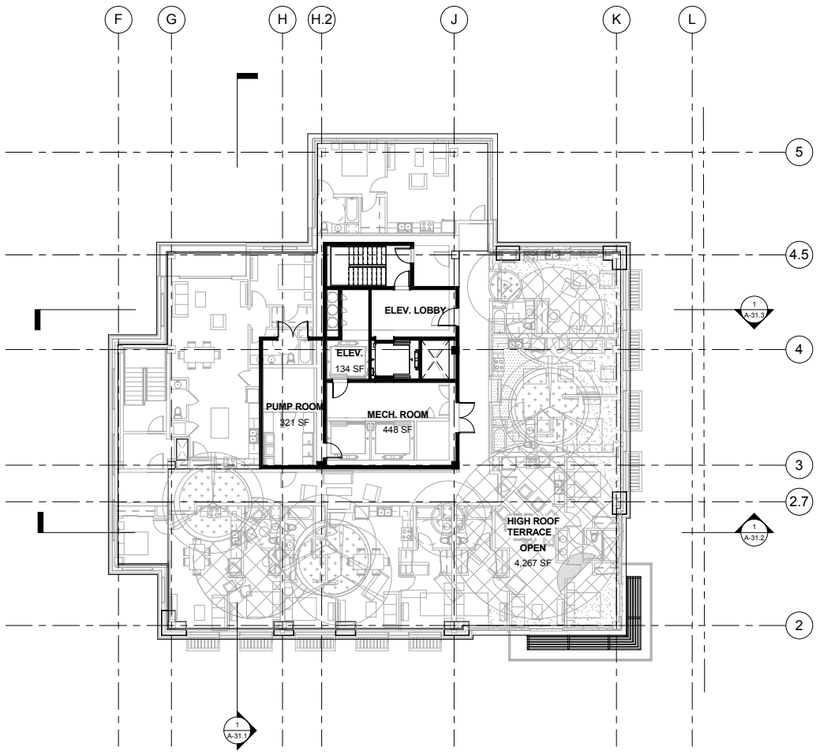
Proposed Level 13 Floor Plan

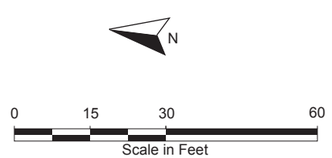
Source: MVEI Institutional, Inc., January 2014

Figure 11

City of Berkeley







Proposed Roof Plans

Source: MVEI Institutional, Inc., January 2014

Figure 12

Proposed Allston Way Elevation

Figure 13

Source: MVEI Institutional, Inc., January 2014

Proposed Kittredge Street Elevation

Figure 14

Source: MVEI Institutional, Inc., January 2014

Source: MVEI Institutional, Inc., January 2014

Proposed Shattuck Avenue Elevation

Figure 15

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Proposed Harold Way Elevation

Source: MVEI Institutional, Inc., January 2014

Figure 16

Vesting Tentative Tract Map. The project applicant proposes two subdivision map requests as a part of the project. The first subdivision map request would adjust the lot lines on the existing condominium parcel map that currently divides the land and air space between the hotel, retail, and the theaters. The second map request would create individual condominium units equal to the number of proposed residential units plus a number of additional condominium spaces (for example, common areas, commercial spaces, parking areas) consistent with the approved project and floor plans at the discretion of the owner. Residential units, whether rented or sold as condominiums, would be subject to the City's affordability requirements (i.e., mitigation or in-lieu fees, and/or on-site below-market-rate units).

Residential Component. The residential component is proposed to be accommodated on floors 2 through 18 of the proposed project. Residential units would be accessed from a residential lobby on Harold Way or from the below-grade parking garage. The unit count and size range are shown in Table 2.

Table 2
Residential Unit Summary

Unit Type	Count	Size Range (square feet)
Studio	73	474 - 774
1 Bedroom	148	583 –979
2 Bedroom	75	752 – 1,085
3 Bedroom	6	1,103
TOTAL	302	n/a

Source: MVE Institutional, Inc., January 2014

If the project's residential units are rented, ten percent of the market rate units, or 28 units, are proposed to be designated as below-market-rate units affordable to households earning 50% or less of Area Median Income.

Proposed private open space for project residents would consist of:

- 10,268 square feet of 13th floor terrace space with outdoor cooking and entertaining facilities, community gardens, and fireplace area, and
- 11,045 square feet of usable balconies and terraces for selected units.

Additionally, the project would include a 1,872-square-foot privately owned public open space plaza.

Theater/Cinema Component. The proposed project includes a six-screen, 665-seat movie theater that would be accessed from Shattuck Avenue via the same entry location as the existing Shattuck Cinemas access. Theater-goers would access theater rooms from a concourse and concession area at the basement level, after descending from street level. The basement level would be lowered by six feet from its current level to provide adequate space for the theater. Three of the theater rooms would have stadium-style seating and would extend vertically from

the basement level to the third floor of the project, and slightly above the second floor of the Hotel Shattuck. A fourth theater room would extend from the basement level to the second floor of the project, and the remaining theater rooms would be entirely within the basement below the ground floor retail strip. The floor area devoted to cinema and related uses would be approximately 21,641 square feet, which would extend under the southern portion of the existing ground floor retail area.

Retail and Restaurant Component. Proposed retail and/or restaurant commercial space would all be on the first (ground floor) level and would be located primarily along Harold Way. One retail space would wrap onto Allston Way at the southeast corner of Harold and Allston ways. A portion of the building on Kittredge Street, between Harold Way and a proposed driveway (described below), would be occupied by retail or restaurant storefronts, as well as the project leasing office. Proposed retail/restaurant space would total approximately 10,535 square feet, which could be divided between several tenants.

Access, Parking, Circulation and Transportation Demand Management. Vehicular access to the project's proposed parking garage would be provided via a two-way driveway from Kittredge Street down to a proposed three-level subterranean parking garage accommodating 171 parking spaces. Of these, 26 would be "small car" spaces and six would be car-sharing spaces. The residential parking spaces would be leased separately from the residential units, and AC Transit passes would be provided, consistent with Section 23E.68.080 of the Berkeley Municipal Code. Of the 171 parking spaces, 11 electric vehicle charging stations would be provided within the garage. Also 100 secure bicycle parking spaces would be provided (36 on the ground level, 64 in the first parking level). The project may make up to 39 parking spaces (equal to the number of spaces on the first basement parking level) available to the public and/or the Shattuck Hotel.

Pedestrian access would be incorporated from all four fronting street sidewalks. The main entrance to the proposed movie theater would be from Shattuck Avenue; the primary residential access would be through the lobby on Harold Way; and retail access would be to each storefront along Harold Way and Kittredge Street. The existing private alley from Allston Way would remain as a service entrance for the hotel and the proposed project.

Offsite Public Improvements. A number of offsite, public streetscape and mobility improvements are proposed. Bulb-outs on both sides of Harold Way would be constructed at its intersections with Allston Way and Kittredge Street. One of these would accommodate public bicycle racks. Approximately 11 new street trees along Harold Way and Kittredge Street would be installed to replace the seven that would be removed. Selected tall street lights would be replaced with shorter pedestrian-scaled lights, and additional pedestrian scaled lights would be installed on Harold Way.

At the corner of the site at Harold Way and Kittredge Street, a 1,872 square-foot exterior plaza area would include a formal entry for the proposed new building and a public space at the northeast corner of Harold and Kittredge (see Figure 6 above). The plaza could provide seating for customers of the proposed restaurant and café spaces. Construction materials would include stone and hardwoods, and planters with steel, cast stone and concrete. The Harold Way crossing area adjacent to Kittredge Street would include an enhanced treatment with textured

or colored paving, landscape pockets, and bollards. Surrounding sidewalks and crossings would be treated with decorative paving. Other improvements would include installation of a speed table to calm traffic and to enhance the public right-of-way providing access to the Berkeley Central Library, the Armstrong College Property, the Library Gardens and the project, and installation of street furniture such as benches, planters with seat walls, and additional bike racks. These improvements would be refined and finalized in coordination with City staff, in accordance with applicable City standards.

Sustainable Building Features. The proposed project is designed to achieve a LEED Gold (or equivalent) rating, as required under Section 23E.68.085.A of the Berkeley Municipal Code. The project's sustainability features include:

- *Compliance with Title 24 of California's Building Standards Code*
- *Roof gardens with flow through planters to reduce heat island effect and capture water*
- *Solar shading for residential units*
- *Rooftop solar panels for hot water and electric power generation*
- *Reuse of captured rainwater for landscape irrigation*
- *Installation of drought-tolerant plants and materials*
- *Transportation Demand Management features as listed above, including unbundled parking (parking that is leased separately from dwelling units), AC Transit passes for each residential household and every commercial employee, six car share and 11 dedicated electric vehicle charging spaces equipped with chargers, and secure bicycle parking.*

Site Preparation and Construction. The existing 1959 Hink's Building would be demolished, and a portion of the Shattuck Hotel building (primarily the 1926 addition and a small portion of the 1913 addition; refer to Figure 3 for the location of these buildings on the site) would be removed or altered to prepare the site for construction of the proposed project, including some alteration of the underground areas. Figures 17 through 20 illustrate the proposed limits of alteration and demolition. Approximately 36,000 cubic yards of grading would be required for site preparation and excavation for the subterranean parking garage. The maximum depth to the bottom of the lowest proposed foundation would be approximately 34 feet below the existing street-level grade. Pile driving would not be required; rather, a mat foundation (a type of continuous thick-slab foundation supporting the entire structure) varying from approximately three to six feet in thickness is proposed. Demolition and construction would require approximately 18-24 months.

Proposed changes to the retail strip and basement under the Shattuck Hotel (which is not owned by the project proponent), include the creation of a new cinema lobby on the ground floor and adding two theaters in the basement. There would be three major components to the associated structural work:

1. Frame out a new 20' by 20' opening in the ground floor to create a two story lobby. This would require new steel beams and girders.
2. Lower the basement floor by six feet to create the head-room necessary for the two new theaters. This would require the removal of the basement slab, soil excavation,

and construction of new footings, retaining walls, and floor in the areas where the new theaters will be located.

3. Seismically strengthen the area affected by the new construction and the retail strip under the Shattuck Hotel. This would require the addition of four concrete shear walls that would extend from the basement to the underside of the second floor. This work would not seismically strengthen the entire building, but only the area directly affected by the new construction. This structural work would not be visible from the exterior of the building.

No other changes are proposed to the Shattuck Hotel building.

Utilities and Services. The proposed project would include utility connections in accordance with requirements of the applicable utility providers for water, wastewater, storm water drainage, power, and telecommunications services. These utilities would connect to existing infrastructure in the vicinity of the site. Pacific Gas & Electric would provide electrical and natural gas services, East Bay Municipal Utility District would provide water and sewer service, and the City of Berkeley would provide storm water services and solid waste services. The project would rely on existing public services, including but not limited to, City of Berkeley police and fire protection, Berkeley Unified School District for schools, and parks and open spaces provided by the City of Berkeley, East Bay Regional Parks District, the County of Alameda and the state of California.

Requested Entitlements. The proposed project is subject to approvals by both the City of Berkeley's Zoning Adjustments Board and the City's Landmarks Preservation Commission. The project would require the following discretionary entitlements from the City of Berkeley:

- *Use Permit for a Mixed Use Development in the C-DMU Zoning District*
- *Use Permit to allow the service of beer, wine and distilled spirits incidental to food service*
- *Administrative Use Permit to allow more than 2,000 square feet of Full Service Restaurant space*
- *Administrative Use Permit to allow amplified live entertainment incidental to food service*
- *Use Permit to construct more than 10,000 square feet of floor area*
- *Use Permit to exceed a building height of 75 feet*
- *Administrative Use Permit to allow mechanical penthouse to exceed maximum building height*
- *Use Permit to demolish a non-residential building (1959 Hink's Building)*
- *Structural Alteration Permit for the alteration of the Shattuck Hotel Landmark structure and site (1926 Hink's Department Store addition and a small portion of 1913 addition to beremoved), and demolition of the 1959 Hink's Building at Allston and Harold Ways.*

Source: MVEI Institutional, Inc., January 2014

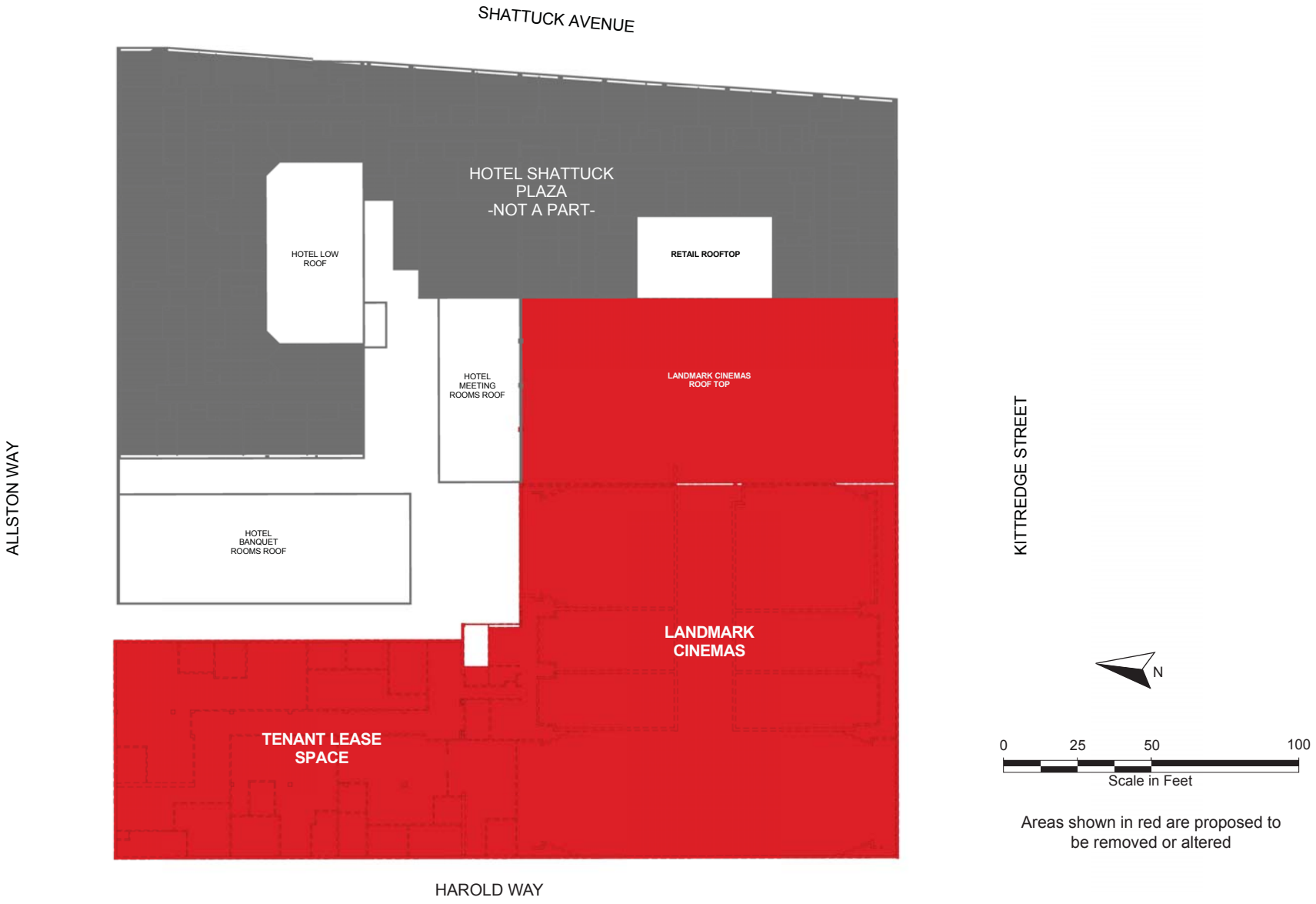
Proposed Basement Level Alteration and Demolition Plan

Figure 17

Source: MVEI Institutional, Inc., January 2014

Proposed Ground Level Alteration and Demolition Plan

Figure 18



Source: MVEI Institutional, Inc., January 2014

Proposed Upper Level Alteration and Demolition Plan

Figure 19

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0 15 30 60
Scale in Feet

Areas shown in red are proposed to be removed or altered

Proposed Section-View
Alteration and Demolition Plan

Source: MVEI Institutional, Inc., January 2014

Figure 20

11. Surrounding land uses and setting:

The larger property is a fully urbanized city block that is generally level, sloping slightly downward towards the west and south. The project site – the area where existing buildings would be altered or demolished and new buildings constructed – is currently occupied by two structures, as shown on Figure 3. The first structure is a small office building with an area of US Post Office boxes on the corner of Alston Way and Harold way, which is also known as the Postal Annex building or 1959 Hink's Building, and was constructed in the 1950s. The second structure, known as the Hink's Addition/Shattuck Cinemas, was the 1926 Hink's addition to the Shattuck Hotel building. This structure has frontage on Kittredge Street and Harold Way, and houses the Shattuck Cinema's movie theaters, part of the Habitot Children's Museum, and office space. Both buildings are two stories in height with a partial third story and a basement level (although the theater rooms occupy the equivalent of two stories of vertical space in what is essentially one level of useable space). Existing uses in the areas to be altered or demolished on the project site are summarized in Table 3.

Table 3
Existing Site Development

USE	NET SQUARE FEET
Office (combination of professional, institutional and medical)	41,170
Shattuck Cinemas	23,474
Children's Museum	7,056

Source: Rhoades Planning Group, January 2014

The structural area affected by the project also extends to a portion of the basement level sitting below the street retail and Shattuck Hotel building, as discussed above under Project Description. Table 4 summarizes the existing characteristics of the project site and surroundings.

Table 4
Existing Site Characteristics

Address:	Multiple, including 2211 Harold Way
Assessor's Parcel Numbers:	057-2027-00600, -00700, -00800, and -0090
Site Size:	38,400 square feet (0.88-acre)
General Plan Land Use Designation:	Downtown (DT); Downtown Area Plan "Core Area"
Zoning Designation:	Downtown Mixed Use District (C-DMU), Core Area
Current Use and Development:	Commercial and Institutional

Table 4
Existing Site Characteristics

Surrounding General Plan Land Use Designations:	North: DT; Downtown Area Plan "Core Area" South: DT; Downtown Area Plan "Corridor" East: DT; Downtown Area Plan "Core Area" West: DT; Downtown Area Plan "Outer Core"
Surrounding Zoning Designations:	North: C-DMU - Core Area South: C-DMU – Corridor Area East: C-DMU – Core Area West: C-DMU – Outer Core Area
Regional Access: Local Access:	Interstate 80/580, State Route 24, SR 123, SR 13 Shattuck Ave, Allston Way, Harold Way, Kittredge St
Public Services:	Water: East Bay Municipal Utility District Wastewater: East Bay Municipal Utility District Fire Protection: Berkeley Fire Department Police Protection: Berkeley Police Department School District: Berkeley Unified, Central Zone

The project site is located in the "Core Area" zoning sub-area of the Commercial-Downtown Mixed-Use (C-DMU) zone within Downtown Berkeley, and is immediately surrounded by commercial, public and institutional land uses, as shown in Figure 2 above. The Downtown Core, as described in the Downtown Area Plan, is known for "its exceptional access to transit, shops amenities, and the UC campus. The Core Area contains BART, the convergence of over thirty bus lines, unique cultural resources, and the highest volume of foot traffic in the East Bay."

As noted above, directly adjacent to the project site and on the same block is the Shattuck Hotel, a City of Berkeley Landmark, whose main lobby and entrance are on Allston Way but which also occupies the airspace above the ground floor retail along the entire block's frontage on Shattuck Avenue. Below the hotel rooms along Shattuck Avenue is a row of commercial storefronts that are part of the project site, as well as the entrance to the Shattuck Cinemas, a 10-screen movie theater. The hotel currently has 199 guest rooms, a restaurant, a bar and meeting rooms.

Commercial uses are located along Shattuck Avenue north of and across from the project site. One block north, around the intersection of Center Street and Shattuck Avenue, are several AC Transit and UC Berkeley Shuttle bus stops serving a number of bus lines, as well as the Downtown Berkeley BART Station on Shattuck Avenue between Allston Way and Addison Street. South of the project site on Shattuck and across Kittredge Street is the Berkeley Central Library, a City of Berkeley and National historic landmark. West of the project site across Harold Way are the Dharma College and the Mangalam Center, both City of Berkeley Landmarks. Commercial land uses and a public parking structure are located north of the project site across Allston Way.

Building heights in the vicinity range from two to three-stories (portions of the Dharma College complex on Harold Way and U.S. Post Office along Kittredge Street) to the 12-story 2140–2144 Shattuck Avenue Chamber of Commerce Building (173 feet) and 14-story 2150 Shattuck Avenue First Savings/Great Western Building (180 feet). The adjacent

Shattuck Hotel is five stories in height, not including the basement. Most buildings around the project site are in the two- to five-story range.

Photographs of the project site and surroundings are shown in figures 21 through 26.

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

None. Although the University of California at Berkeley has no permitting authority over the project, the Draft EIR will be provided to the University for comment.

Photo 1 - View of the Allston Street frontage of the existing "Postal Annex" building, also known as the 1958 Hink's Building, at the corner of Harold Way and Allston Way, looking southwest from across Allston Way. The adjacent one-story 1912 Restaurant Addition portion of the Shattuck Hotel is visible to the left of the frame, and the Dharma College building across Harold Way from the site is visible in the right of the frame.

Photo 2 - View of the corner of and the Allston Way and Harold Way frontages of the 1958 Hink's Building looking southeast from across Allston Way.

Existing Project Site Development

Figure 21

Photo 3 - View of the Harold Way frontage of the Shattuck Cinemas building, also known as the 1926 Hink's addition to the Shattuck Hotel, looking north from across Kittredge Street.

Photo 4 - View of the Kittredge Street-fronting portion of the 1926 Hink's Addition/Shattuck Cinemas building looking northeast from across Kittredge Street.

Existing Project Site Development

Figure 22

Photo 5 - View of the Kittredge Street-fronting portion of the 1926 Hink's Addition/Shattuck Cinemas building looking west from Kittredge Street.

Photo 6 - View of the Kittredge Street-fronting portion of the 1926 Hink's Addition/Shattuck Cinemas building looking west from Kittredge Street. A portion of the 1913 Shattuck Hotel addition is in the right of the frame.

Existing Project Site Development

Figure 23

Photo 7 - View of the Shattuck Hotel building, immediately adjacent to the project site, looking northwest from across Shattuck Avenue.

Photo 8 - View of the Shattuck Hotel building, immediately adjacent to the project site, looking south from Shattuck Avenue at Center Street. The adjacent BART station plaza and commercial development are in the right of the frame.

Surrounding Development

Figure 24

Photo 9 - The south side of Shattuck Avenue, looking northwest from Shattuck Avenue at Allston Way across from the Shattuck Hotel.

Photo 10 - The public library building across Kittredge Street from the project site, looking southwest from across Shattuck Avenue. A portion of the Shattuck Hotel is visible in the rightside of the frame.

Surrounding Development

Photo 11 - Development on Shattuck Avenue and Allston Way east of the project site, viewed looking east from across Shattuck Avenue.

Photo 12 - The adjacent Shattuck Hotel, and development to the east beyond, viewed from Allston Way looking east. A portion of the project site is visible at the right of the frame.

Surrounding Development

Figure 26

SATISFACTION OF APPENDIX M PERFORMANCE STANDARDS

CEQA *Guidelines* Section 15183.3 allows lead agencies to streamline the environmental review process for eligible infill projects by removing analysis of the following types of environmental effects from the CEQA document:

1. If an effect was addressed as a significant effect in a prior EIR for a planning level decision (such as the Downtown Area Plan), then, with some exceptions, that effect need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR.

2. An effect need not be analyzed, even if it was not analyzed in a prior EIR or is more significant than previously analyzed, if the lead agency makes a finding that uniformly applicable development policies or standards, adopted by the lead agency or a city or county, apply to the infill project and would substantially mitigate that effect.

A copy of Section 15183.3 is provided in Appendix H to this document.

In order to be eligible for streamlined review under Section 15183.3, a project must meet the performance standards contained in Appendix M of the *Guidelines*. The following section provides information demonstrating that the infill project satisfies these standards

1. *Does the non-residential infill project include a renewable energy feature? If so, describe below. If not, explain below why it is not feasible to do so.*

   Pursuant to CEQA *Guidelines* Appendix M, "Where a project includes some combination of residential, commercial and retail, office building, transit station, and/or schools, the performance standards in this Section that apply to the predominant use shall govern the entire project." The proposed project is predominantly residential; therefore, this standard does not apply. However, it may be noted that the proposed project would include rooftop solar panels and an integrated solar water heating trellis.

2. *If the project site is included on any list compiled pursuant to Section 65962.5 of the Government Code, either provide documentation of remediation or describe the recommendations provided in a preliminary endangerment assessment or comparable document that will be implemented as part of the project.*

   The project site is not included on any list compiled pursuant to Section 65962.5 of the Government Code. Review of Cortese List sites indicates that the closest listed property is a closed Underground Storage Tank at 2001 Allston Way, currently the site of the YMCA.

3. *If the infill project includes residential units located within 500 feet, or such distance that the local agency or local air district has determined is appropriate based on local conditions, of a high volume roadway or other significant source of air pollution, as defined in Appendix M, describe the measures that the project will implement to protect public health. Such measures may include policies and standards identified in the local general plan, specific plans, zoning code or community risk reduction plan, or measures recommended in a health risk assessment, to promote the protection of public health. Identify the policies or standards, or refer to the site specific analysis, below. (Attach additional sheets if necessary.)*

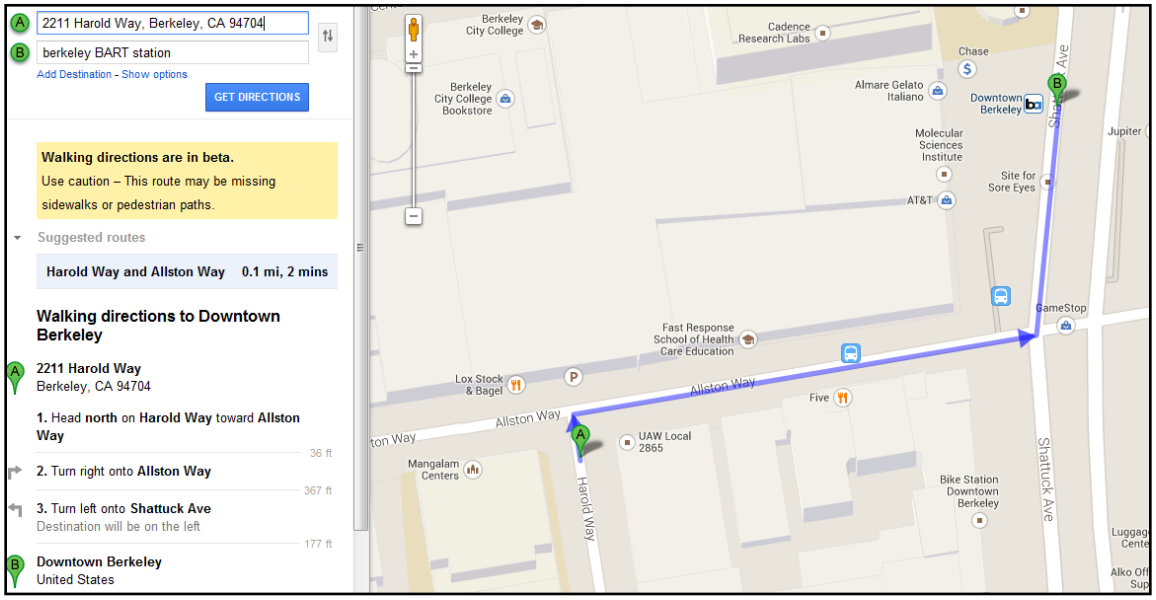
   The proposed project does not include residential units located within 500 feet, or such distance that the local agency or local air district has determined is appropriate based on local conditions, of a high-volume roadway or other significant source of air pollution. High-volume roadways are defined as freeways, highways, or urban roads with traffic volumes of at least 100,000 vehicles per day, or rural roads with 50,000 vehicles per day. The nearest such roadway is Interstate 80, approximately two miles from the project site.

4. *For residential projects, the project satisfies which of the following?*

   ☐ *Located within a low vehicle travel area, as defined in Appendix M. (Attach VMT map.)*

   ☒ *Located within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor. (Attach map illustrating proximity to transit.)*

   The project site is approximately 0.15 miles from the main entrance to the Berkeley BART station at Shattuck Avenue and Center Street (it is closer to a second BART entrance at Shattuck Avenue and Allston Way), and to numerous bus stops, as illustrated in the map excerpt below.



☐ *Consists of 300 or fewer units that are each affordable to low income households. (Attach evidence of legal commitment to ensure the continued availability and use of the housing units for lower income households, as defined in Section 50079.5 of the Health and Safety Code, for a period of at least 30 years, at monthly housing costs, as determined pursuant to Section 50053 of the Health and Safety Code.)*

5. *For commercial projects with a single building floor-plate below 50,000 square feet, the project satisfies which of the following?*

[Not Applicable]

☐ *Located within a low vehicle travel area, as defined in Appendix M. (Attach VMT map.)*

☐ *The project is within one-half mile of 1800 dwelling units. (Attach map illustrating proximity to households.)*

6. *For office building projects, the project satisfies which of the following?*

[Not Applicable]

☐ *Located within a low vehicle travel area, as defined in Appendix M. (Attach VMT map.)*

☐ *Located within ½ mile of an existing major transit stop or within ¼ of a stop along a high quality transit corridor. (Attach map illustrating proximity to transit.)*

7. *For school projects, the project does all of the following:*

[Not Applicable]

☐ *The project complies with the requirements in Sections 17213, 17213.1 and 17213.2 of the California Education Code.*

☐ *The project is an elementary school and is within one mile of 50% of the student population, or is a middle school or high school and is within two miles of 50% of the student population. Alternatively, the school is within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor. (Attach map and methodology.)*

☐ *The project provides parking and storage for bicycles and scooters.*

8. *For small walkable community projects, the project must be a residential project that has a density of at least eight units to the acre or a commercial project with a floor area ratio of at least 0.5, or both.*

The proposed project would represent a density of approximately 343 units per acre (302 units proposed on 0.88 acres), which is more than eight units to the acre. The proposed floor area ratio of approximately 9.0 is greater than 0.5.

ENVIRONMENTAL FACTORS AFFECTED

The infill project could potentially result in one or more of the following environmental effects.

☐ Aesthetics	☐ Agriculture and Forest Resources	☐ Air Quality
☐ Biological Resources	☒ Cultural Resources	☐ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☒ Transportation/Traffic	☐ Utilities/Service Systems	☒ Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

☐ I find that the proposed infill project WOULD NOT have any significant effects on the environment that either have not already been analyzed in a prior EIR or that are more significant than previously analyzed, or that uniformly applicable development policies would not substantially mitigate. Pursuant to Public Resources Code Section 21094.5, CEQA does not apply to such effects. A Notice of Determination (Section 15094) will be filed.

☐ I find that the proposed infill project will have effects that either have not been analyzed in a prior EIR, or are more significant than described in the prior EIR, and that no uniformly applicable development policies would substantially mitigate such effects. With respect to those effects that are subject to CEQA, I find that such effects WOULD NOT be significant and a NEGATIVE DECLARATION, or if the project is a Transit Priority Project a SUSTAINABLE COMMUNITIES ENVIRONMENTAL ASSESSMENT, will be prepared.

☐ I find that the proposed infill project will have effects that either have not been analyzed in a prior EIR, or are more significant than described in the prior EIR, and that no uniformly applicable development policies would substantially mitigate such effects. I find that although those effects could be significant, there will not be a significant effect in this case because revisions in the infill project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION, or if the project is a Transit Priority Project a SUSTAINABLE COMMUNITIES ENVIRONMENTAL ASSESSMENT, will be prepared.

☒ I find that the proposed infill project would have effects that either have not been analyzed in a prior EIR, or are more significant than described in the prior EIR, and that no uniformly applicable development policies would substantially mitigate such effects. I find that those effects WOULD be significant, and an infill ENVIRONMENTAL IMPACT REPORT is required to analyze those effects that are subject to CEQA.

_____ _____

Signature Date

_____

Printed Name and Title

ENVIRONMENTAL CHECKLIST

As described below and reflected in the organization and content of the checklist, this Infill Environmental Checklist is different from the Appendix G CEQA *Guidelines* Checklist commonly used for CEQA Initial Studies. This Infill Environmental Checklist is based on Appendix N CEQA *Guidelines* Infill Environmental Checklist form. The Appendix N Infill Environmental Checklist form and this Infill Environmental Checklist are intended to document a qualifying infill project's eligibility for streamlining pursuant to CQEA Guidelines Section 15183.3 and to assist in making the determinations required by Section 15183.3, including whether the infill project's effects have been addressed in a planning level decision or by uniformly applicable development policies.

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) For the purposes of this checklist, "prior EIR" means the environmental impact report certified for a planning level decision, as supplemented by any subsequent or supplemental environmental impact reports, negative declarations, or addenda to those documents. "Planning level decision" means the enactment or amendment of a general plan, community plan, specific plan, or zoning code. (Section 15183.3(e).)

4) Once the lead agency has determined that a particular physical impact may occur as a result of an infill project, then the checklist answers must indicate whether that impact has already been analyzed in a prior EIR. If the effect of the infill project is not more significant than what has already been analyzed, that effect of the infill project is not subject to CEQA. The brief explanation accompanying this determination should include page and section references to the portions of the prior EIR containing the analysis of that effect. The brief explanation shall also indicate whether the prior EIR included any mitigation measures to substantially lessen that effect and whether those measures have been incorporated into the infill project.

5) If the infill project would cause a significant adverse effect that either is specific to the project or project site and was not analyzed in a prior EIR, or is more significant than what was analyzed in a prior EIR, the lead agency must determine whether uniformly applicable development policies or standards that have been adopted by the lead agency, or city or county, would substantially mitigate that effect. If so, the checklist shall explain how the infill project's implementation of the uniformly applicable development policies

will substantially mitigate that effect. That effect of the infill project is not subject to CEQA if the lead agency makes a finding, based upon substantial evidence, that the development policies or standards will substantially mitigate that effect.

6) If all effects of an infill project were either analyzed in a prior EIR or are substantially mitigated by uniformly applicable development policies or standards, CEQA does not apply to the project, and the lead agency shall file a Notice of Determination.

7) Effects of an infill project that either have not been analyzed in a prior EIR, or that uniformly applicable development policies or standards do not substantially mitigate, are subject to CEQA. With respect to those effects of the infill project that are subject to CEQA, the checklist shall indicate whether those effects are significant, less than significant with mitigation, or less than significant. If there are one or more "Significant Impact" entries when the determination is made, an infill EIR is required. The infill EIR should be limited to analysis of those effects determined to be significant. (Sections 15128, 15183.3(d).)

8) "Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures will reduce an effect of an infill project that is subject to CEQA from " Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how those measures reduce the effect to a less than significant level. If the effects of an infill project that are subject to CEQA are less than significant with mitigation incorporated, the lead agency may prepare a Mitigated Negative Declaration. If all of the effects of the infill project that are subject to CEQA are less than significant, the lead agency may prepare a Negative Declaration.

9) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to an infill project's environmental effects in whatever format is selected.

10) The explanation of each issue should identify:

    a) the significance criteria or threshold, if any, used to evaluate each question; and
    b) the mitigation measure identified, if any, to reduce the impact to less than significance.

RELATIONSHIP OF THE PROPOSED PROJECT TO THE DOWNTOWN AREA PLAN EIR ANALYSIS

As required by CEQA, the City prepared a Final Environmental Impact Report (FEIR), State Clearinghouse Number: 2008102032, which analyzed the environmental impacts of the Downtown Area Plan (DAP). The City Council certified the DAP FEIR as meeting the requirements of CEQA on March 20, 2012 by adopting Resolution 65647 – N. S. On March 20, 2012, the Berkeley City Council adopted the 2012 Downtown Area Plan (DAP) by adopting Resolution 65648 – N. S. The following written checklist cites the specific portions of the DAP EIR, including page and section references, containing the analysis of the Project's significant effects. The written checklist also indicates the applicable mitigation measures from the DAP

EIR that will be incorporated into the Project. The written checklist follows the same Chapter organization used by the DAP EIR.

The following checklist of "environmental factors potentially affected" should be viewed in the context that the DAP FEIR, as it states at page 1-5, "constitutes and is designated as a 'program environmental impact report' for purposes of Public Resources Code Section 21090(a). Any new projects (such as private or public development activities) that might occur within the Downtown Area following adoption of the DAP will be subject to subsequent environmental review pursuant to CEQA. Such review will determine whether:

- A project is exempt from further review;
- The activity is adequately covered by this EIR, so that no further CEQA review is needed……."

This Report presents the written checklist that cites the specific portions of the DAP EIR, including page and section references, containing the analysis of the Project's potential significant effects. For this reason, this analysis begins with reference to the Project Description in the DAP EIR to demonstrate that the Project is generally included within the overall plan area buildout described in the Project Description for the DAP EIR.

Chapter 3: Project Description.

The Project Description for the DAP FEIR contains numerous references that relate to the project site, project location, and proposed type of development, including the following.

- Page 3-14, final bullet on the page: The text notes: "Within the Inner Core Area, not more than four mixed-use structures built to a height of up to 180 feet each are assumed, on parcels exceeding 13,000 square feet.
- Page 3-16: Figure 3.6: EIR Building Height Assumptions. The project site is designated as "Inner Core Area: Mixed Use" which generally allows building heights up to 85 feet but within which two hotels up to 225 feet and four other buildings ("non-hotels") up to 180 feet would be allowed.
- Page 3-16: Figure 3.6: EIR Building Height Assumptions. The EIR identifies a building height assumption for the project site of 225 feet.

Although the project site was modeled in the DAP EIR with a taller building than proposed, its development would also be within the overall buildout assumptions for the Inner Core Area, which includes development on several Inner Core sites with buildings of 180 to 225 feet in height. As noted on Page 3-15, these developments could potentially occur on a number of Inner Core sites, not only those chosen for conceptual modeling purposes, and might not occur specifically on those where the development was modeled.

As also discussed in the DAP EIR Project Description (Page 3-4), the DAP EIR assumed that implementation of the Plan would enable the City of Berkeley to accommodate up to 3,100 additional dwelling units and nearly 1,000,000 square feet of non-residential space (largely comprised of University uses) within the 20-year planning horizon. The project's proposed 302 new units and cinema and retail/restaurant space are within this projected buildout.

As described above, the Project is specifically identified in the Project Description in all relevant terms – subject property, use type and building height. As documented throughout this Infill Environmental Checklist, development on the subject property is included in all aspects of the DAP EIR.

Finally, pursuant to Section 23E.68.065 of the Berkeley Municipal Code, "Projects that may create potentially significant environmental impacts as described in the Downtown Area Plan Final EIR shall be subject to the adopted Mitigation Monitoring Program adopted concurrently with this Chapter. (Ord. 7229-NS § 1 (part), 2012)."

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

Note: Pursuant to California State law (Senate Bill 743, 2013), aesthetic impacts of a mixed-use residential/commercial project (to the extent they are not also historic resource impacts) on an infill site within a transit priority area, such as the proposed project, may not be considered significant impacts on the environment.

Downtown Area Plan Summary.

The 2009 DAP EIR analyzes aesthetics in pages 4-1 through 4-35. It reviews the potential for development accommodated by the DAP to result in adverse effects on scenic vistas, light or glare that could adversely affect day or nighttime views, degradation of the visual character of city or specific neighborhoods, damage to scenic resources including historic buildings, increased shading on parks, open space, or schoolyards, and winds exceeding 36 mph for more than 1 hour during the day.

The Aesthetics section of the DAP Environmental Impact Report includes discussion of scenic vistas within and through downtown Berkeley. According to the DAP EIR, in addition to the scenic vistas identified in the 1994 Downtown Design Guidelines, "some more distant scenic vistas have iconic status in the history of Berkeley, such as views from the campus over Downtown to the Golden Gate Bridge and Bay, or views from the Campanile on campus through Downtown towards the Bay." The DAP EIR concludes that the 3,100 new dwelling units and the 1,000,000 square feet of non-residential space that could be accommodated by the approved plan would result in unavoidable significant aesthetic impacts on views from Downtown Berkeley toward the Berkeley Hills through the introduction of tall, dense structures. The DAP EIR requires site specific visual analysis for structures proposed between Shattuck Avenue and Oxford Street, but concludes that this impact would remain unavoidable:

- *Impact AES-l:* DAP-Related Reduction in Views of the Berkeley Hills from the Downtown Area. Development anticipated under DAP would result in a reduction in the existing views of the Berkeley Hills available to observers traveling east along east-west streets in the Downtown Area (e.g., University Avenue, Center Street and Allston Way). This would represent a *potentially significant* impact.

    - *Mitigation AES-l:* Conduct Site-Specific Visual Analysis for Buildings Proposed Between Shattuck Avenue and Oxford Street. In order to reduce development-related impacts on existing views of the Berkeley Hills for observers traveling east along east-west streets in the Downtown Area, the City should require site-specific visual analysis for proposed buildings that have the potential to affect existing view corridors to determine the extent to which such structures may interfere with existing views of the Berkeley Hills, and should consider whether stepping back such buildings is feasible and would result in a substantial reduction in impact.

      While the measures incorporated in the DAP and the additional recommended mitigation measures could reduce potential adverse impacts related to views of the Berkeley Hills from the Downtown Area, the impact would remain *significant and unavoidable.*

A second aesthetic impact identified in the DAP EIR involves the potential for shadowing of the West Crescent open space at the western entrance to the UC Berkeley campus. The EIR requires that shadow effects be analyzed for structures proposed to reach 85 feet or taller near the eastern edge of Downtown. Depending on the ability to modify the envelopes of such structures that would cast shadows on the Crescent, the impact may remain unavoidable:

- *Impact AES-2:* DAP-Related Shadows Falling onto University "Crescent." Shadow modeling indicates that development anticipated under the DAP would be expected to add new shadows that would fall on the "crescent" open space on the western edge of the University of California campus (between Addison Street and University Avenue) in the late afternoons/early evenings during fall and winter. This would represent a *potentially significant* impact.

    - *Mitigation AES-2:* Evaluate Shadow Effects for Proposed Structures near the Eastern Edge of the Downtown Area. The extent of the impact on the Crescent will depend on the location, height and bulk of structures to the southwest. While the impact may be significant, it is not possible to determine with any certainty the level of impact. Accordingly, all structures with a proposed height of 85 feet or more to be located within an area bounded by Addison Street on the north, Oxford Street on the east, Allston Way on the south, and Shattuck Avenue/Shattuck Square on the west shall be evaluated in a site-specific basis to determine the extent to which such buildings may cast shadows within the Crescent. Modifications to building heights, bulk or location should be considered as a way to reduce such shadowing.

      If the locations, heights and bulk of new structures in the immediate vicinity of the Crescent can be modified to effectively reduce afternoon shadowing within the area during the fall and winter (as demonstrated by project-specific shadow analysis under Mitigation AES-2, above), the impact could be reduced to a level of less than significant. However, absent such modifications for this purpose, the impact would remain *significant and unavoidable.*

Impacts to scenic resources were determined to be less than significant in the DAP EIR. The EIR states that "There are no scenic resources that meet the narrow definition of scenic resources typically used in CEQA Guidelines…it is the "main street" character of the Downtown Area characterized by zero lot line buildings (no setbacks), retail frontages, and the relatively large number of buildings from earlier eras that establish its visual character. " The DAP EIR does conclude that aesthetic impacts to the visual resources associated with historic buildings and street trees would be less than significant through implementation of DAP policies including those calling for preservation of important historic buildings and street trees.

In regard to light and glare impacts, the DAP EIR concluded that impacts would be less than significant through implementation of DAP policies intended to reduce glare and night lighting.

<u>Aesthetics and Urban Design Policy Setting.</u>

The project site and vicinity are located within an urban area in the City of Berkeley and lie entirely within the DAP planning area. The primary policy documents used to review aesthetics and urban design issues as part of the City's review of development applications in the Downtown area include the DAP itself and the City's Downtown Design Guidelines (2012).

It should be noted here that, pursuant to California State law (Senate Bill 743, 2013), aesthetic impacts of a mixed-use residential/commercial project on an infill site within a transit priority

area, such as the proposed project, may not be considered significant impacts on the environment. (It should also be noted that, pursuant to CEQA Statute Section 21099.d, in this context "aesthetic impacts do not include impacts on historical or cultural resources.")

Project-Specific Impacts

a) A photo documentation site reconnaissance tour of the project site vicinity was conducted on December 4, 2013 in order to document current visual conditions and compare viewshed conditions to those analyzed in the DAP EIR. The photographic data was also used to determine which viewpoints warranted further analysis in photosimulations. Appendix A includes a cataloged list of the viewshed imagery recorded, and serves as a reference for viewshed impact discussions analyzed in this report.

   Of the locations identified in the Downtown Design Guidelines as "important vistas," three would be affected by the proposed project, as demonstrated in the viewshed reconnaissance exercise (Appendix A):

   - the Allston Way corridor (see Figure 28a on Page 64 below);
   - the terminations of Kittredge Street (see Figure 29a); and
   - the north and south termination of Harold Way.

   In none of these cases would views to the hills from Downtown be affected by the proposed project, as such views are defined and wholly framed by the existing structures fronting the street. This framing would not change with the implementation of the proposed project, and the project would not block views to the hills from these vantage points. This observation is consistent with DAP EIR Mitigation Measure AES-1, which requires "site-specific visual analysis for buildings proposed between Shattuck Avenue and Oxford Street." This mitigation measure would apply only to DAP-affected development proposals east of Shattuck Avenue. Parts of the proposed new buildings could potentially intermittently appear within views toward the Berkeley Hills while travelling along other east-west or north-south streets within or near to the Downtown area, but from no such viewpoint would substantial portions of views to the hills be blocked.

   The Downtown Design Guidelines also broadly identify preserving existing views of the bay from Downtown as a goal. No public views of the bay can be directly accessed from or through the project site, except for a distant view from the UC Berkeley campus. The DAP EIR analyzed views of the bay from the top of the UC Berkeley Campanile (Sather Tower, officially). Figures 4.1A and 4.1B of the DAP EIR illustrate that structural massing potentially accommodated by buildout under the DAP would affect the view of Berkeley buildings in the foreground of the view, but would not substantially effect the bay view or long-range views across the bay. Thus the proposed project would not result in impacts to direct views of the bay from the top of the Campanile (the viewpoint shown in figures 4.1A and 4.1B of the DAP EIR).

   The DAP EIR included a survey of potential viewshed impacts that the DAP could facilitate as a result of its broad policy objective of selective and thoughtfully-planned urban intensification. The viewshed photo simulation work in the DAP EIR focused on height and massing concepts that would be generally permitted under the DAP. Because the structural

massing used in the DAP EIR modeling was conceptual, additional simulation modeling was conducted for the proposed 2211 Harold Way project. Using the December 4, 2013 survey imagery (Appendix A), combined with policy direction from the aforementioned planning policy documents, City of Berkeley staff selected four viewshed perspective locations that warranted further visual impact analysis through the photosimulation. Figure 27 presents a map indicating the viewshed perspective locations. Table 5 lists the viewshed locations and visual features accessible therefrom.

Milvia @ Allston Crosswalk looking east. Figure 28a illustrates the view east towards the Berkeley Hills from the mid-crosswalk location. This location provides a streetscape-framed distant view of the Berkeley Hills, and close-range view of the Downtown Berkeley streetscape. This location provides a direct linear sightline toward the visual backdrop of the Berkeley Hills. As shown, the views of the Hills features would not be affected by the proposed project from this location. The new construction would extend into the sky, increasing the development profile within the view; in the context of the DAP, this change would be an anticipated result of the desired urban intensification and is within the overall impacts identified in the DAP EIR for buildout of the plan area as a whole. As mentioned throughout this report, the DAP allows for, and the DAP EIR included in its buildout projections, a 225-foot tall building within the project site. Compared to Figure 4.7B in the DAP EIR, which shows a similar view, neither the modeled DAP view for development on the site nor the proposed project simulated view would block views to the hills.

Table 5
View Locations and Visual Features

Figure # and (Photosim Perspective Number)	Location and Direction of Viewshed	Visual Features in Viewshed
28a (View 1)	Milvia @ Allston, west midblock crosswalk looking east. (Compare to Figure 4.7B in the DAP EIR.)	This location provides a streetscape-framed distant view of the Berkeley Hills, and close-range view of the Downtown Berkeley streetscape.
29a (View 2)	Milvia @ Kittredge, west sidewalk looking east. (Not simulated in DAP EIR.)	This location provides a streetscape-framed distant view of the Berkeley Hills, and close-range view of the Downtown Berkeley streetscape.
30a (View 3)	Shattuck @ Center, northeast corner looking southwest. (Not simulated in DAP EIR.)	This location provides a view toward the Shattuck Hotel building and the west streetscape frontage of Shattuck Avenue including the Berkeley BART portal plaza complex.
31a (View 4)	UC Berkeley Campanile upper base looking west. (Not simulated in DAP EIR.)	This location provides a view west of the San Francisco Bay, the northern end of Alcatraz Island, and the south tower of the Golden Gate Bridge.

Milvia @ Kittredge looking east/northeast. Figure 29a illustrates the view east northeast towards the Berkeley Hills from the sidewalk on the east edge of the Berkeley High School campus. This location also provides a direct linear sightline toward the visual backdrop of the Berkeley Hills. As shown, the views of the hills would not be affected by the proposed project from this location. The proposed new building would extend into the the sky view as framed in this photograph (but less of the overall sky view experienced in person); however, in the context of the DAP and DAP EIR, this incremental growth in the built environment is an anticipated result of the desired urban intensification envisioned in the DAP.

Shattuck @ Center, northeast corner looking southwest. This location provides a view (Figure 30a) dominated by the urban streetscape of Shattuck Avenue in Downtown Berkeley. This location provides a view toward the Shattuck Hotel building and the west streetscape frontage of Shattuck Avenue including the Downtown Berkeley BART station's main entry plaza. Most prominent from this location is the background view of the Shattuck Hotel with its façade generously articulated with windows and its ground floor storefronts. Also prominent at the edge of the frame is the density of the Chase Bank building and the BART plaza, with its unique cylindrical entry structure. As shown, the project would extend into the sky above the site – part of the anticipated effect of overall Downtown buildout under the DAP - but views of the hills would not be affected by the proposed project from this location.

The proposed project would also alter this vista by introducing building massing into the perspective. This would alter the view of approximately 50% of the parapet line of the block (and a portion of the block to the north) from this location by changing the background view from sky to the proposed new building. The articulation of the massing of the proposed project, however, results in an interesting play on the parapet height of the urban scene, and adds a visual texture to the streetscape viewshed. While this increase in intensity may be considered adverse by some viewers, the proposed project could be viewed as imparting a more interesting skyline vista to Downtown Berkeley from this location. It should be noted that from other viewpoints along Shattuck Avenue, the backdrop with the proposed project would vary, shifting the background of portions of the hotel's roof line from proposed building to sky as one moves along the street.

UC Berkeley Campanile base looking west. Of the seven perspective viewsheds from this location examined in the photo survey (Appendix A), Figure 31a illustrates the most sensitive view west from the Campanile toward the San Francisco Bay and the Golden Gate. The viewshed is from one side of the base of the Campanile structure (rather than the top as modeled in the DAP EIR), along the north edge of the top of the landing, adjacent to the balustrade. From this location, a central axial view of the Bay and Golden Gate, framed by the Campanile Way/Frank Schlessinger Way promenade and its fronting academic buildings and mature landscaping, is available. According to UC Berkeley's 2004 *Landscape Heritage Plan*, Campanile Way is a historically significant component of the campus, and east-west views along the Way are a character-defining feature of this area of the campus. Therefore, this issue is discussed further in the cultural resources section of this checklist.

Source: City of Berkeley & Environmental Vision, February 2014

Simulation Viewpoint Locations

Figure 27

Existing view from Milvia Street at Allston Way looking east (VP 1)

Visual simulation of Proposed Project

Photosimulations
Milvia at Allston

Source: Environmental Vision, February 2014

Figure 28a

Visual simulation of Proposed Project

Existing view with Proposed Project overlaid.

Visual Impact Calculation
Milvia at Allston

Source: Environmental Vision, February 2014

Figure 28b

Existing view from Milvia Street at Kittredge Street looking east (VP 2)

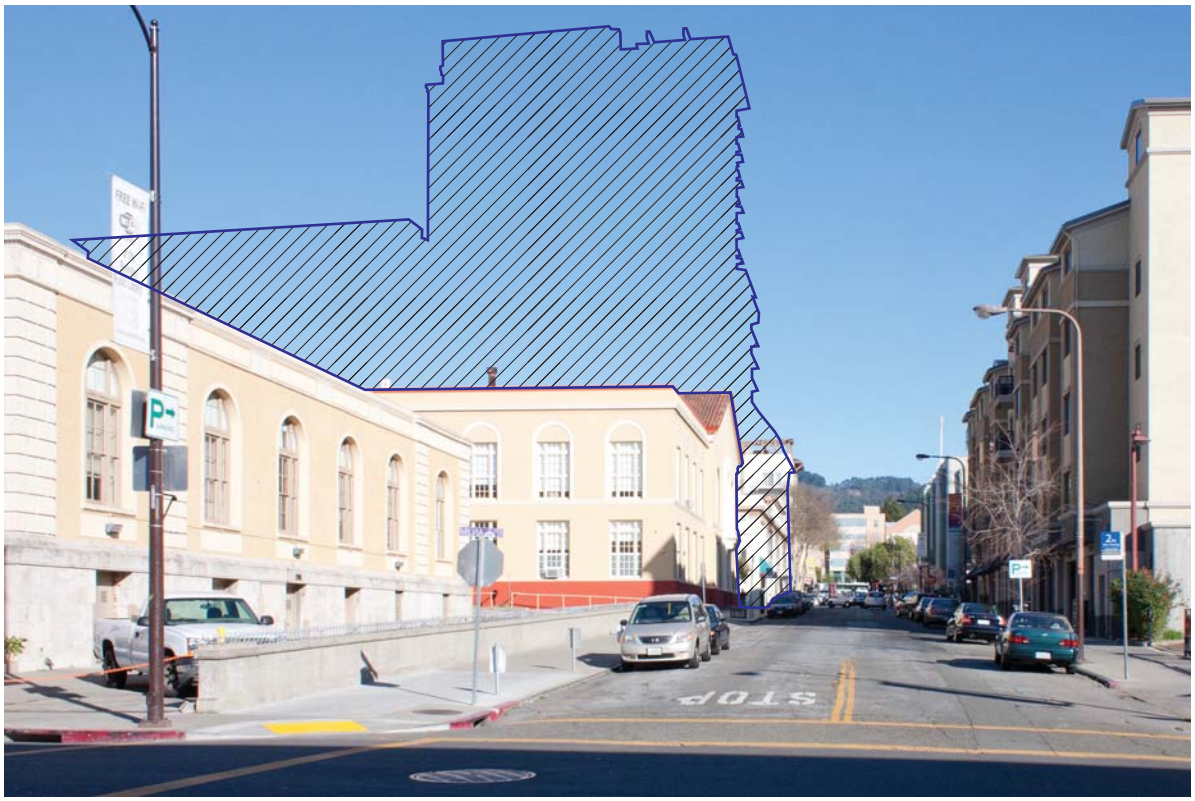
Visual simulation of Proposed Project

Photosimulations
Milvia at Kittredge

Source: Environmental Vision, February 2014

Figure 29a

Visual simulation of Proposed Project



Existing view with Proposed Project overlaid.

Visual Impact Calculation
Milvia at Kittredge

Source: Environmental Vision, February 2014

Figure 29b

Figure 31b provides an isolated and telescoped frame of the San Francisco Bay view in order to more clearly show details of the view change. This subset of the image is indicated by a dashed box. The image is then modified with an insertion of an outline of the proposed project's massing. Within this geometry, the modeling shows that the view of Alcatraz Island within this viewshed would be the feature most affected by the proposed project. Approximately 85%percent of the view of the island from this viewpoint would be eliminated. In contrast, the proposed project would not substantially affect the views of the bridge. The effect on the vista of Alcatraz Island, a significant landmark under the City's definition of "View Corridor,"[1] would be considered adverse. It should be noted that the degree of intrusion into the view of the island would vary with one's specific location at the base of the Campanile; specifically, the island is substantially visible only from the north (viewer's right) side of the stairway, while it is mostly blocked by existing trees when standing at the south (viewer's left) and middle of the stairway, from which the proposed project would not be visible.

The view obstruction discussed above would be similar to, but less adverse than, what was modeled for the site in the DAP EIR. This is because the assumption for buildout in the DAP EIR had the 225-foot building located on the northern portion of the site, potentially blocking more of the bay and island view from this specific location. On the other hand, this viewing location was not specifically discussed and analyzed in the DAP EIR, which focused on the view from the top of the Campanile. The project would not block any bay views from the top of the Campanile (refer to DAP EIR Figure 4.1B).

In summary, scenic vistas and identified important views would not be adversely affected by the proposed project, with the exception of the view of the bay and Alcatraz Island from the base of the Campanile, which would be partially obstructed. This is considered an adverse aesthetic impact of the project. As required by California State law (Senate Bill 743, 2013, which says that aesthetic impacts of a mixed-use project on an infill site within a transit priority area may not be considered significant impacts on the environment), **this impact cannot be considered significant** on aesthetic grounds alone. However, as noted earlier, due to the potential historic significance of the east-west views along Campanile Way, this issue will be discussed in the EIR's analysis of cultural resources impacts.

b, c) The proposed project would have adverse effects if it would "substantially damage" scenic resources. This topic was thoroughly analyzed in the DAP EIR, and this analysis focuses on the project site and visual character of the immediate vicinity. As noted at the beginning of this section, the aesthetic effects of this project are not considered significant due to SB 743, but the following analysis is provided nonetheless for the purpose of public discussion.

As noted in the project description, the subject property is fully developed and there are no rock outcroppings, trees or other substantial natural features located on the property. Although there are seven street trees on Harold Way and Kittredge Street that would be removed during site preparation and construction, they are not of sufficient stature or type to be considered substantial scenic resources. The project includes replacing them with approximately 11 street trees of species acceptable to the City's Street Trees and Urban Forestry Management Program.

[1] See Berkeley Municipal Code Section 23F.04.010.

The *Infill Environmental Checklist* form incorporated into the State CEQA *Guidelines* also lists "historic buildings within a state scenic highway" as a type of scenic resource warranting examination. The project site is not visible from a State scenic highway, and there are no such highways within the DAP planning area. Therefore, by definition, the proposed project would not result in an adverse effect on scenic resources associated with a State scenic highway pursuant to the Infill Environmental Checklist.

The DAP EIR notes that the grouping of a large number of buildings from earlier eras establishes visual character in the vicinity of the project site, and that "this built environment…would be regarded as scenic resources by local residents and visitors." Because the project would not physically alter the built environment surrounding the project site, it would not "substantially damage" any off-site buildings or features regarded as "scenic resources." Furthermore, as discussed further below, the project would utilize durable, attractive materials that are compatible with surrounding buildings, and would generally conform to the Downtown Design Guidelines that were developed to promote aesthetic quality in new projects. Therefore, the project's aesthetic impacts on the built environment surrounding the project site would be less than significant. However, as required by CEQA, the project's impacts on historical resources, both on the project site and in its immediate vicinity, are discussed below in Item V, *Cultural Resources*.

The DAP incorporates numerous policies that strive to reduce the potential to adversely impact the visual character of the Downtown. These include directives to:

- *preserve, reuse, and restore historic structures and sites*
- *maintain "main street" character and pedestrian orientation*
- *allow for variety is massing and scale*
- *require street-level commercial facades and entrances without street setbacks*
- *promote open spaces and plazas.*

The proposed project would result in the removal of a portion of an identified historic structure. As noted below under Item V, *Cultural Resources,* the project appears to be inconsistent with certain adopted City policies related to protection of historic resources, and this issue will therefore be studied further in the EIR.

The proposed project includes a number of urban design features that appear to implement urban design policy directives adopted in the DAP - features that would improve the aesthetic environment and condition of the affected block faces. By association, these would be expected to beneficially affect the neighborhood's urban visual character. These features include

- *a variety of massing and scale;*
- *inclusion of new retail frontage on Allston and Harold Ways and Kittredge Street;*
- *the inclusion of an open plaza on the corner of Harold Way and Kittredge Street; and*
- *Streetscape amenities.*

Existing view from Shattuck Avenue at Center Street looking south (VP 3)

Visual simulation of Proposed Project

Photosimulations
Shattuck Center

Source: Environmental Vision, February 2014

Figure 30a

Visual simulation of Proposed Project

Existing view with Proposed Project overlaid.

Visual Impact Calculation
Shattuck Center

Source: Environmental Vision, February 2014

Figure 30b

Existing view from UC Berkeley Campanile at plaza level looking west (VP 4)

Visual simulation of Proposed Project

Photosimulations
Campanile

Source: Environmental Vision, February 2014

Figure 31a

Visual simulation of Proposed Project

Existing view with Proposed Project overlaid.

Visual Impact Calculation
Campanile

Source: Environmental Vision, February 2014

Figure 31b

The DAP called for updates to the City's Downtown Design Guidelines to update the design vision as appropriate and to address the potential changes envisioned by the DAP, and these updates have been incorporated into the current Downtown Design Guidelines. Among the key site design guidelines for new construction applicable to the project are the following (guidelines applicable to historical resources will be discussed in the EIR):

Frontages, Setbacks and Heights Guidelines:

1. *Maintain a continuous zero-setback "build-to line" at the ground floor at the edge of all Downtown streets where commercial and higher levels of activity is anticipated, as has been indicated in the map "Public Serving Frontages" (see Figure 43). The only exceptions to this may be to: provide suitably defined, usable open space; create a special corner feature; provide recessed storefront entrances; create an arcade; to provide a narrow band of landscaping (see Figure 37); or to give emphasis to a civic building.*

2. *On Downtown streets without commercial or higher levels of activity, bring buildings close to the street-facing property line while also providing landscaping.*

3. *Continue the rhythm of 15-30 foot spacing of structural bays and/or enframed storefronts at ground level, in order to establish visual continuity with existing buildings and create pedestrian scale.*

4. *Design recessed storefront entrances so they do not exceed 50% of the width of the storefront, nor ten feet in depth.*

5. *Consider massing alternatives that would reduce shadow impacts on streets and relate new construction to the scale of nearby buildings, such as use of upper-story setbacks. Consider ways that buildings with upper-story setbacks can avoid the "wedding cake effect," such as by setting street-level entrances back to the same vertical plane as upper floors and/or by incorporating features that tie the building together visually (see Figure 38).*

6. *For new construction projects located on narrow east-to-west streets and over 75 feet in height, prepare an analysis of shade impacts on public open spaces and pedestrian sidewalks across the street. East of Shattuck, analyze visual impacts of ridgeline views to the east. Based on such analysis/ analyses, consider upper floor setbacks, setbacks at street corners or other techniques to mitigate negative impacts. (see #12 for Wind Impacts.)*

7. *Place entrances to storefronts and other ground floor uses so that they are accessible directly from the public sidewalk, not internal lobbies.*

8. *Design entrances of individual buildings to contribute positively to the street. Main entries should be clearly identifiable and inviting, and located to encourage interaction between open space and pedestrians.*

9. *New curb cuts in the Downtown core area are discouraged. Existing driveways may be relocated or replaced.*

10. *Maintain and reinforce Downtown's historic streetwall at the property line. Upper floor setbacks are desirable above 60 feet (usually the fifth floor for residential construction), and should be used above 75 feet.*

11. *Along Oxford Street, consider ways to link Downtown to the University campus, such as with usable open space, public art and other features.*

12. *For buildings over 85 feet in height, prepare an analysis of potential wind impacts. Protect sidewalks and public open spaces by deflecting downward wind drafts ("wind shear") by using building setbacks, recesses, projections, and other devices (see Figure 40). For projects with potentially significant wind impacts, evaluate massing options with a wind tunnel or other simulation, such as are available at UC Berkeley's College of Environmental Design.*

13. *Consider how the building's form and orientation can take advantage of sun and shade to appropriately heat and cool the building.*

Although, as noted previously, there is a DAP policy to require street-level commercial facades and entrances without street setbacks, it should be noted that site design Guideline 1 for new construction above specifically allows for exceptions to "provide suitably defined, usable open space; create a special corner feature; provide recessed storefront entrances…" The proposed corner plaza would generally meet the intent of the allowed exception; the remaining facades would generally extend to the sidewalk line. The number of curb cuts would remain at one (the existing driveway on Harold Way would be removed and a new driveway is proposed on Kittredge Street).

Shadow impacts are discussed above under Item I, *Aesthetics*, and would be less than significant, as would wind impacts, as discussed under Item X, *Land Use and Planning*. Upper floor setbacks are included in project design, and the ground floor retail spaces would be accessible directly from the public sidewalk. See further discussion of DAP development policies under Item X, *Land Use and Planning*.

The Guidelines reflect the potential for buildings up to 180 feet in height as envisioned in the DAP for specific plan subareas. Many of the issues raised in these guidelines are addressed throughout this report. Others are addressed in the project description, such as bringing development to the lot line, and locating commercial uses at the ground floor. The project would maintain a generally continuous street wall at the edge of the abutting streets up to where the building would step back toward the interior of the site.

Selected "Corner Sites" Guidelines:

1. *Accentuate the corner as the focal point of the site (see Figure 50). This may be accomplished by building to the maximum height, utilizing setbacks, providing definition at the streetwall with landscaping or architectural elements, or providing open space or main entries at the corner.*

3. *Both street fronts are individual facades. (See also Building Design: Facades.)*

The project's tallest feature would be located at the corner of Kittredge Street and Harold Way. Architectural elements and a 1,872 square-foot public plaza are also proposed at this corner. The two main street fronts on either side of the primary corner include full façade design.

Applicable "All Buildings" Guidelines:

1. *Consult Berkeley's Zoning Ordinance for specific height limits for sub-areas within the Downtown.*

2. *Respect the height of neighboring buildings, and provide a sense of continuity and enclosure which avoids abrupt changes in height.*
3. *On the corner sites, locate the tallest elements at the corners, particularly at major intersections, except where ridgeline views may be obstructed.*

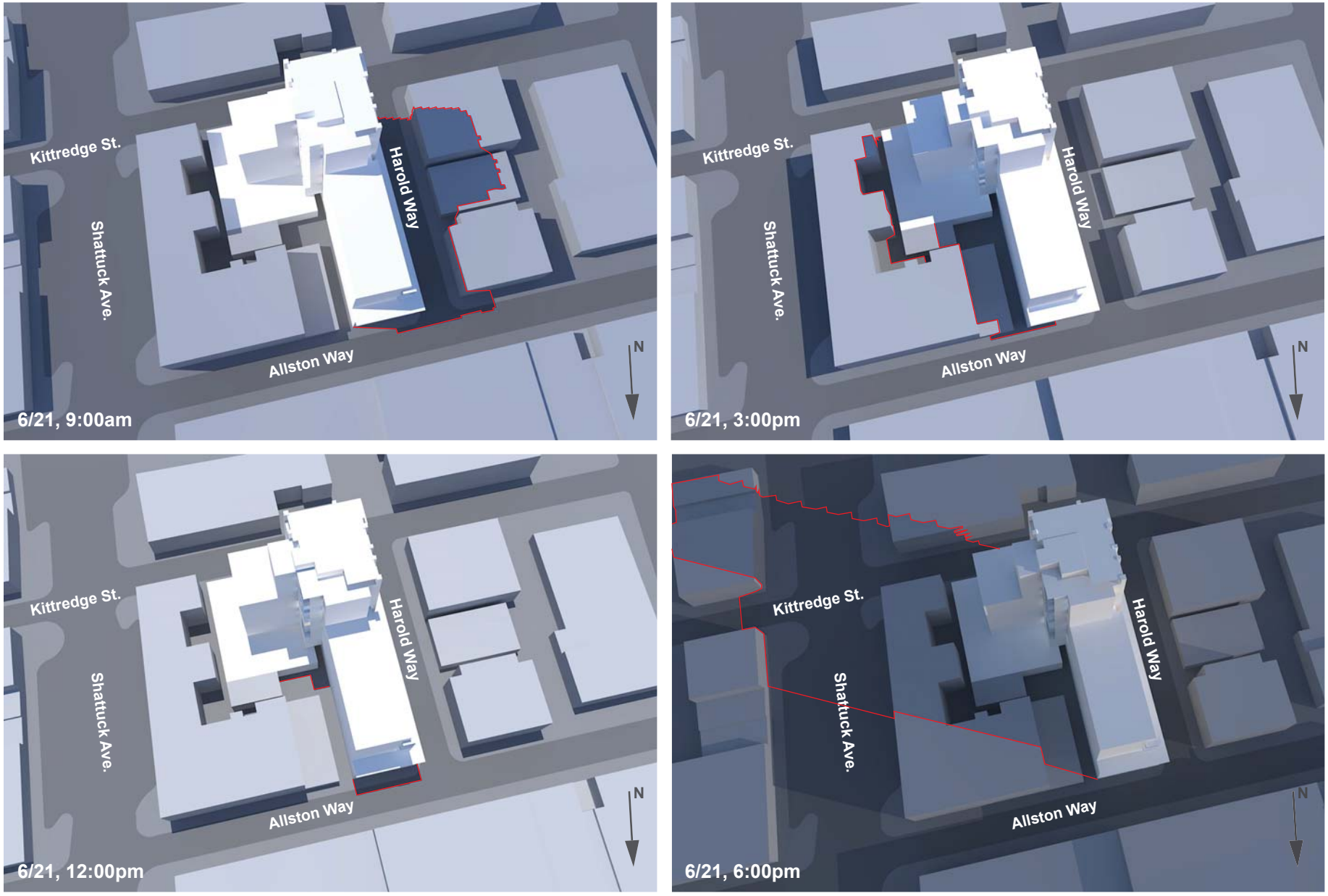
The proposed building would step down to 54 feet (5 stories) along the street fronts, and would be about 10 feet shorter than the adjacent Shattuck Hotel, but would be about three feet taller than the height of the public library across Kittredge Street. Building step backs would occur primarily just above the fifth and 13th floors. The project's tallest feature would be located at the corner of Kittredge Street and Harold Way.

Shadows:

The proposed project would result in structural massing greater than the current condition, and new shading patterns would result. DAP Policy ES-3.15 directs that new structures in the plan area be designed and located in a manner that minimizes shading on public open spaces. Whereas no public open spaces are located within the block or block faces fronting the proposed project, Civic Center Park lies one block west of Harold Way and the West Crescent open space at the western entrance to the UC Berkeley campus is located three blocks to the east. Figure 32 illustrates four conditions throughout the day of the Winter Solstice, while Figure 33 illustrates four diurnal conditions on the Summer Solstice. These models indicate the range of shading pattern that could be anticipated during the year.

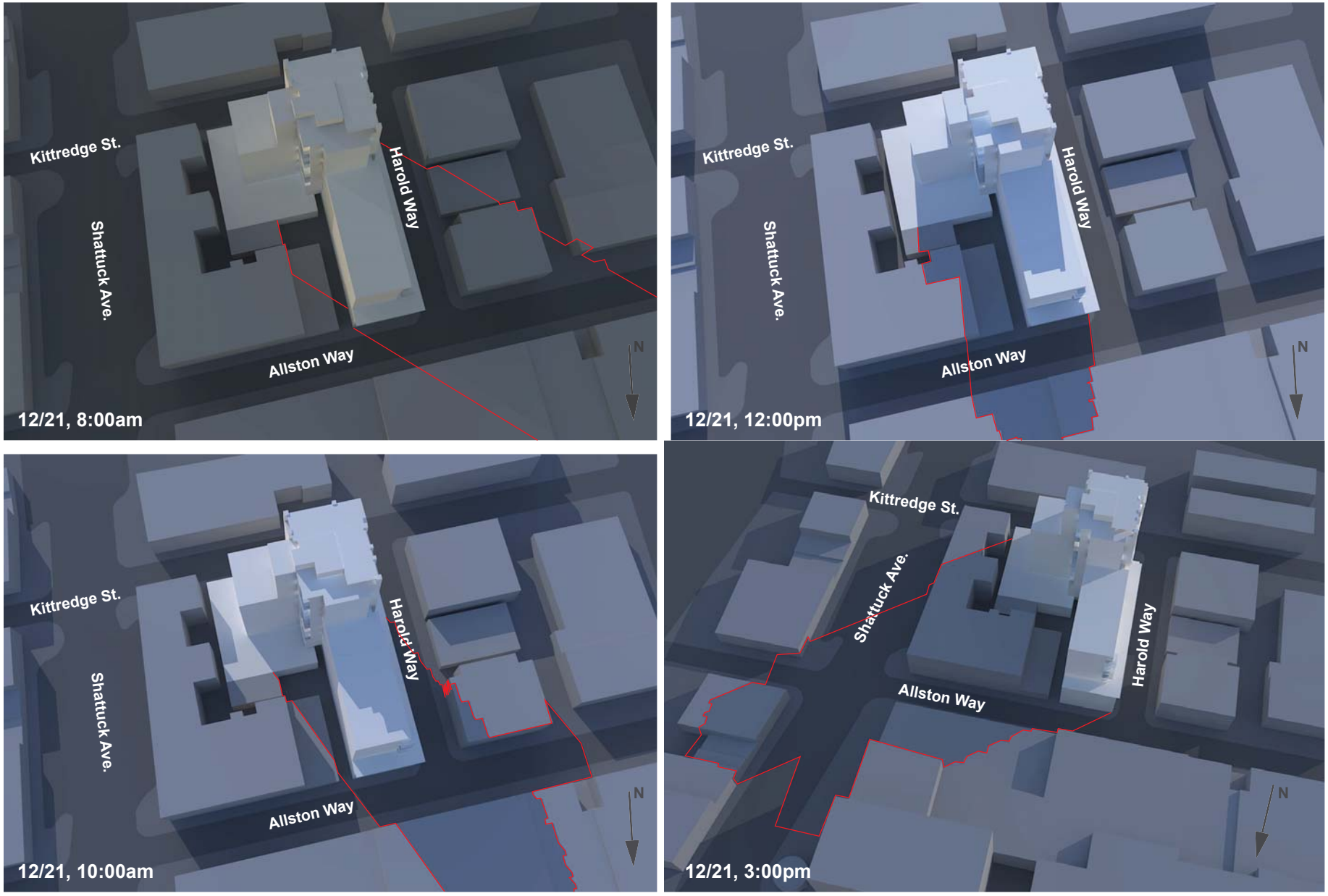
None of the shadow modeling diagrams suggest that project-related shading impacts would occur to the Crescent, Civic Center Park, or other public open spaces, other than streets and sidewalks, except for the southern portion of the BART plaza, which would be shaded for approximately one hour on winter afternoons. However, as shown in the DAP EIR on Figure 4.16, this area is largely shaded under existing and DAP-analyzed conditions at this hour as well. Therefore, the project would not adversely affect public open spaces with shading. The issue of solar access for neighboring structures is a related land use issue. The modeling confirms that there would be no impacts to neighboring structures wherein access to solar rays for energy production via photovoltaic arrays would be precluded in a substantial way.

In the DAP EIR, the shadow models included a tall building on the site but with a more limited footprint than the proposed project. The shadow diagrams in the DAP EIR are shown in figures 4.10-4.18. Because the proposed project's shadows would accordingly have an incrementally larger "footprint," a correspondingly larger area would be shaded throughout the day. However, the DAP EIR conclusions would remain valid for the proposed project, because the types of areas affected (city streets, sidewalks and commercial buildings rather than open spaces) and the general duration of shadows would be similar.



Shadow Models - Summer Solstice

Figure 32



Shadow Models - Winter Solstice

Figure 33

Conclusion

The proposed project could result in one adverse aesthetic impact beyond those identified in the DAP EIR, related to the partial obstruction of a vista of Alcatraz Island from the base of the UC Berkeley Campanile. Under state law (SB 743), this impact may be noted as adverse, but may not be considered significant; therefore, no additional mitigation is required. In general, the scale and general intensity of proposed development on the site would fall within that envisioned under the DAP EIR. Additional analysis of viewshed impacts will be included in the EIR in relation to potential historic impacts, but not in relation to aesthetic impacts.

Impacts related to the proposed project's compatibility with surrounding development are discussed above in the context of aesthetics and visual resources, and would not be significant in this context. However, additional analysis of impacts related to compatibility with surrounding development from a historic resources perspective is warranted in the EIR, as discussed below under Item V, *Cultural Resources*, and will be included in the EIR discussion of cultural resources.

See additional discussion under Item V, *Cultural Resources*, and Item X, *Land Use and Planning*.

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and					

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☒	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☒	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses agricultural resources impacts on pages 4-36 and 4-37. As noted therein, "the Downtown Area is a highly urbanized area within Berkeley. No portion of the Downtown Area has been in active agricultural use for many years, and no parcels in the area have been identified as Prime Farmland, Unique Farmland or Farmland of Statewide Importance. No land within the Downtown Area is currently under a Williamson Act contract, or zoned for agricultural use." The DAP EIR concluded that there would be no DAP-related impacts to agricultural resources, and no mitigation measures were required or identified.

Project-Specific Impacts

a - d) The project site and vicinity are located within an urban area in the City of Berkeley. There are no agricultural resources, Williamson Act-contracted land, or forest land located on or near the project site. The site and all surrounding properties are classified as "Urban and Built-Up Land" on the State Department of Conservation's Farmland Mapping and Monitoring Maps (2010). The proposed project would not convert agricultural land to non-agricultural uses or result in the loss of forest land or conversion of forest land to non-forest use. The site's urban zoning designation would not change. Although there are seven street trees on Harold Way and Kittredge Street that would be removed during site preparation and construction, those ornamental trees are not considered forestry resources, and the project includes replacing them with approximately 11 street trees of species acceptable to the City's Street Trees and Urban Forestry Management Program. The proposed project would have no impact on agriculture or forestry resources.

Conclusion

As the project would have no impact on agriculture or forestry resources – the same as the impacts identified in the DAP EIR for the Plan as a whole – this issue **does not require mitigation or further study in an EIR**.

	Significant Impact	**Less Than Significant or Less than Significant with Mitigation Incorporated**	**No Impact**	**Analyzed in the Prior EIR**	**Substantially Mitigated by Uniformly Applicable Development Policies**
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☒	☐

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☒	☐	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses air quality impacts on pages 4-69 through 4-77 (project-level air quality impacts) and page 4-87 (cumulative air quality impacts). The DAP EIR examined a range of potential impacts related to local and regional air quality, including consistency with the 1991 Clean Air Plan (1991 CAP, October 1991); possible exposure of sensitive receptors to toxic air contaminants (TACs) and odors; and construction period air quality impacts. Impacts were assessed in the context of adopted planning documents, including the City's 2003 General Plan and 1991 CAP. The DAP EIR identified the following impacts and mitigation measures:

- *Impact AIR-1:* Conflict with CAP Assumptions. Development anticipated under the Downtown Area Plan would increase population and employment at a greater rate than assumed when preparing the latest update to the CAP. This could lead to greater regional emissions of nonattainment air pollutants (or their precursors) than assumed in the CAP. This would be a *significant and unavoidable* impact.

- *Impact AIR-2:* Possible Exposure of Sensitive Receptors to TACs and Odors. Development anticipated under the Downtown Area Plan may expose sensitive receptors to TACs or odors through development of new residential units near non-residential uses that may be sources of TACs or odors, or through development of new non-residential development that may be sources of TACs or odors near existing

residences or other sensitive receptors. Such exposure would represent a *potentially significant* impact.

- *Mitigation AIR-2:* Buffer TAC and Odor Emission Sources and Sensitive Land Uses. Consider potential air pollution and odor impacts from future development that may emit pollution and/or odors when locating (a) air pollution sources, and (b) residential and other pollution-sensitive land uses in the vicinity of air pollution sources (which may include areas where buses idle, diesel generators, parking garage vents, restaurants, and other similar uses). Buffer sensitive receptors from TACs whenever possible, and if buffering is not feasible, apply appropriate mitigation to reduce impacts to a less than significant level, such as air filtration systems or other technologies. While the above mitigation can address most conflicts, because buffering will not always be feasible, the DAP is technically inconsistent with the *BAAQMD CEQA Guidelines*, and the impact remains *significant and unavoidable*.

- *Impact AIR-3:* Construction Period Air Quality Impacts. Construction of development projects under the DAP would result in temporary emissions of dust and diesel exhaust that may result in both nuisance and health impacts. Without appropriate measures to control these emissions, these impacts would be considered *significant*.

  - *Mitigation AIR-3:* Implement BAAQMD-Recommended Measures to Control PM_{10} Emissions during Construction. Measures to reduce diesel particulate matter and PM_{10} from construction are recommended to ensure that short-term health impacts to nearby sensitive receptors are avoided.

    Dust (PM_{10}) Control Measures:

    - Water all active construction areas at least twice daily and more often during windy periods. Active areas adjacent to residences should be kept damp at all times.
    - Cover all hauling trucks or maintain at least two feet of freeboard.
    - Pave, apply water at least twice daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas.
    - Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas and sweep streets daily (with water sweepers) if visible soil material is deposited onto the adjacent roads.
    - Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (i.e., previously-graded areas that are inactive for 10 days or more).
    - Enclose, cover, water twice daily, or apply (non-toxic_ soil binders to exposed stockpiles.
    - Limit traffic speeds on any unpaved roads to 15 mph.
    - Replant vegetation in disturbed areas as quickly as possible.
    - Suspend construction activities that cause visible dust plumes to extend beyond the construction site.

Measures to Reduce Diesel Particulate Matter and $PM_{2.5}$.

- Clear signage at all construction sites will be posted indicating that diesel equipment standing idle for more than five minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate, or other bulk materials. Rotating drum concrete trucks could keep their engines running continuously as long as they were onsite or adjacent to the construction site.
- Opacity is an indicator of exhaust particulate emissions from off-road diesel powered equipment. The project shall ensure that emissions from all construction diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately.
- The contractor shall install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g., compressors).
- Properly tune and maintain equipment for low emissions.

Implementation of the measures recommended by BAAQMD and listed above would reduce the air quality impacts associated with grading and new construction to a level of *less than significant*.

Mitigation Measures AIR-2 and AIR-3 would apply to the proposed project. However, the DAP EIR concluded that impacts related to 1991 CAP consistency (Impact AIR-1) and possible exposure of sensitive receptors to odors (Impact AIR-2) were determined to remain significant and unavoidable.

Air Quality Environmental and Regulatory Setting

The project site is located in the City of Berkeley within the boundaries of the San Francisco Bay Area Air Basin (Bay Area). The Bay Area's moderate climate steers storm tracks away from the region for much of the year, although storms generally affect the region from November through April. Berkeley's proximity to the refreshing onshore breezes stimulated by the Pacific Ocean provide for generally very good air quality. However, during the ozone smog season (typically, May through October), transport studies have shown that ozone precursor emissions generated in Oakland and Berkeley are often transported to other regions of the Bay Area and beyond (e.g., Central Valley) that are more conducive to the formation of ozone smog. In the winter, reduced solar energy and cooler temperatures diminish ozone smog formation, but increase the likelihood of carbon monoxide formation.

Average annual temperatures in the area are in the mid-fifties, generally ranging from the low-forties on winter mornings to mid-seventies during summer afternoons. Daily and seasonal oscillations of temperature are small because of the moderating effects of the nearby ocean. In contrast to the steady temperature regime, rainfall is highly variable and confined almost exclusively to the "rainy" period from November through April. About 95 percent of the average annual rainfall of approximately 30 inches occurs during this period. Precipitation may

vary widely from year to year as a shift in the annual storm track of a few hundred miles can mean the difference between a wet year and drought conditions. Winds in the project area display several characteristic regimes. During the day, especially under fair weather conditions, winds are from the west and northwest as air is funneled through the Golden Gate toward Berkeley. At night, cooling of the land generates winds from the east and southeast. Summer afternoon sea breezes typically range from 20 to 30 miles per hour. Peak annual winds occur during winter storms. South and southeast winds typically also precede weather systems passing through the region.

As required by the federal Clean Air Act passed in 1970, the United States Environmental Protection Agency has identified six criteria air pollutants that are pervasive in urban environments and for which state and federal health-based ambient air quality standards have been established. EPA calls these pollutants criteria air pollutants because the agency has regulated them by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. Ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM), and lead are the six criteria air pollutants.

The California Health and Safety Code defines toxic air contaminants (TACs) as air pollutants "which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health" (Health and Safety Code Section 39655(a)). By definition, TACs include substances listed in the federal Clean Air Act as "hazardous air pollutants." TACs are less pervasive in the urban atmosphere than criteria air pollutants, but are linked to short-term (acute) or long-term (chronic and/or carcinogenic) adverse human health effects. There are hundreds of different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), and motor vehicle exhaust. Unlike regulations concerning criteria air pollutants, there are no ambient air quality standards for evaluation of TACs based on the amount of emissions. Instead, emissions of TACs are evaluated based on the degree of health risk that could result from exposure to these pollutants.

Project-Specific Impacts

a) The California Clean Air Act requires that air districts create a Clean Air Plan (CAP) that describes how the jurisdiction will meet air quality standards. These plans must be updated every three years. The most recently adopted air quality plan in the San Francisco Bay Area Air Basin is the 2010 Clean Air Plan (2010 CAP). The 2010 CAP is a roadmap showing how the San Francisco Bay Area will achieve compliance with the state one-hour ozone standard as expeditiously as practicable, and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. The 2010 CAP does not include control measures that apply directly to individual development projects; instead, the control strategy includes stationary-source control measures to be implemented through the Bay Area Air Quality Management District (BAAQMD) regulations; mobile-source control measures to be implemented through incentive programs and other activities; and transportation control measures to be implemented through transportation programs in cooperation with the Metropolitan Transportation Commission (MTC), local governments, transit agencies, and others. The 2010 CAP also represents the Bay Area's most recent triennial assessment of the region's strategy to attain the state one-hour ozone standard. In

this, the 2010 CAP replaces the 2005 Ozone Strategy. Under BAAQMD's methodology, a determination of consistency with the most recently adopted CAP should demonstrate that a project:

- *Supports the primary goals of the CAP;*
- *Includes applicable control measures from the CAP; and*
- *Does not disrupt or hinder implementation of any CAP control measures.*

Support the Primary Goals of the CAP. The primary goals of the 2010 CAP are to:

- *Attain air quality standards;*
- *Reduce population exposure and protecting public health in the Bay Area; and*
- *Reduce greenhouse gas emissions and protect the climate.*

Any project that would not support these goals would not be considered consistent with the 2010 CAP. On an individual project basis, consistency with BAAQMD quantitative thresholds is interpreted as demonstrating support for the CAP goals. As shown in the response to checklist items b and c (see pp. 91-93), approval of the project would not result in significant and unavoidable criteria pollutant emissions or other significant air quality impacts; similarly, as shown in Section VII, *Greenhouse Gas Emissions*, the project would result in less than significant GHG impacts. The DAP EIR identified impacts related to CAP consistency as significant and unavoidable, due to the large scale of development, which would increase population and employment at a greater rate than assumed in the then-current 1991 CAP. However, the proposed project would result in a smaller increase in population and employment than forecast for the DAP as a whole, and the project is designated as Downtown in the City of Berkeley General Plan, which is considered appropriate for mixed-use commercial and residential buildings. The project site is zoned Commercial Downtown Mixed Use District (C-DMU). The proposed project is consistent with these existing designations, indicating that the project represents anticipated growth under the inventory and assumptions of the General Plan and the 2010 CAP. Therefore, the project is consistent with the 2010 CAP.

Include Applicable CAP Control Strategies. The Bay Area 2010 CAP contains 61 control strategies aimed at reducing air pollution in the Bay Area. Of these, 18 address stationary sources and will be implemented by BAAQMD using its permit authority and are therefore not suited to implementation through local planning efforts. An additional 18 strategies are a draft list of strategies for further study and are not yet identified as feasible for implementation under the 2010 CAP. The remaining 25 strategies include area, mobile source, and transportation control measures designed to protect the climate and promote mixed use, compact development to reduce vehicle emissions and exposure to pollutants from stationary and mobile sources. BAAQMD encourages project developers and lead agencies to incorporate these Land Use and Local Impact (LUM) measures and Energy and Climate measures (ECM) into proposed project designs and plan elements. These control measures are identified in Table 6. This table identifies each control measure and correlates it to specific elements of the project or explains why the measure does not apply to the proposed project.

Table 6
2010 Clean Air Plan Control Measures

Transportation Control Measures	
TCM A: Improve Local and Regional Transit (Bus & Rail) Services	Not Applicable: The proposed project would include retail, commercial and residential development, and would not include changes to transit services. However, the project would increase the intensity of residential and commercial development within ¼-mile of a major transit hub. Also, the project would include AC Transit passes for each new residential household and commercial employee.
TCM B: Improve Freeway Performance and Transit System Efficiency	Not Applicable: This measure addresses infrastructure improvements to increase operational efficiencies on freeways and transit service (such as common fare payment systems) and are geared toward regional transit agencies and Caltrans.
TCM C: Encourage Sustainable Travel Behavior (e.g., voluntary employer-based trip reduction, safe routes to schools, rideshare services, etc.)	The project would establish a Transportation Demand Management (TDM) program that would reduce vehicle trips, which would include: • Unbundled parking (parking that is leased separately from dwelling units); • AC Transit passes for each residential household and every commercial employee; • Six car share parking spaces; • 11 dedicated electric vehicle charging areas; and • 100 secure bicycle parking spaces. The project is located within two blocks of the Downtown Berkeley BART station.
TCM D: Support Focused Growth (Bicycle and Pedestrian Access and Facilities & Local Land Use Strategies)	The project would provide 100 secure bicycle parking spaces, as well as construct a number of offsite, public streetscape and mobility improvements. Bulb-outs on both sides of Harold Way would be constructed at its intersections with Allston Way and Kittredge Street. One of these would accommodate public bicycle racks.
TCM E: Implement Pricing Strategies (Parking and Transportation)	The project would provide the required parking per City of Berkeley requirements for the residential apartments and the retail/commercial units. The project would also include unbundled parking (parking that is leased separately from dwelling units), six car share parking spaces, 11 dedicated electric vehicle charging areas; and 100 secure bicycle parking spaces.
Mobile Source Control Measures	
MSM A-1: Promote Clean, Fuel Efficient Light & Medium-Duty Vehicles. Expand the use of Super Ultra-low Emission (SULEV) and Partial-Zero emission (PZEV) light-duty passenger vehicles and trucks within the Bay Area.	The project would establish electric vehicle charging stations for electric vehicles as one element of the proposed TDM program for the new development.
MSM A-2: Zero Emission Vehicles and Plug-in Hybrids. Expand the use of Zero Emission (ZEV) and Plug-in Hybrid (PHEV) passenger vehicles and light-duty trucks within the Bay Area, working in partnership with the Bay Area Electric Vehicle Corridor coalition.	

Table 6
2010 Clean Air Plan Control Measures

MSM A-3: Green Fleets (Light, Medium, and Heavy-Duty Vehicles). Develop a green fleet certification component of the Bay Area Green Business program, promote best practices for green fleets, and evaluate existing grant programs to ensure incentive funding is directed towards fleets and vehicles that meet stringent fuel economy standards.	Not Applicable: The project would be a complex containing retail, commercial and residential units and would not include a vehicle fleet.
MSM A-4: Replacement or Repair of High-Emitting Vehicles. Enhance the Air District's Vehicle Buy Back program to increase participation from car owners; e.g., via higher cash payments and/or increased marketing. Consider including motorcycles in the VBB programs, or other potential enhancements, e.g. implementing a vehicle repair program. Pursue improvements to the Air District's Smoking Vehicle program.	Not Applicable: This strategy addresses vehicle buy-back programs implemented by BAAQMD.
MSM B-1: HDV Fleet Modernization. Provide incentives to accelerate the replacement or retrofit of on-road heavy-duty diesel engines in advance of requirements for the CARB in-use heavy-duty truck regulation.	Not Applicable: This strategy addresses incentive programs for truck modernization which are implemented by BAAQMD or CARB.
MSM B-2: Low- NO_X retrofits for In-Use Engines. Provide cash incentives to install retrofit devices that reduce NO_X emissions from MY 1994-2006 heavy-duty engines. Continue requiring software updates to engine control modules in model year 1993-1998 diesel trucks as a condition of all heavy duty vehicle retrofit grants.	Not Applicable: This strategy addresses cash incentives for retrofits which are implemented by BAAQMD or CARB.
MSM B-3: Efficient Drive Trains. Encourage development and demonstration of hybrid drive trains for medium- and heavy-duty vehicles, in partnership with CARB, CEC and other existing programs.	Not Applicable: This strategy addresses development and demonstration programs in partnership with CARB and the California Energy Commission.
MSM C-1: Construction and Farming Equipment. Reduce emissions from construction and farming equipment by 1) cash incentives to retrofit construction and farm equipment with diesel particulate matter filters or upgrade to a Tier III or IV off-road engine; 2) work with CARB, CEC and	Not Applicable: This strategy addresses cash incentives for retrofits which are implemented by BAAQMD or CARB.

Table 6
2010 Clean Air Plan Control Measures

others to develop more fuel efficient off-road engines and drive-trains; 3) work with local communities, contractors and developers to encourage the use of renewable alternative fuels in applicable equipment.	
MSM C-2: Lawn & Garden Equipment. Reduce emissions from lawn and garden equipment through voluntary retirement and replacement programs.	Not Applicable: This strategy addresses voluntary exchange programs implemented by BAAQMD.
MSM C-3: Recreational Vessels. Reduce emissions from recreational vessels through voluntary retirement and replacement programs.	Not Applicable: This strategy addresses voluntary exchange programs implemented by BAAQMD.
Land Use & Local Impact Measures	
LUM 1: Goods Movement. Reduce diesel PM and GHG emissions from goods movement in the Bay Area through targeted enforcement of CARB diesel ATCMs in impacted communities, partnerships with ports and other stakeholders, increased signage indicating truck routes and anti-idling rules, shifts in freight transport mode, shore-side power for ships, and improvements in the efficiency of engine drive trains, distribution systems (roadways, logistic systems) and land use patterns.	The City of Berkeley's transportation network promotes truck travel along highways and arterial routes, and away from constrained routes and concentrated sensitive receptors.
LUM 2: Indirect Source Review Rule. Develop an indirect source review rule to reduce construction and vehicular emissions associated with new or modified land uses.	The project would be required to conform to applicable statutes, ordinances, and regulations of the City of Berkeley. Further the project would reduce emissions to decrease the impact on air quality through: • LEED Gold or equivalent environmental conformance; • Roof gardens with flow through planters to reduce heat island effect and capture water; • Solar shading for residential units; • rooftop solar panels for hot water and electric power generation; • Reuse of captured rainwater for landscape irrigation; • Installation of drought-tolerant plants and materials; • Transportation Demand Management, including unbundled parking, AC Transit passes, electric vehicle charging spaces and 100 secure bicycle parking spaces; and • Planting additional street trees.
LUM 3: Enhanced CEQA Program. 1) Develop revised CEQA guidelines and thresholds of significance and 2) expand District review of CEQA documents.	Not Applicable: The project's environmental review will be consistent with the *CEQA Guidelines* that are in place at the time of project approval.

Table 6
2010 Clean Air Plan Control Measures

LUM 4: Land Use Guidance. Provide guidance to local governments re: 1) air quality and greenhouse gases in General Plans, and 2) how to address and mitigate population exposure related to land use development.	The project would be consistent with the City of Berkeley's land use planning documents such as the Land Use Element and the Downtown Area Plan (DAP) and with air quality protection guidance such as the BAAQMD *CEQA Guidelines*.
LUM 5: Reduce Risk in Impacted Communities. Establish a system to track cumulative health risks from all emissions sources in impacted communities (as identified by the District's CARE program) in order to monitor progress in reducing population exposure.	The project site is not located near a high-volume road or industrial activities. The nearest high-volume road is the I-80 freeway, approximately 1.7 miles to the west. The project area is generally developed with commercial, retail and residential uses and would not be considered to be an "impacted" community with regard to airborne health risk exposure.
LUM 6: Enhanced Air Quality Monitoring. Expand monitoring program to provide better local air quality monitoring data in impacted communities.	Not Applicable: This strategy addresses air quality monitoring that is the purview of BAAQMD and/or CARB.
Energy & Climate Measures	
ECM 1: Energy Efficiency. Provide 1) education to increase energy efficiency; 2) technical assistance to local governments to adopt and enforce energy-efficient building codes; and 3) incentives for improving energy efficiency at schools.	The project would include energy efficient features, such as: • LEED Gold or equivalent environmental conformance; • Roof gardens with flow through planters to reduce heat island effect and capture water; • Solar shading for residential units; • Rooftop solar panels for hot water and electric power generation; • Reuse of captured rainwater for landscape irrigation; and • Installation of drought-tolerant plants and materials. Under State law, all appliances that are purchased for the project - both pre- and post-development – would be consistent with energy efficiency standards that are in effect at the time of manufacture. In addition, the proposed project would be required to comply with all standards of Title 24 that are in effect at the time of development. The 2013 Title 24 standards are approximately 30% more efficient than the 2008 standards, which in turn are approximately 15% more efficient than the 2005 standards.
ECM 2: Renewable Energy. Promote distributed renewable energy generation (solar, micro wind turbines, cogeneration, etc.) on commercial and residential buildings, and at industrial facilities.	See Measure ECM-1 above.
ECM 3: Urban Heat Island Mitigation. Mitigate the "urban heat island" effect by promoting the implementation of cool roofing, cool paving, and other strategies.	See Measure ECM-1 above.

Table 6
2010 Clean Air Plan Control Measures

ECM 4: Tree-Planting. Promote planting of low-VOC-emitting shade trees to reduce urban heat island effects, save energy, and absorb CO_2 and other air pollutants.	The project would include planting of four additional street trees.

Table 6 shows that the proposed project would not disrupt or hinder implementation of any CAP control measures. Therefore, the proposed project would be consistent with the Control Strategies contained in the 2010 CAP for the San Francisco Bay Area Air Basin.

Hinder Implementation of CAP Control Measures. The proposed project would be required to be consistent with BAAQMD rules and regulations, including dust and diesel particulate matter reduction measures which were included in Mitigation Measures AIR-3 in the DAP EIR, and would not otherwise cause the disruption, delay or otherwise hinder the implementation of any air quality plan control measure. The project would not preclude any planned transit or bike pathways, and would not otherwise disrupt regional planning efforts to reduce VMT and meet federal and state air quality standards. Impacts would be within those identified in the DAP EIR for the Plan as a whole, and would be **less than significant.**

b, c) In June 2010, the BAAQMD Board of Directors adopted thresholds of significance to assist in the review of projects under CEQA. The BAAQMD was ordered to set aside the adopted thresholds by the by the Alameda County Superior Court (*California Building Industry Association v. Bay Area Air Quality Management District*, 2013), and is no longer recommending that these thresholds be used as a general measure of a project's significant air quality impacts. As such, lead agencies need to determine appropriate GHG thresholds of significance based on substantial evidence in the record. Lead agencies may rely on the BAAQMD's *CEQA Guidelines* (updated May 2012) for assistance in calculating air pollution emissions, obtaining information regarding the health impacts of air pollutants, and identifying potential mitigation measures. According to the BAAQMD's 2012 *CEQA Guidelines*, the BAAQMD's 1999 thresholds of significance for criteria pollutants remain appropriate for use in CEQA analysis. These thresholds are 15 tons per year of ROG, NO_X and PM_{10}. The estimated air pollution emissions associated with the project were calculated using the California Emissions Estimator Model (CalEEMod) version 2013.2. Complete results from CalEEMod and assumptions are included in Appendix B.

Construction Emissions. Construction of the proposed project would generate temporary criteria pollutant emissions primarily due to the operation of construction equipment and truck trips. Site preparation and grading typically generate the greatest amount of emissions due to the use of grading equipment and soil hauling. CalEEMod was used to estimate emissions associated with the construction period, based on parameters such as the duration of construction activity, area of disturbance, and anticipated equipment use during construction.

Demolition and construction activities would occur over a period of 18-24 months . For the purpose of the emissions estimates in this analysis, an overall construction period of 18 months is assumed, which represents a conservative estimate of the construction period, as the total required construction activity is compressed into a shorter period. As shown in Table 7, construction emissions would not exceed BAAQMD thresholds.

Table 7
Estimated Construction Emissions

	Emissions (tons/year)				
	ROG	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
2015 Construction Emissions	0.7	5.2	5.1	0.7	0.4
2016 Construction Emissions	6.1	1.1	1.4	0.2	0.1
Maximum Annual Construction Emissions	**6.1**	**5.2**	**5.1**	**0.7**	**0.4**
BAAQMD Thresholds (tons/year)	*15*	*15*	*n/a*	*15*	*n/a*
Exceeds Threshold?	no	no	n/a	no	n/a

See Appendix B for CalEEMod results.

The project is also subject to standard dust and diesel particulate matter reduction measures, which were included in Mitigation Measures AIR-3 in the DAP EIR. Construction air pollutant emissions would be within those identified in the DAP EIR for the Plan as a whole, and would be **less than significant with mitigation.**

Operational Emissions. Operation of the proposed project would consume energy and result in new motor vehicle trips. Operational emissions from energy use for the proposed project were estimated using CalEEMod (see Appendix B for calculations). The default values on which CalEEMod is based include the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies. Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coatings were calculated in CalEEMod based on standard emission rates from the California Air Resources Board (CARB), USEPA, and district supplied emission factor values (CalEEMod User's Guide, July 2013). Emissions from transportation sources were based on the traffic impact analysis conducted by the IBI Group (July, 2014), using the standard Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th Edition vehicle trip generation rates.

Table 8 shows operational emissions associated with the proposed project. In addition, the proposed project would involve the removal of existing land uses on the project site, which include Shattuck Cinemas, the Habitot children's museum, a medical office, and approximately 41,000 square feet of leasable office space. Removal of these existing uses would eliminate ongoing GHG emissions associated with these uses, replacing them with the proposed residential, theater, and retail/restaurant uses. The estimate of net new emissions associated with the project subtracts emissions associated with these existing uses

that would be removed as part of the project. Table 8 combines the operational emissions associated with new development with the ongoing emissions from these existing land uses on the project site to estimate the net new criteria pollutant emissions that would result from the proposed project.

Table 8
Estimated New Operational Emissions

	Emissions (tons/year)				
	ROG	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Area	1.9	<0.1	2.3	<0.1	<0.1
Energy	<0.1	0.2	0.1	<0.1	<0.1
Mobile	1.5	3.2	3.5	1.2	0.4
Subtotal Annual Operational Emissions (Proposed Project Gross)	3.4	3.4	15.9	1.2	0.4
Existing Onsite Annual Operational Emissions	1.5	3.3	12.0	1.1	0.3
Net New Annual Operational Emissions	**1.9**	**0.1**	**3.9**	**0.1**	**0.1**
BAAQMD Thresholds (tons/year)	*15*	*15*	*n/a*	*15*	*n/a*
Exceeds Threshold?	no	no	n/a	no	n/a

See Appendix B for CalEEMod results.

As shown in Table 8, the estimated new annual operational emissions associated with the proposed project would not exceed BAAQMD threshold. Operational air pollutant emissions would be within those identified in the DAP EIR for the Plan as a whole, and would be **less than significant.**

d) Certain population groups are considered more sensitive to air pollution than others. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases. Residential uses are also considered more sensitive to air pollution than non-residential uses because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. The project would be subject to DAP Mitigation Measure AIR-2, which requires that sensitive receptors be buffered from TACs where possible, and when buffering is not feasible, to apply appropriate mitigation to reduce impacts to a less than significant level, such as air filtration systems or other technologies. The project does not involve commercial uses that are known to emit substantial quantities of TACs. Similarly, adjacent commercial uses are not known to emit substantial quantities of TACs. Therefore, onsite and nearby sensitive receptors would not be exposed to TAC emissions that would significantly impact human health, since the project would only involve minor releases of air contaminants during construction and

operations [2]. In addition, the proposed project would not result in an exceedance of any thresholds for operational emissions; therefore, the project would not contribute to an exceedance of federal or State ambient air quality standards (AAQS). Therefore, impacts to sensitive receptors would be within those identified in the DAP EIR for the Plan as a whole, and would be **less than significant** with implementation of DAP Mitigation Measure AIR-2**.**

e) The uses proposed for the project include retail/restaurant space, which may result in odors related to cooking processes and waste disposal. The project would be subject to DAP Mitigation Measure AIR-2, which requires that sensitive receptors be buffered from odors where possible, and when buffering is not feasible, to apply appropriate mitigation to reduce impacts to a less than significant level.

The 2012 BAAQMD *CEQA Guidelines* lists land uses considered by BAAQMD to have greater potential for offensive odors. The list includes wastewater treatment plants; landfills; confined animal facilities; composting stations; food manufacturing plants; refineries; and hemical plants.

None of these uses are located in close enough proximity to the project site to affect substantial numbers of people at the site. While there may be some odors from future restaurants, these would be controlled according to standard permit conditions of the Health Department, BAAQMD, and Building Department. This impact would therefore be **less than significant.**

Conclusion

As the project would have less than significant impacts on air quality – and the impacts would be within the impacts identified in the DAP EIR for the Plan as a whole – this issue **does not require further study in an EIR**.

[2] *In March 2012, the California Supreme Court denied the petition for review and requests for depublication of the Second District Court of Appeal's opinion in* Ballona Wetlands Land Trust et al. v. City of Los Angeles *(2011) 201 Cal.App.4th 455 (Ballona Wetlands). This case held that CEQA does not require analysis of the environment's effects on a proposed project (converse-CEQA analysis), a determination that would place a number of impacts historically analyzed in CEQA documents outside CEQA's statutory authority. For example, a number of questions from the CEQA Guidelines Appendix G checklist may no longer apply, including questions related to such issues as air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, and noise. Therefore, analysis of these effects is not necessarily required to be analyzed under CEQA but included as supplemental environmental information.*

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
IV. BIOLOGICAL RESOURCES: Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or	☐	☒	☐	☒	☐

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
impede the use of native wildlife nursery sites?					
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses biological resources impacts on pages 4-88 and 4-92. As noted therein, "it is unlikely that any portion of the area provides suitable habitat for special status wildlife species… There are no open bodies of water or jurisdictional wetlands within the Downtown Area, and the portion of Strawberry Creek that passes through the area has been culverted for many years, which severely limits its ability to support fish or wildlife." The DAP EIR concluded that DAP-related impacts to biological resources would be less than significant, and no mitigation measures were required or identified. However, the DAP EIR does acknowledge on Page 4-88 that "there are numerous trees within the area which may provide nesting habitat for migratory birds."

Project-Specific Impacts

a – f) The project site and vicinity are located within an urban area in the City of Berkeley and within the DAP area. The setting information for the project site is the same as that described for the DAP area in the DAP EIR; there is virtually no vegetation on-site or adjacent other than non-native street trees on Harold Way and Kittredge Street, and no wetlands or riparian or other habitat on site or nearby. There is no suitable habitat for special status wildlife on site or adjacent. The project site does not provide a suitable corridor for wildlife movement, as it is completely developed with existing structures and not adjacent to habitat or wildlife movement areas. As existing street trees affected by the project would be replaced with an equal or greater number of street trees of species acceptable to the City's Street Trees and Urban Forestry Management Program, no conflict with local policies or ordinances protecting biological resources, including trees, would occur. No adopted Habitat Conservation Plans, Natural Community Conservation Plans or other approved local, regional, or state habitat conservation plans apply to the project site.

In addition, as discussed in the introduction to this document, buildings of similar height and intensity were considered in the DAP EIR, including on the project site, so the project's general impacts on biological resources were considered as part of the overall DAP buildout impact analysis in the DAP EIR.

The DAP EIR did not specifically discuss the potential for bird strikes on new buildings in the DAP area. However, studies have shown that "the bulk of bird deaths result from the cumulative effects of a lone, confused bird mistaking glass for a safe flight path. The lone bird strike occurs over and over with conservative estimates calculating that each building kills 10 birds per year on average in the United States (Klem 1990). Poorly designed buildings kill hundreds per year (Hager et al. 2008)." The amount, location and design of glass on buildings are the primary factors affecting safety for birds. The City of Berkeley has adopted bird-safe building standards that are "uniformly applicable development policies for multi-story buildings with the potential for significant bird strikes (City of Berkeley, *Additional Amendments to the Master Use Permit Process, West Berkeley Project EIR*, 2012). Pursuant to these standards, new buildings with the potential for significant bird strikes must adhere to the following design measures, which would be included in the conditions of approval for the proposed project:

- *Create visual markers and mute reflections in the glass features of buildings. Glass treatment (e.g., modifications in transparency, reflectivity, patterns and colors) shall be on at least the first 12 meters, or to the anticipated height of the majority of vegetation at maturity, whichever is higher. Applying these solutions to the entire building is preferred.*

- *Reduce light pollution which disorients migrating birds by choosing exterior light fixtures that project light downward rather than toward the sky, by turning off interior lights at night, especially during spring and fall migration periods, and by locating interior plantings away from glass areas that are lit at night.*

- *For buildings located inside of, or within a clear flight path of less than 300 feet from, suitable bird habitat, require bird-safe glass treatment on building facades such that the first 6o feet of the building is no more than 10 percent untreated glass. Treatments include fritting, netting, perimeter stencils, frosted glass, grids, or UV patterns visible to birds. Vertical elements of patterns must be at least ~ inch wide at a minimum spacing of 4 inches; or have horizontal elements at least 1/8-inch wide at a minimum spacing of 2 inches. Require minimal shielded lighting, and no uplighting or event searchlights. Prohibit the construction of horizontal-axis windmills or vertical axis windmills that do not appear solid.*

- *For structures such as greenhouses, skyways, free-standing glass walls and some balconies, require that 100 percent of glass be treated.*

It should be noted that the third bullet would not apply to the proposed project, as the site is well over 300 feet from suitable bird habitat such as foraging areas, large tracts of open space or stands of mature trees, or wetlands or water features.

Conclusion

As the project would have less than significant impacts on biological resources with required adherence to uniformly applicable development policies – generally the same as the impacts identified in the DAP EIR for the Plan as a whole – this issue **does not require further study in an EIR**.

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
V. CULTURAL RESOURCES. Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☒	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses cultural resources impacts on pages 4-93 through 4-124. The DAP EIR identified the following impacts and mitigation measures:

- *Impact CUL-1:* Demolition of Historic Resources. Despite the substantial protections in place in City policy and the proposed DAP, it is possible that development anticipated under the DAP could result in the demolition of historic resources located within the Downtown Area. Were demolition of historic resources to occur, this would represent a *significant and unavoidable* impact associated with DAP implementation.
    - Demolition of any historic resources within the Downtown Area would represent a *significant and unavoidable* environmental impact, which could not be

mitigated to a level of less than significant. However, should demolition be proposed, a separate, site-specific environmental review would be required, requiring an analysis of alternatives and potential project-specific mitigation measures.

- *Impact CUL-2:* Substantial Adverse Changes in Character-Defining Features in Portions of the Downtown Area that may have the Potential for Future Designation as Historic Districts. Implementation of the DAP may cause substantial adverse changes in the character-defining features of structures in areas within the Downtown Area that may have the potential for future designation as historic districts. Because implementation of the DAP could result in a cumulative impact on the existing character-defining features in those portions of the Downtown Area that may be formally designated as historic districts at some point in the future, any significant adverse change to those features would represent a *potentially significant* impact.

    - *Mitigation CUL-2:* Establish Parameters for Compatible Infill Development in the Downtown Area within Updated Design Guidelines. Using the Secretary of the Interior's "Standards" as a starting point (in compliance with DAP Policy HD-l-la), the Design Guidelines for future development in the Downtown Area should be updated to ensure that new construction respects the authentic character, significance and integrity of the existing building stock in areas that may have the potential for designation as historic districts. Specific guidelines that could be added for this purpose include, but are not limited to, the following:

        - Consider the difference in character of individual blocks. The scale of buildings change within the potential historic district(s) and new construction should reflect the appropriate scale per block.
        - Priorities for new construction and additions include: build-to-the-street, particularly at corners; construct infill buildings at vacant or underutilized sites along major streets; and modify non-historic buildings so that they contribute visual interest and quality.
        - Construct new buildings, of compatible design with the surrounding neighborhood.
        - Encourage creative and innovative contemporary designs for new buildings in the downtown.
        - Streetscape plays an important role in drawing individuals to a particular area of the city. Use signage, lighting, and paving to improve the pedestrian experience.
        - Build consistently with the street wall, particularly at corner sites. Continue dominant rhythms for structural bays, bay windows, large pilasters, and other repeating vertical elements. Also, continue dominant cornice lines, such as between ground floors and upper stories, and at the top of facades that meet a street.
        - Design new buildings to respond to the existing building context within a block, and provide continuity to the overall streetscape. Frequently, a new building will be inserted on a site between two existing buildings of disparate scale and design.

- Set back upper floors where taller buildings are permitted, so that dominant roof and cornice lines remain generally consistent in the Downtown, as seen from the street.
- Explore options for multi-use buildings, combining residential, commercial, and other compatible uses where appropriate.
- Provide multi-tenant retail space and other active publicly accessible uses at the street level. These should be accessible directly from the sidewalk, rather than through common interior lobbies.
- Provide easy-to-locate building entrances on all street-facing facades. Where a building extends through an entire block or is located at a comer, connect its entrances with a suitably scaled public lobby. Highlight entrances with signage and lighting to distinguish them from storefronts.
- Use vertically-proportioned windows. Group such windows in sets where a horizontally proportioned window opening is desired, especially for the expression of structural bays.

The DAP EIR discussion under Impact CUL-2 goes on to explain that as individual development projects are proposed in the Downtown Area, those which may have potential adverse effects on historic resources will be evaluated under the Landmark Preservation Ordinance. Project compliance with the provisions of the Landmark Preservation Ordinance, conformance with the Secretary of the Interiors Standards (consistent with DAP Policy HD l-la), and consistency with updated Design Guidelines intended to protect the character-defining features of those portions of the Downtown Area which may have the potential for designation as historic districts (as called for in Mitigation CUL-2, above) would reduce potential impacts associated with development that might jeopardize existing character defining features in those areas to a less than significant level.

- *Impact CUL-3:* Possible Disturbance of Unidentified Subsurface Archaeological Resources. Although no archaeological resources are currently known to exist in the Downtown Area, ground-disturbing activities associated with new construction and related underground utility installation could result in the destruction or disturbance of unidentified subsurface archaeological resources, which would represent a *potentially significant* impact.

    - *Mitigation CUL-3:* Halt Work/Archaeological Evaluation/Site-Specific Mitigation. If archaeological resources are uncovered during construction activities, all work within 50 feet of the discovery shall be redirected until a qualified archaeologist can be contacted to evaluate the situation, determine if the deposit qualifies as an archaeological resource, and provide recommendations. If the deposit does not qualify as an archaeological resource, then no further protection or study is necessary. If the deposit does qualify as an archaeological resource, then the impacts to the deposit shall be avoided by project activities. If the deposit cannot be avoided, adverse impacts to the deposit must be mitigated. Mitigation may include, but is not limited to, archaeological data recovery. Upon completion of the archaeologist's assessment, a report should be prepared documenting the methods, findings and recommendations. The report should be submitted to the City, the project proponent and the NWIC.

Implementation of this mitigation measure would reduce the impact to a level of *less than significant.*

- *Impact CUL-4:* Possible Disturbance of Unidentified Subsurface Paleontological Resources. Although no paleontological resources are currently known to exist in the Downtown Area, ground-disturbing activities associated with new construction and related underground utility installation could result in the destruction of unidentified subsurface paleontological resources, which would represent a *potentially significant* impact.

    - *Mitigation CUL-4:* Halt Work/Paleontological Evaluation/Site-Specific Mitigation. Should paleontological resources be encountered during construction or site preparation activities, such works shall be halted in the vicinity of the find. A qualified paleontologist shall be contacted to evaluate the nature of the find and determine if mitigation is necessary. All feasible recommendations of the paleontologist shall be implemented. Mitigation may include, but is not limited to, in-field documentation and recovery of specimen(s), laboratory analysis, the preparation of a report detailing the methods and findings of the investigation, and curation at an appropriate paleontological collection facility. Implementation of this mitigation measure would reduce the impact to a level of *less than significant.*

- *Impact CUL-5:* Possible Disturbance of Unidentified Human Remains. Ground disturbing activities associated with new construction and related underground utility installation could result in the disturbance of unidentified subsurface human remains, which would represent a *potentially significant* impact.

    - *Mitigation CUL-5:* Halt Work/Coroner's Evaluation/Native American Heritage Consultation/Compliance with Most Likely Descendent Recommendations. If human remains are encountered during construction activities, all work within 50 feet of the remains should be redirected and the County Coroner notified immediately. At the same time, an archaeologist shall be contacted to assess the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods. The archaeologist shall recover scientifically-valuable information, as appropriate and in accordance with the recommendations of the MLD. Upon completion of the archaeologist's assessment, a report should be prepared documenting methods and results, as well as recommendations regarding the treatment of the human remains and any associated archaeological materials. The report should be submitted to the City, the project proponent and the NWIC. Implementation of this mitigation measure would reduce the impact to a level of *less than significant.*

Project-Specific Impacts

a) The city block that includes the project site and immediately adjacent structures is bound by Allston Way to the north, Kittredge Street to the south, Shattuck Avenue to the east, and Harold Way to the west. The Shattuck Plaza Hotel and associated additions occupy the block. The entire block was designated a City of Berkeley Historic Landmark by the Landmarks Preservation Commission in 1987. The Shattuck Plaza Hotel is not listed in the National Register of Historic Places, and is only noted in the California Register of Historical Resources as a local landmark designated under a local municipal or county ordinance. However, the Shattuck Plaza Hotel is a significant landmark in Berkeley's commercial and architectural history. Completed in 1910, the building was Berkeley's first grand hotel constructed during the city's post-earthquake building boom, and was one of the first reinforced concrete structures built in the Downtown area. The hotel was conceived by Rosa Shattuck in honor of her late husband, Francis Kittredge Shattuck, a prominent civic leader and Berkeley developer, and was constructed on a portion of the family's nineteenth-century estate. Noted California architect Benjamin Geer McDougall designed the original hotel and 1913 addition in the popular Mission Revival Style. As the success of the hotel's main commercial tenant (Hink's Department Store) grew, the building was further expanded in 1926 by Walter H. Ratcliff Jr., one of Berkeley's most respected and prolific architects.

   The Shattuck Plaza Hotel, a designated City Landmark, is considered a historical resource for purposes of CEQA. Some or all of the additions to the hotel (constructed in 1913, 1926 and 1959) also may be eligible for listing on the California Register of Historical Resources and the National Register of Historic Places. Thus, the proposed alteration of the 1926 addition and demolition of the 1959 Hink's Building, and structural work that would affect below-grade portions of the Shattuck Plaza Hotel and its earlier additions, may result in a potentially significant impact.

   In addition to potential direct impacts as a result of alteration and demolition of historic resources, the proposed project is adjacent to or otherwise in proximity to a number of designated or potentially eligible historic properties. These include, but are not limited to, the following:

   - Portions of the Shattuck Plaza Hotel to remain
   - 2000 Allston Way, Berkeley Post Office (1914/1931), Civic Center Historic District
   - 2001 Allston Way, Berkeley YMCA (1910) [designed by Benjamin G. McDougall, Civic Center Historic District
   - 2016 Allston Way, Elks Lodge (1913)
   - 2105 Bancroft Way, Masonic Temple (1905)
   - 2124 Center Street, Mikkelsen & Berry Building (1902)
   - 2128 Center Street, Ennor's Restaurant Building (1923)
   - 2222 Harold Way, Armstrong College (1923) [designed by Walter H. Ratcliff, Jr.]
   - 2090 Kittredge Street, Berkeley Public Library (1930)

   The proposed project could cause a substantial adverse change in a historical resource by enabling new construction that could compromise the historic setting of these or other

adjacent and nearby historical resources. In addition, it could cause substantial adverse changes in the character-defining features of such structures in areas that may have the potential for future designation as historic districts.

UC Berkeley's 2004 *Landscape Heritage Plan* indicates that Campanile Way is a "historically significant" component of the campus, and that the westward view of the Golden Gate is a character-defining feature of the Way. As mentioned above under Item I, *Aesthetics,* there is the potential for view-related cultural resources impacts related to alteration of the view toward the San Francisco Bay and Golden Gate from the UC Berkeley Campanile.

Finally, vibration caused by construction of the proposed project could result in structural damage to adjacent and nearby historic properties. **These are potentially significant impacts and will be studied in an Infill EIR.**

b – d. As discussed in the DAP EIR, no archaeological or paleontological resources are currently known to exist in the Downtown Area, which includes the project site. Nevertheless, the DAP EIR identified impacts to unrecorded subsurface archaeological and paleontological resources, and to human remains, as potentially significant but mitigable.

The majority of the project site has been excavated to accommodate the basement level of the existing buildings, reducing the likelihood that resources within approximately 10 to 15 feet of the surface are still present. However, the proposed subterranean parking garage would descend a greater distance than the existing basement, to over 30 feet below existing street grade; thus previously undisturbed resources could be disturbed during excavation for the proposed project, if they are located on the site. The site is not known to have greater likelihood of containing subsurface archaeological and paleontological resources or human remains than the DAP area as a whole. Therefore, mitigation measures CUL-3 through CUL-5 would apply to the project, and would be expected to reduce impacts to **less than significant levels.**

Conclusion

Potential impacts to historic resources throughout the Downtown area have already been identified in the DAP EIR. The DAP EIR found that the DAP's impacts related to alteration or demolition of historic properties would be significant and unavoidable, and that the DAP's impacts related to changes in the character-defining features of certain structures would be potentially significant but mitigable. The proposed project is within the location and intensity of development envisioned in the DAP and the DAP EIR. However, the DAP EIR specifically states that "should demolition be proposed, a separate, site-specific environmental review would be required, requiring an analysis of alternatives and potential project-specific mitigation measures." Therefore, these topics and these **potentially significant impacts will be analyzed in detail in an Infill EIR** pursuant to CEQA Guidelines Section 15183.3, which will include a technical report assessing specific project impacts and including specific mitigation measures as appropriate. In addition, under Item I, *Aesthetics*, potential view-related cultural resources impacts were identified. These impacts will also be analyzed in an EIR.

As the project would have potentially significant but mitigable impacts on unrecorded subsurface archaeological and paleontological resources and human remains – generally the

same as the impacts identified in the DAP EIR for the Plan as a whole – these issue areas **do not require further study in an EIR**.

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
VI. GEOLOGY AND SOILS. Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☒	☐	☒	☒
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☒	☐
ii) Strong seismic ground shaking?	☐	☒	☐	☒	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☒	☒
iv) Landslides?	☐	☐	☒	☒	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☒	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☒	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994),	☐	☒	☐	☒	☒

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
creating substantial risks to life or property?					
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses impacts related to geology and soils on pages 4-125 through 4-132. The basic geologic setting of the project area has not changed since certification of the DAP EIR. The DAP EIR found that all impacts related to geology and soils would be less than significant with required implementation of existing regulations, policies, and standard practices, including the following:

- Current Uniform Building Code and City of Berkeley design requirements and guidelines for buildings constructed in areas of high seismic risk.
- Berkeley General Plan Policy S-20, which identifies mitigation for potentially hazardous buildings in the event that development under the DAP results in the retrofitting or replacement of existing soft-story or URM (unreinforced masonry) buildings.
- Berkeley General Plan policies S-14 and S-15, which require that new development in the Downtown Area be evaluated for susceptibility to liquefaction and landslides, and in those instances where such risks are present, appropriate structural design features be required.
- Standard soil erosion control measures during demolition and construction associated with development under the DAP in order to minimize erosion from exposed surfaces and reduce soil erosion impacts.
- Appropriate foundation design in accordance with current Uniform Building Code requirements in order to reduce any potential stability hazards.

Project-Specific Impacts

a (i-iv). As stated in the DAP EIR, the Downtown Area is not in an Alquist Priolo fault zone and is therefore not an area where structures are at significant risk from fault rupture; however, it is, like all of the East Bay, in an area at high risk from seismic shaking. The project site and its surroundings are relatively flat, and are not subject to landslides. Because development under the proposed project would fall within that envisioned under the DAP EIR in terms of location, use, scale and density, the project would not increase the exposure of people or

structures, relative to that analyzed in the DAP EIR, to adverse effects from seismic shaking, seismic-related ground failure including liquefaction, or landslides.

A Geotechnical Feasibility Report was completed for the project by ENGEO Incorporated in January 2013 (Appendix C). It found that, while an earthquake of moderate to high magnitude in the region could cause considerable ground shaking at the site, design of all structures on the site using sound engineering judgment and the latest California Building Code (CBC) requirements would make the project geotechnically feasible.

The DAP EIR found that most of the Downtown Area is not subject to liquefaction, with the exception of the alignment of the underground portion of Strawberry Creek. The Geotechnical Feasibility Report found that, while the native soils on the project are too dense to be prone to liquefaction, backfilled soils in the original alignment of Strawberry Creek exist under the northern end of the project site, and these soils could be prone to liquefaction. However, it determined that these fill soils would be removed from the site during excavation, and that this would remove this potential hazard. One of the recommendations of the report is that a site-specific, design-level geotechnical exploration be performed, which would allow this finding to be confirmed.

The Geotechnical Feasibility Report concluded that the proposed project is feasible from a geotechnical standpoint, provided that the preliminary recommendations included in the report, along with other sound engineering practices, are incorporated in the design and construction of the project. In addition, the proposed new building's foundation system would be integrated with and would complement the existing adjacent Shattuck Hotel building's foundation system where it may come in contact, so would not adversely affect that building's seismic readiness. The City of Berkeley requires all projects to submit a geotechnical report in order to receive a building permit from the City, and to comply with the recommendations of the report. Compliance with this uniformly applicable standard condition would reduce the project's potential impacts related to seismic shaking and landslides to a level of **less than significant level**.

b) As stated in the DAP EIR, most of the Downtown Area has already been developed. The use of standard soil erosion control measures during demolition and construction associated with the proposed project would be expected to minimize erosion from exposed surfaces and reduce soil erosion impacts to a **less than significant** level.

c) As stated in the DAP EIR, the Downtown Area is relatively flat, and soils have proven sufficiently stable to support previous urban development. The Geotechnical Feasibility Report for the proposed project found that the project site is underlain by dense, stable soils of the Quaternary Temescal formation, except under the northern end of the project site where, as mentioned above, there are backfilled soils in the original alignment of Strawberry Creek. However, the geotechnical report determined that these fill soils would be removed from the site during excavation, thus removing any potential soil stability hazard. Development under the project would therefore not be expected to face major soil stability concerns, and appropriate foundation design in accordance with current Uniform Building Code requirements, as well as required compliance with the project-specific geotechnical

report, would be expected to reduce any potential soil stability hazards to a level of **less than significant with mitigation incorporated**.

d) As stated in the DAP EIR, expansive soils may be present within the Downtown Area. However, General Plan Policy S-14 would help to reduce the potential risk associated with development on expansive soil. This Policy includes the following actions:

- When appropriate, utilize the environmental review process to ensure avoidance of hazards and/or adequate mitigation of hazard-induced risk.
- Require soil investigation and/or geotechnical reports in conjunction with development/redevelopment on sites within designated hazard zones such as areas with high potential for soil erosion, landslides, fault rupture, liquefaction and other soil-related constraints.
- Place structural design conditions on new development to ensure that recommendations of the geotechnical/soils investigations are implemented.
- Encourage owners to evaluate their buildings' vulnerability to earthquake hazards, fire, landslides, and floods and to take appropriate action to minimize the risk.
- Develop criteria for disaster-resistant land use regulations to ensure that new construction reduces rather than increases risk of all kinds.

As stated above, a geotechnical report has already been completed for the proposed project in January 2013. It did not identify expansive soils as a potential hazard at this site. As discussed above, the City of Berkeley requires compliance with the recommendations contained in the geotechnical report, thus complying with General Plan Policy S-14. Risks to life and property from expansive soils would be **less than significant**.

e) As discussed in the DAP EIR and under Item XVII, *Utilities and Service Systems,* of this environmental checklist, the Downtown Area, including the project site, is served by a sanitary sewer system maintained by the City of Berkeley for the collection system, and by the East Bay Municipal Utility District (EBMUD) for interceptor lines. The proposed project would have access to these systems, and the use of septic systems would be neither required nor permitted. The project would therefore have **no impact** in this regard.

Conclusion

The basic geologic setting of the project area has not changed since adoption of the DAP EIR, and the project's impacts related to Geology and Soils would be no greater than the less than significant impacts identified in the DAP EIR for the Plan as a whole. Implementation of the geotechnical recommendations from the project-specific geotechnical report would reduce any potential impacts to a less than significant level. These issues **do not require further study in an EIR**.

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
VII. GREENHOUSE GAS EMISSIONS. Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒	☐	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses greenhouse gas emissions (GHGs) on pages 4-77 through 4-86. As noted therein, "the adoption of the DAP, in itself, will have no impacts related to GHGs. However, individual projects developed in conformance with the DAP will generate GHG impacts from their construction and operation." However, the DAP EIR also noted that the increase in density associated with the DAP would result in reduced long-term GHGs, compared to alternative locations for accommodating future growth. Page 4-79 of the DAP states that "One of the core concepts underlying the DAP is that, by its nature, it is intended to be a plan for sustainable development. It would allow increased development within a quarter mile of one of the busiest transit node in the East Bay." Therefore, the DAP EIR concluded that there would be no DAP-related impacts related to GHGs, and no mitigation measures were required or identified.

In addition, the DAP EIR notes that, "while no significant GHG-related impacts have been identified in relation to adoption and implementation of the DAP, and no mitigation is required, the DAP includes many policies that will further reduce the GHG emissions from individual development projects." DAP policies that would reduce GHG emissions include:

Goal ES-3: *Encourage higher-density, highly livable development to take advantage of Downtown's proximity to regional transit and to improve the availability of diverse walk-to destinations – such as retail, services, culture, and recreation.*

Goal LU-1: *Concentrate housing, jobs, and cultural destinations in Downtown to be near transit, shops, and amenities, while simultaneously enhancing its character and livability.*

Goal AC-1: *Improve options that increase access to Downtown on foot, by bicycle, and via transit.*

Goal AC-4: Promote transit as an efficient, attractive choice and as a primary mode of motor-vehicle travel.

Greenhouse Gas Emissions Environmental and Regulatory Setting

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat trapping effect of GHG, Earth's surface would be about 34° C cooler (CalEPA, 2006). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. According to the CalEPA's 2010 Climate Action Team Biennial Report, potential impacts of climate change in California may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CalEPA, April 2010). While there is growing scientific consensus about the possible effects of climate change at a global and potentially statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy.

The regulatory circumstances surrounding the analysis of GHG emissions has developed substantially since the DAP EIR, including the amendment of the CEQA guidelines to include checklist items addressing GHG emissions pursuant to SB 97, the BAAQMD's adoption of thresholds of significance for analyzing GHG emissions, and the subsequent overruling of the BAAQMD thresholds by the Alameda County Superior Court (*California Building Industry Association v. Bay Area Air Quality Management District*, March 2013). The BAAQMD was ordered to set aside the thresholds and is no longer recommending that these thresholds be used as a general measure of a project's significant air quality impacts. In August 2013, the First District Court of Appeal overturned the trial court and held that the thresholds of significance adopted by the BAAQMD were not subject to CEQA review. The California Supreme Court has agreed to hear an appeal of this case. The case is currently being briefed and the matter is still pending. Thus, BAAQMD will not issue a further recommendation until this litigation is complete.

Climate Action Plan. Adopted in June of 2009, the City of Berkeley's Climate Action Plan (CAP; City of Berkeley, June 2009) sets a 2020 year target to achieve a 33 percent absolute reduction below 2000 community-wide emissions and identifies actions to achieve the target with the ultimate goal of 80 percent emission reductions. The CAP contains GHG-reduction policies for transportation and land use, building energy use, and waste reduction and recycling.

General Plan. The City of Berkeley also addresses GHG emissions in its General Plan, primarily in the Environmental Management Element. Policies in the General Plan that would reduce GHG emissions include developing a green building certification program and encouraging compliance with green building standards (Policy EM-4, Policy EM-5), increased waste diversion (Policy EM-7), construction and demolition material recycling (Policy EM-8), support and implementation of local emission reduction programs (Policy EM-19), promotion

of energy-efficient design techniques (Policy EM-35), and implementation of energy conservation techniques (Policy EM-36).

Project-Specific Impacts

Thresholds of Significance. Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the *State CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions in March 2010. These guidelines are used in evaluating the cumulative significance of GHG emissions from the proposed project. According to the adopted *CEQA Guidelines*, impacts related to GHG emissions from the proposed project would be significant if the project would:

- *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or*
- *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (*CEQA Guidelines*, Section 15355). In June 2010, the BAAQMD Board of Directors adopted thresholds of significance to assist in the review of projects under CEQA. As described above, the BAAQMD was ordered to set aside its adopted GHG thresholds and is no longer recommending that these thresholds be used as a general measure of a project's significant air quality impacts. As such, lead agencies need to determine appropriate GHG thresholds of significance based on substantial evidence in the record. Lead agencies may rely on the BAAQMD's *CEQA Guidelines* (updated May 2012) for assistance in calculating air pollution emissions, obtaining information regarding the health impacts of air pollutants, and identifying potential mitigation measures.

The City of Berkeley's CAP is not a qualified GHG Reduction Strategy (Strategy) pursuant to BAAQMD's *CEQA Air Quality Guidelines*. Among other requirements, a qualified Strategy must establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable. The City's CAP does not set such a threshold. Therefore, for this EIR, the City of Berkeley has determined that the significance thresholds in the BAAQMD's May 2010 *CEQA Guidelines* for project operations within the San Francisco Bay Area Air Basin are the most appropriate thresholds for use to determine the GHG impacts of the proposed project. The significance thresholds are shown in Table 9.

Table 9
GHG Significance Thresholds

GHG Emission Source Category	Operational Emissions
Non-stationary Sources	1,100 MT of CO_2E/year OR 4.6 MT of CO_2E/SP/year (residents + employees)
Stationary Sources	10,000 MT/year
Plans	6.6 MT of CO_2E/SP/year (residents + employees)

Notes: SP = Service Population.
Project emissions can be expressed on a per-capita basis as metric tons of CO_2E/Service Population/year, which represents the project's total estimated annual GHG emissions divided by the estimated total number of new residents and employees that would result from development of a project.

These thresholds are lower than many other commonly used thresholds, including the BAAQMD's 1999 thresholds, and thus use of the thresholds in the May 2010 *CEQA Guidelines* represents a more conservative analysis of potential GHG impacts. The per-service population guideline is intended to avoid penalizing large projects that incorporate GHG-reduction measures such that they may have high total annual GHG emissions, but would be relatively efficient, as compared to projects of similar scale. Therefore, the proposed project would have a potentially significant contribution to GHG emissions if it would result in GHG emissions that would exceed both the bright-line threshold of 1,100 metric tons of CO_2E per year or the efficiency threshold of 4.6 metric tons of CO_2E per service population per year. If the proposed project would not result in more than 1,100 metric tons of CO_2E per year, then comparison to the efficiency threshold is not required.

Study Methodology. Calculations of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) emissions are provided to identify the magnitude of potential project effects. The analysis focuses on CO_2, CH_4, and N_2O because these make up 98.9 percent of all GHG emissions by volume (IPCC, 2007) and are the GHG emissions that the project would emit in the largest quantities. Fluorinated gases, such as HFCs, PFCs, and SF_6, were also considered for the analysis. However, because the project is a mixed-use development that would not include industrial uses, the quantity of fluorinated gases would not be significant since fluorinated gases are primarily associated with industrial processes. Emissions of all GHGs are converted into their equivalent weight in CO_2 (CO_2E). Minimal amounts of other main GHGs (such as chlorofluorocarbons [CFCs]) would be emitted; however, these other GHG emissions would not substantially add to the calculated CO_2E amounts. Calculations are based on the methodologies discussed in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper (January 2008) and included the use of the California Climate Action Registry (CCAR) General Reporting Protocol (January 2009).

a) GHG emissions associated with project construction and operations are discussed below.

Construction Emissions. Although construction activity is addressed in this analysis, CAPCOA does not discuss whether any of the suggested threshold approaches adequately address impacts from temporary construction activity. As stated in the *CEQA and Climate Change* white paper, "more study is needed to make this assessment or to develop separate thresholds for construction activity" (CAPCOA, 2008). Nevertheless, air pollution control

districts such as BAAQMD have recommended amortizing construction-related emissions over a 30-year period in conjunction with the proposed project's operational emissions.

Construction of the proposed project would generate temporary GHG emissions primarily due to the operation of construction equipment and truck trips. Site preparation and grading typically generate the greatest amount of emissions due to the use of grading equipment and soil hauling. CalEEMod was used to estimate emissions associated with the construction period, based on parameters such as the duration of construction activity, area of disturbance, and anticipated equipment use during construction. Complete results from CalEEMod and assumptions are included in Appendix B.

Demolition and construction activities would occur over a period of 18-24 months. For the purpose of the emissions estimates in this analysis, an overall construction period of 18 months is assumed, which represents a conservative estimate of the construction period, as the total required construction activity is compressed into a shorter period. As shown in Table 10, construction activity associated with the project would generate an estimated 1,064 metric tons of CO_2E. In order to assess the potential impact of construction GHG emissions, which occur prior to project occupancy and then cease, construction emissions are amortized over the estimated lifetime of the project (most commonly assumed to be 50 years). Amortized over a 50-year period, construction of the proposed project would generate approximately 21.3 metric tons of CO_2E per year.

Table 10
Estimated Construction Emissions of Greenhouse Gases

	Annual Emissions (metric tons CO_2E)
Total Estimated Construction Emissions	1,064 MT of CO_2E
Amortized over 50 years	21.3 MT CO_2E/year

See Appendix B for CalEEMod Results.

On-Site Operational Emissions. Operation of the proposed project would consume natural gas and electricity. Operational emissions from energy use for the proposed project were estimated using CalEEMod (see Appendix B for calculations). The default values on which CalEEMod is based include the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies.

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coatings were calculated in CalEEMod based on standard emission rates from the California Air Resources Board (CARB), USEPA, and district supplied emission factor values (CalEEMod User's Guide, 2013).

Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic

content of waste (CalEEMod User's Guide, 2013). Waste disposal rates by land use and overall composition of municipal solid waste in California were primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle). A 50% reduction in waste was assumed, consistent with the requirements of AB 939.

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for Northern and Southern California.

Direct Emissions from Mobile Combustion. GHG emissions from transportation sources were based on the traffic impact analysis conducted by the IBI Group (April 2014), using the standard Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th Edition vehicle trip generation rates. Emissions of CO_2 and CH_4 from transportation sources associated with the proposed project were quantified using CalEEMod.

Combined Annual Construction, Operational, and Mobile GHG Emissions. Table 11 combines the construction and operational GHG emissions associated with the proposed project. As described above, emissions associated with construction activity (approximately 1,064 metric tons CO_2E) are amortized over 50 years (the anticipated lifetime of the project).

Table 11
Combined Annual Emissions of Greenhouse Gases from Proposed New Development

Emission Source	Annual Emissions
Construction	21.3 MT of CO_2E
Operational	
Area	3.8 MT of CO_2E
Energy	744.4 MT of CO_2E
Solid Waste	34.0 MT of CO_2E
Water	88.4 MT of CO_2E
Mobile	1,495.6 MT of CO_2E
Total	**2,352.0 MT of CO_2E**

Sources: See Appendix B for calculations and for GHG emission factor assumptions.

As shown in Table 11, the combined annual emissions from new development on the project site would total approximately 2,352 metric tons per year of CO_2E. The majority (64%) of the project's GHG emissions are associated with transportation sources.

In addition, the proposed project would result in the removal of existing land uses on the project site, which include Shattuck Cinemas, the Habitot children's museum, a medical office, and approximately 41,000 square feet of leasable office space. Removal of these existing uses would eliminate ongoing GHG emissions associated with these uses, replacing them with the proposed residential, theater, and retail/restaurant uses. Table 12 combines the operational GHG emissions associated with these existing land uses on the project site.

Table 12
Combined Annual Emissions of Greenhouse Gases from Existing Development

Emission Source	Annual Emissions
Operational	
Area	<0.1 MT of CO_2E
Energy	278.4 MT of CO_2E
Solid Waste	16.7 MT of CO_2E
Water	46.7 MT of CO_2E
Mobile	1,387.4 MT of CO_2E
Total	**1,729.3 MT of CO_2E**

Sources: See Appendix B for calculations and for GHG emission factor assumptions.

As shown in Table 12, the combined annual emissions from existing development on the project site would total approximately 1,729 metric tons per year of CO_2E. When subtracted from the new GHG emissions that would result from proposed new development on the project site, the net new annual GHG emissions would total approximately 637 metric tons of CO_2E per year. These emissions do not exceed the threshold of 1,100 metric tons per year. Because the DAP EIR did not identify project-specific impacts related to GHG emissions, impacts resulting from GHG emissions would be greater than impacts identified in the DAP EIR for the Plan as a whole, but would remain **less than significant**.

b) State policies to reduce GHG emissions associated with energy use, including the Renewable Portfolio Standard, Title 24 of the California Building Code, and the California Solar Initiative, would reduce anticipated emissions associated with the proposed project by reducing energy use, or by providing a "cleaner" (less GHG-intensive) mix of electricity to the project from the regional utility. In addition, the City General Plan, Community Design Guidelines, and Zoning Regulations include policies that reduce energy use from buildings and equipment, including design standards that maximize passive ventilation and cooling systems and use of natural lighting within buildings, and energy efficiency performance standards for proposed buildings taller than 50 feet. By complying with existing City policies and regulations, the project would be generally consistent with these existing requirements.

In addition, the City of Berkeley adopted a Climate Action Plan in 2009. The CAP includes goals, policies, and implementing actions that are applicable to the project proposal, including:

- *The Transportation and Land Use Chapter includes policies designed to reduce vehicle miles traveled in Berkeley by making cycling, walking, public transit, and other sustainable mobility modes the mainstream and to increase vehicle fuel efficiency and the utilization of low carbon fuels.*

- *The Building Energy chapter includes policies that would reduce conventional energy use in existing Berkeley homes, businesses, and institutions through energy efficiency retrofits and a greater reliance on renewable energy, such as solar.*
- *The Waste Reduction and Recycling chapter includes policies that would eliminate solid waste at the point of production, and to maximize reuse and recycling throughout the community.*

City of Berkeley General Plan Environmental Management Element also contains policies and actions that would be expected to reduce GHG emissions. The project site is designated as Downtown in the City of Berkeley General Plan, which is considered appropriate for mixed-use commercial and residential buildings and is also located within the Downtown Area Plan. The project site is zoned Commercial Downtown Mixed Use (C-DMU). The proposed project is consistent with these existing designations, indicating that the project represents anticipated growth under the inventory and assumptions of the General Plan and the CAP.

Table 13 illustrates that the proposed project would be consistent with the applicable implementation measures in the CAP and General Plan Environmental Management Element.

Table 13
Project Consistency with Applicable
Climate Action Plan and General Plan Implementation Strategies

Goals, Policies, and Actions	***Project Consistency***
City of Berkeley Climate Action Plan	
Sustainable Transportation & Land Use Actions: *1. Goal: Increase density along transit corridors* *a. Policy: Encourage the development of housing (including affordable housing) retail services, and employment centers in areas of Berkeley best served by transit* **Implementing Actions:** • *Implement zoning adjustments to facilitate a mix of housing and commercial development (including retail services and employment centers) in certain transit-served areas. Proposed zoning adjustments or changes to the General Plan will not have any force or effect until approved by a separate action by the City Council. Such proposals will undergo thorough review by commissions, community members and the City Council. Review processes will include noticed public hearings. Proposed zoning adjustments include:* • *Encourage car-lite (e.g., households with fewer cars than driving-age residents) and, where possible, car-free (e.g., households without cars) development in certain transit-served areas by creating incentives and eventually requiring developers and business owners who work with the City, AC Transit, BART and other appropriate agencies to develop and implement a plan of action for reducing the impact of their development/business on VMT.* • *Encourage car-lite and/or car-free development in certain transit-served areas by making parking*	**Consistent.** The proposed project is located in Downtown Berkeley near the intersection of University Avenue and Shattuck Avenue. The site is located within ½-mile of bus stops and the Downtown Berkeley BART station. The project proposes: • 302 apartment/condominium units (including 28 affordable units) • A 1,403 square-foot community room available to be reserved by the residents for parties and other social events (not be available to the general public) • Residential open space, consisting of 14,535 square feet of shared rooftop terraces and 11,045 square feet of private balconies and decks • An AC Transit pass for each apartment/condominium unit and one pass for each employee • Six new movie theaters to replace the existing Shattuck cinemas, totaling 21,641 square feet • 10,535 square feet of retail and/or restaurant commercial floor area fronting Allston and Harold Ways and Kittredge Street • 1,872 square feet of privately owned, publicly accessible open space at the corner of Kittredge Street and

Table 13
Project Consistency with Applicable
Climate Action Plan and General Plan Implementation Strategies

Goals, Policies, and Actions	*Project Consistency*
requirements more flexible for developers and business owners that site near transit and that provide services, infrastructure and/or mitigation payments to reduce parking demand. Options a developer/business owner could provide in lieu of providing parking spaces may include: ○ *Car share parking* ○ *Indoor and outdoor bicycle parking* ○ *Indoor showers and changing rooms for cycling employees* ○ *Dedicated parking for electric vehicles, hybrids and plug-in hybrids* ○ *Implementation of an Eco-Pass program for employees/tenants* ○ *Mitigation payments that would be allocated to local transportation* ○ *demand management projects* • *Establish parking maximums in specified transit-rich areas of the City.* • *Adjust zoning to allow for greater residential density and specified commercial uses along certain transit corridors and in proximity to the Downtown Berkeley, Ashby and North Berkeley BART stations* • *Establish minimum building heights in certain transit-rich areas such as the Downtown in order to prevent the underutilization of transit-served areas* • *Ensure that dense transit-served corridors transition well into surrounding lower density residential zones in order to preserve the character of interior neighborhoods* • *Increase current bicycle parking requirements for new development in Berkeley*	Harold Way with improvements including special paving and amenities, and street improvements along Harold and Allston ways including a speed table (please see the discussion below under Offsite Public Improvements for further details) • 171 parking spaces in a three–level, subterranean parking structure accessed from Kittredge Street, including 11 electric vehicle charging stations and 6 spaces reserved for carsharing vehicles • 100 secured bicycle storage spaces within the building, including spaces on the first level as well as in the parking garage • Roof-top solar energy production and solar water heating • LEED Gold or equivalent environmental performance
2. Goal: Increase and enhance urban green and open space, including local food production, to improve the health and quality of life for residents, protect biodiversity, conserve natural resources, and foster walking and cycling *b. Policy: Promote tree planting, landscaping, and the creation of green and open space that is safe and attractive and that helps to restore natural processes.* **Implementing Actions:** • *Establish standards and guidelines to ensure that ecologically beneficial stormwater quality and retention features and water conservation features are integrated into the design of landscaping features on both public and private land.* • *Encourage the development of green roofs by providing outreach and guidelines consistent with the building code.* *c. Policy: Increase access to healthy and affordable foods for the community by supporting efforts to build more complete and sustainable local food production*	**Consistent.** The project would incorporate urban green features such as: • LEED Gold or equivalent environmental conformance; • Roof gardens with flow through planters to reduce heat island effect and capture water; • Solar shading for residential units; • rooftop solar panels for hot water and electric power generation; • Reuse of captured rainwater for landscape irrigation; • Installation of drought-tolerant plants and materials; • Transportation Demand Management, including unbundled parking, AC Transit passes, electric vehicle charging spaces and 100 secure bicycle parking spaces; and • Planting 4 additional street trees.

Table 13
Project Consistency with Applicable
Climate Action Plan and General Plan Implementation Strategies

Goals, Policies, and Actions	*Project Consistency*
and distribution systems. **Implementing Actions:** • *Encourage and provide guidelines consistent with the building code for buildings to incorporate rooftop gardens that can be used for food production.* • *Through the City's website and publications, encourage residents to grow food in home and community gardens using methods that reduce GHG emissions, such as using organic inputs and compost.*	
3. Goal: Manage parking more effectively to minimize driving demand and to encourage and support alternatives to driving *a. Policy: Design and implement parking strategies to create disincentives for driving – especially for single-occupancy commuting – and, where possible, to build revenue for transportation services.* **Implementing Actions:** • *"Un-bundle" prices for housing and parking so that parking spaces require separate payment and are not included in the rent or purchase price of a unit. Those who choose to live car-free should not be burdened with the cost of a parking space they do not need. And those that do require a car should be made aware of the full costs associated with owning it.*	**Consistent.** The project would implement Transportation Demand Management features that would reduce vehicle trips, which include: • Unbundled parking (parking that is leased separately from dwelling units); • AC Transit passes for each residential household and every commercial employee; • Six car share parking spaces; • 11 dedicated electric vehicle charging; and • 100 secure bicycle parking spaces. A number of offsite, public streetscape and mobility improvements are proposed as well. Bulb-outs on both sides of Harold Way would be constructed at its intersections with Allston Way and Kittredge Street. One of these would accommodate public bicycle racks.
5. Goal: Accelerate Implementation of the City's Bicycle & Pedestrian Plans *a. Policy: Continue to expand and improve Berkeley's bicycle and pedestrian infrastructure* **Implementing Actions:** • *Continue to create additional bicycle parking throughout the community, including near transit centers and other key destinations and as part of any new development projects.*	**Consistent.** The project would create additional bicycle parking as a part of the proposed development. As mentioned previously the project site is located near transit centers, as well as located in a key location Downtown. Bicycle parking includes : • 100 secure bicycle parking spaces; and • Public bicycle racks on one of the proposed bulb-outs on Harold Way. In addition, the project would be located approximately 350 feet from the Milvia Street Bicycle Boulevard, one of Berkeley's main designated north-south bicycle routes.
6. Goal: Make public transit more frequent, reliable, integrated and accessible *d. Policy: Partner with AC Transit, BART, UC Berkeley and other employers to provide subsidized transit passes and fare-free zones.* **Implementing Actions:** • *Negotiate conditions of approval for all new residential multi-family developments to provide free or subsidized transit passes for tenants. Incentives can*	**Consistent.** The project would implement Transportation Demand Management features that would reduce vehicle trips, and provide AC Transit passes for each residential household and every commercial employee.

Table 13
Project Consistency with Applicable
Climate Action Plan and General Plan Implementation Strategies

Goals, Policies, and Actions	*Project Consistency*
include reduced parking requirements for projects served by transit.	
7. Goal: Enhance and expand car sharing and ridesharing programs ***a.*** *Policy: Make car sharing convenient and available to all Berkeley residents by providing additional incentives and by removing disincentives to car sharing* **Implementing Actions:** • *Require that developers of new residential and commercial projects of a certain size (to be specified) make spaces available for car share vehicles (provide decreased parking requirements in return).*	**Consistent.** The project would implement Transportation Demand Management features that would reduce vehicle trips, and provide six car share parking spaces.
City of Berkeley General Plan Environmental Management Element	
Policy EM-4*: Green Building Certification. Develop a green building certification program.* ***Actions****:* *A. Requiring City-owned buildings, buildings developed by private developers on City-owned and controlled land, and projects that include City financial assistance to be Green Building certified.* *B. Encouraging all private buildings to be Green Building certified.* *C. Developing a green design assistance program.* *D. The minimization of greenhouse gases produced by new buildings especially as related to space heating efficiencies.*	**Consistent.** The project would include green building and design standards including: • LEED Gold or equivalent environmental conformance (as required under Section 23E.68.085.A of Berkeley's Municipal Code); • Roof gardens with flow through planters to reduce heat island effect and capture water; • Solar shading for residential units; and • Rooftop solar panels for hot water and electric power generation. In addition, the proposed project would be required to comply with all standards of Title 24 that are in effect at the time of development. The 2013 Title 24 standards are approximately 30% more efficient than the 2008 standards, which in turn are approximately 15% more efficient than the 2005 standards.
Policy EM-5*: "Green" Buildings. Promote and encourage compliance with "green" building standards. (Also see Urban Design and Preservation Policy UD-33.)* ***Actions****:* *A. Encourage, and where appropriate require, new construction and major remodel projects to be sited, designed, constructed, and operated to enhance the well-being of their occupants, and to minimize present and future impacts on the community and the natural environment. (Also see Policy EM-39.)* *B. Encourage landscaping for water and energy efficiency. (Also see Policy EM-26.)* *C. Encourage buildings to incorporate renewable energy and energy- and water-efficient technologies. (Also see Policies EM-38 and EM-39.)* *D. Encourage use of recycled-content construction materials.*	**Consistent.** The project would incorporate green building standards, as well as other sustainable building features. These features include: • LEED Gold or equivalent environmental conformance; • Roof gardens with flow through planters to reduce heat island effect and capture water; • Solar shading for residential units; • rooftop solar panels for hot water and electric power generation; • Reuse of captured rainwater for landscape irrigation; • Installation of drought-tolerant plants and materials;

Table 13
Project Consistency with Applicable
Climate Action Plan and General Plan Implementation Strategies

Goals, Policies, and Actions	*Project Consistency*
(Also see Policy EM-6.) *E. Encourage efforts to improve indoor air quality and to provide a comfortable and healthy environment.* *F. Encourage reduction of construction and demolition waste. (Also see Policy EM-6.)* *G. Encourage construction of durable buildings.* *H. Establish a green design assistance and green building certification program.*	• Transportation Demand Management, including unbundled parking, AC Transit passes, electric vehicle charging spaces and 100 secure bicycle parking spaces; and • Planting 4 additional street trees. The proposed project would also be required to comply with all standards of Title 24 that are in effect at the time of development. The 2013 Title 24 standards are approximately 30% more efficient than the 2008 standards, which in turn are approximately 15% more efficient than the 2005 standards. The project would also be required to comply with all State and local measures that address water use and conservation that are in effect at the time of development, including the State CALGreen water efficiency standards.
***Policy EM-7**: Reduced Wastes. Continue to reduce solid and hazardous wastes.* ***Actions**:* *A. Achieve a 64 percent diversion of waste from landfills.* *B. Manage wastes locally to the greatest extent feasible to minimize the export of wastes and pollution to other communities.* *C. Encourage the Lawrence Berkeley Laboratory and the University of California to minimize to the greatest extent feasible the storage of radioactive and other toxic wastes in Berkeley.* *D. Encourage reduction in the use of toxic materials.* *E. Encourage reuse, recycling, and composting.* *F. Facilitate battery and used oil recycling.* *G. Support programs and incentives to reduce the manufacture and use of materials which are non-recyclable or hazardous to people and the environment.* *H. Develop education and promotion programs to increase recycling by occupants of multifamily buildings.* *I. Through legislation and other means, reduce the use of plastic by eliminating multiple layers in packaging and encourage reusable shipping containers such as collapsible pallets and refillable bottles for bulk liquids.* *J. Encourage reusable bags and packaging such as reusable bottles, whether glass or plastic.* *K. Link collection of plastic to mandated recycled content in plastic packaging.* *L. Advocate at the state level for higher disposal fees for products that are designed for single use and for products that do not incorporate any post-consumer recycled content.*	**Consistent.** The City of Berkeley is responsible for complying with AB 939. The City has consistently met its goals for solid waste diversion, and achieved a diversion rate of 57% in 2006, the last year for which diversion rate data is available from CalRecycle (CalRecycle, 2014). From 2007 to 2012, the City of Berkeley reduced its per capita disposal rate from 5.1 lbs/day to 3.5 lbs/day, a decrease of 31%. Therefore, it is reasonable to expect that the current diversion rate in the City of Berkeley exceeds the 64% goal stated in the CAP. It is anticipated that the proposed project would participate in the City's waste diversion programs and would similarly divert a minimum of 57% of its solid waste. The project would also be subject to all applicable State and County requirements for solid waste reduction as they change in the future.

Table 13
Project Consistency with Applicable
Climate Action Plan and General Plan Implementation Strategies

Goals, Policies, and Actions	*Project Consistency*
***Policy EM-8**: Building Reuse and Construction Waste. Encourage rehabilitation and reuse of buildings whenever appropriate and feasible in order to reduce waste, conserve resources and energy, and reduce construction costs. (Also see Urban Design and Preservation Policy UD-6.)* ***Actions**:* *A. Encourage the reuse of demolition materials and recycling of construction scraps.* *B. Expand the existing yard-waste recycling program to include restaurant and institutional food waste.*	**Consistent.** The City of Berkeley responsible for complying with AB 939. The City has consistently met its goals for solid waste diversion, and achieved a diversion rate of 57% in 2006. Additionally, the City of Berkeley requires that Building Permit applicants constructing any new building are required to divert Construction and Demolition (C&D) waste and debris from landfill disposal in accordance with Construction & Demolition Debris Diversion Requirements (BMC 19.24) and the Berkeley Green Code (BMC 19.37). Subject building projects shall divert 100% of asphalt, concrete, excavated soil and land clearing debris and at least 50% of the remaining construction and demolition debris by recycling, reuse, compost, or other approved method.
***Policy EM-19**: 15 percent Emission Reduction: Global Warming Plan. Make efforts to reduce local emissions by 15 percent by the year 2010. (Also see Transportation Policy T-19.)* ***Action**:* *A. Continue to support and implement local emission reduction programs, such as the City of Berkeley Employee Fleet Bicycle Program, the Police Bicycle Program, and the actions recommended in the City of Berkeley Resource Conservation and Global Warming Abatement Plan.*	**Consistent.** The project would implement Transportation Demand Management features that would reduce vehicle trips, which include: • Unbundled parking (parking that is leased separately from dwelling units); • AC Transit passes for each residential household and every commercial employee; • Six car share parking spaces; • 11 dedicated electric vehicle charging; and • 100 secure bicycle parking spaces. A number of offsite, public streetscape and mobility improvements are proposed as well. Bulb-outs on both sides of Harold Way would be constructed at its intersections with Allston Way and Kittredge Street. One of these would accommodate public bicycle racks.
***Policy EM-35**: Energy-Efficient Design. Promote high-efficiency design and technologies that provide cost-effective methods to conserve energy and use renewable energy sources. (Also see Urban Design and Preservation Policy UD-33.)* ***Action**:* *A. Promote statewide code revisions necessary to enable the use of new methods and materials to conserve resources and prevent pollution.*	**Consistent.** The project would install energy efficient features, such as: • LEED Gold or equivalent environmental conformance; • Roof gardens with flow through planters to reduce heat island effect and capture water; • Solar shading for residential units; and • Rooftop solar panels for hot water and electric power generation; Under State law, all appliances that are purchased for the project - both pre- and post-occupancy – would be consistent with energy efficiency standards that are in effect at the

Table 13
Project Consistency with Applicable
Climate Action Plan and General Plan Implementation Strategies

Goals, Policies, and Actions	*Project Consistency*
	time of manufacture. In addition, the proposed project would be required to comply with all standards of Title 24 that are in effect at the time of development. The 2013 Title 24 standards are approximately 30% more efficient than the 2008 standards, which in turn are approximately 15% more efficient than the 2005 standards.
***Policy EM-36**: Energy Conservation. Continue to implement energy conservation requirements for residential and commercial buildings at the time of sale and at time of major improvements.* ***Actions**:* *A. Encourage patterns of development, building designs, and construction methods that are energy-efficient and reduce pollution.* *B. Encourage the use of lighting that is energy-efficient and non-intrusive.*	**Consistent.** The project would conserve energy by establishing: • LEED Gold or equivalent environmental conformance ; • Roof gardens with flow through planters to reduce heat island effect and capture water; • Solar shading for residential units; • Rooftop solar panels for hot water and electric power generation; • Reuse of captured rainwater for landscape irrigation; and • Installation of drought-tolerant plants and materials. In addition, the proposed project would be required to comply with all standards of Title 24 that are in effect at the time of development. The 2013 Title 24 standards are approximately 30% more efficient than the 2008 standards, which in turn are approximately 15% more efficient than the 2005 standards.

As shown in Table 13, the project would be consistent with the applicable implementation measures in the City's CAP and General Plan. Because the proposed project would not conflict with state regulations intended to reduce GHG emissions from new development, and represents anticipated growth under the inventory and assumptions of the General Plan and the CAP, GHG emissions from the project would not conflict with California's commitment to GHG reduction under AB 32, or any other plan, policy or regulation intended to reduce GHG emissions. The DAP EIR did not address impacts related to GHG emissions; however, impacts from GHG emissions would be **less than significant**.

Conclusion

The DAP EIR did not address impacts related to GHG emissions; however, impacts from GHG emissions would be less than significant. This issue **does not require mitigation or further study in an EIR**.

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
VIII. 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?	☐	☒	☐	☒	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☒	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☒	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☒	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☒	☐

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☒	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☒	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒	☐	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses hazards and hazardous materials impacts on pages 4-133 through 4-140. It addresses the following issues, discussed below: hazardous materials; aviation hazards; emergency response and evacuation; and wildland fire hazards.

Hazardous Materials Use and Transport

The DAP identifies motor vehicle use and storage, and use of materials for periodic cleaning, repair, and maintenance or for landscape maintenance/pest control as potential source of exposure to hazardous materials. However, it concludes that normal use of hazardous materials at commercial and residential land uses in the Downtown would not pose a significant risk to human health or the environment because those using such materials would be responsible for their safe use and would be required to comply with all applicable regulations regarding the disposal of household hazardous waste.

According to the DAP EIR, the major sources of existing hazardous materials contamination on sites in the Downtown Area are associated with non-residential activity, including chemical contamination from businesses such as dry cleaning establishments; gasoline and waste oil contamination from automobile repair and service facilities whose underground storage tanks (USTs) may have leaked; and fuel oil contamination from underground heating oil storage tanks. It identifies sites with a record of having leaking underground storage tanks (LUSTs) and

leaking underground fuel tanks (LUFTs), but no sites on the "Cortese" list (i.e., Government Code Section 65962.5). The DAP EIR concludes that any development on these sites would require remediation of the site contamination, but that after remediation, impacts associated with development on these sites would be considered less than significant.

The DAP EIR also states that medical facilities, dentists, veterinarians, and clinics in the Downtown Area are another potential source of hazardous materials, but are required to comply with the Medical Waste Management Act, which establishes handling, storing, hauling, treating and disposal requirements for medical waste. The Medical Waste Management Act also requires that generators responsible for the production of more than 200 pounds of medical waste per month register with the State. The DAP EIR also identifies potential activities of the University of California in the Downtown that may involve the routine transport, use and disposal of hazardous materials, such as use and transport of chemicals, medical wastes and biohazards, radioactive substances, explosives, toxic gases, nanoparticles and controlled substances. However, it also states that the Hazardous Materials Management team within the University's Office of Environment, Health and Safety has responsibility for monitoring the transport, use and disposal of all hazardous materials that may be present in University laboratories and research facilities, and has established procedures and regulations to ensure that all such materials will be handled safely. The DAP EIR concludes that potential impacts related to hazardous materials transport, such as risk of upset, would be less than significant.

Similarly, the DAP EIR concludes that, although there are schools in the Downtown that could be within ¼ mile of facilities with the potential to release hazardous materials, compliance with existing regulations and standard safety procedures related to the handling of hazardous materials at these facilities would be expected to reduce potential impacts to a less than significant level.

Aviation Hazards

The DAP EIR concludes that, because there are no airstrips in the vicinity of the Downtown Area, development under the DAP would not expose those in the Downtown Area to any hazards associated with aviation operations.

Emergency Response and Evacuation

The DAP EIR finds that the DAP proposes no changes to the Downtown Area street system that would impede or otherwise negatively affect emergency access, including the emergency access and evacuation routes identified in the Berkeley General Plan. It also states that Berkeley General Plan Policy T-28, which identifies actions to help maintain emergency access, including not installing diverters or speed humps on streets identified as Emergency Access and Evacuation Routes (which includes all streets in the Downtown Area except Milvia Street north of University Avenue and Fulton Street south of Bancroft Way), would help ensure that adequate emergency access would be maintained. It also states that the Berkeley Fire Department and Berkeley Police Department would review any proposed changes to the current Emergency Access and Evacuation routes prior to modification. It finds that, for all these reasons, the DAP would have a less than significant impact on emergency response and evacuation.

Wildland Fire Hazards

The DAP EIR finds that no part of the Downtown Area is within an area formally identified as subject to wildland fire hazards, and that development under the DAP would therefore not increase exposure to this hazard in any significant way, although such a hazard cannot be completely ruled out. As stated on page 4-135 of the DAP EIR, "…in September, 1923, a major wildfire that began in the Wildcat Canyon area ultimately destroyed homes within a few blocks of the Downtown Area. An uncontrolled wildfire originating in the Berkeley Hills today could still pose a threat to people and property in the Downtown Area, given conditions favorable to the rapid spread of such a fire."

Project-Specific Impacts

a,c) As stated in the DAP EIR, hazardous materials use associated with the type of commercial and residential uses proposed under the project can include motor vehicle use and storage, and use of materials for periodic cleaning, repair, and maintenance or for landscape maintenance or pest control. The DAP EIR's conclusion remains valid that, with existing regulations and normal standards of use, use of hazardous materials at commercial and residential land uses in the Downtown would not pose a significant risk to human health or the environment. Transport and use of such materials would be subject to all applicable state and federal laws, such as Hazardous Materials Transportation Act, the Resource Conservation and Recovery Act, the California Hazardous Materials Management Act, and the California Code of Regulations, Title 22. While the project site is within roughly 330 feet (0.06 miles) of Berkeley High School, it would not emit hazardous emissions or pose a significant risk to this or any other school from hazardous materials releases. This impact is **less than significant**.

b, d) The existing structures on the project site would be altered or demolished to accommodate the proposed project. A Phase I Site Assessment performed in June 2012 by IVI Assessment Services, Inc. (Appendix D) found some materials in the buildings currently located on the project site that may contain Asbestos-Containing Material (ACM). It found that these materials were in good condition, and recommended no further action other than maintaining potential ACM in good condition under the site's existing Asbestos Operations and Maintenance (O&M) Program. It recommended that all activities involving disturbance of ACM should be conducted in accordance with governmental regulations. BAAQMD Regulation 11, Rule 2, which governs the proper handling and disposal of ACM for demolition, renovation, and manufacturing activities in the Bay Area, is the applicable governmental regulation, and would apply to the project. The Phase I Assessment also found that lead-based paint (LBP) may exist at the project site. It concluded that testing would be required in order to determine whether LBP exists. The City of Berkeley recommends that common renovation activities like sanding, cutting and demolition, which can create hazardous lead dust, are conducted properly by trained and certified contractors or individuals (City of Berkeley. *Frequently Asked Questions (FAQs) from Residents*. April 2014), consistent with the EPA's Lead Renovation, Repair and Painting Rule, which is available on the EPA's website at http://www.epa.gov/lead/pubs/renovation.htm (United States Environmental Protection Agency, April 2014).

Review of Cortese List sites in the Geotracker database (California State Water Resources Control Board, March 2014) indicates that the closest listed property is a closed Underground Storage Tank at 2001 Allston Way, located approximately 285 feet to the west of the project site, which is currently the site of the YMCA. Because this site has a closed status, and because the generally southward flow of groundwater in this area would not tend to carry contamination from this site to the project site, it would not pose a significant risk of having introduced contamination in the soils underneath the project site. The closest "open status" listed property is Berkeley Touchless Car Wash, a LUST cleanup site at 2176 Kittredge Street, located approximately 415 feet to the east of, and slightly uphill from, the project site. The site status for this site is "Open - Site Assessment as of 1/9/2013." The contaminants of concern are gasoline, waste oil/motor/hydraulic/lubricating. However, groundwater flow in the area is to the south, which would generally not carry contamination from this site to the project site, although Geotracker does show multiple "closed case" historical contamination sites to the north of the project site.

The project site is not included on any list compiled pursuant to Section 65962.5 of the Government Code. Additionally, the Phase I Site Assessment for the site (Appendix D) found no evidence of Recognized Environmental Conditions (REC) in connection with the project site. However, it does identify a portion of the project site as the site of dry cleaning establishments during the 1920s-1950s, although these former cleaners were not identified on any regulatory databases that report releases, spills or contamination conditions, such as the CERCLIS or SHWS lists. Nevertheless, it concludes that the potential still exists for adverse impact to the project site, mainly as a vapor intrusion concern from any potential remaining contamination not removed during construction of the current building's basement level.

The proposed project would involve excavation of the project site, both for the subterranean parking garage and for lowering the theater floor. Although unlikely, the potential exists to encounter contaminated soils from the sources discussed above or others. However, standard conditions of the City of Berkeley's Toxics Management Division (TMD) require that a Soil and Groundwater Management Plan (SGMP) be submitted to the TMD with a project's building permit application and be approved by TMD prior to issuance of the building permit for residential or mixed-use projects that include four or more units and are (1) in the Environmental Management Area (EMA) as shown on the most recent City of Berkeley EMA map; and (2) propose any excavations deeper than five feet below grade. The proposed project meets both these conditions. The SGMP is required to identify procedures for soil and groundwater management, including identification of pollutants and disposal methods, and is required to comply with the hazardous materials and waste management standards required by Berkeley Municipal Code Section 15.12.100, the San Francisco Bay Regional Water Quality Control Board's Order No. R2-2009-0074 C3 and C6, California hazardous waste generator regulations (Title 22 California Code of Regulations (CCR) 66360 et seq.), and the East Bay Municipal Utility District's Ordinance 311.

The SGMP is also required to include:

- A requirement that TMD be notified within 24 hours of the discovery of any previously undiscovered contamination;

- Procedures to manage odors, dust and other potential nuisance conditions expected during development.

- A requirement that the name and phone number of the individual responsible for implementing the SGMP and responding to community questions and complaints be posted at the construction site on the same notice required by Zoning Officer for noise management (BMC B.28.050.D).

TMD is required to review the SGMP and may require additional information or impose additional conditions as deemed necessary to protect human health and the environment. All requirements of the approved SGMP are deemed conditions of approval of the project's Use Permit.

The TMD also requires that, prior to approving any permit for partial or complete demolition activities, a hazardous materials survey shall be conducted by a qualified professional. The survey shall include, but not be limited to, identification of any lead-based paint, asbestos, PCB containing equipment, elevators or lifts, refrigeration systems, and treated wood and mercury containing devices. The survey shall include hazardous materials removal and disposal procedures to be implemented that fully comply with hazardous waste generator requirements (22 California Code of Regulations (CCR) 66360 et seq.). If the survey identifies hazardous materials, the removal and disposal procedures included in the survey shall become conditions of any building or demolition permit for the project. Documentation evidencing disposal of hazardous waste in compliance with the survey shall be submitted to TMD within 30 days of the completion of the demolition (City of Berkeley TMD, March 2013).

Compliance with these standard City conditions would reduce these potential impacts to a **less than significant** level.

e, f) As stated in the DAP EIR, the Downtown Area is not near any airports or airstrips. The closest airport is Oakland International Airport, located approximately eight miles to the south. The project would therefore have **no impact** in this regard.

g) The proposed project would not include any street closures. It would include various offsite public streetscape and mobility improvements, including bulb-outs on both sides of Harold Way at its intersections with Allston Way and Kittredge Street; an enhanced treatment with textured or colored paving, landscape pockets, and bollards at the Harold Way crossing area adjacent to Kittredge Street; and a speed table to calm traffic and enhance the public right-of-way at the Harold Way/Kittredge Street access to the Berkeley Central Library, the Armstrong College Property, the Library Gardens, and the project site. As stated above, Berkeley General Plan Policy T-28 states that, in order to help maintain emergency access, diverters or speed humps should not be installed on streets identified as Emergency Access and Evacuation Routes, which would include Harold Way. However, it is not clear if a speed table qualifies as a diverter or speed hump. (It should be noted that the DAP suggests that Harold Way may be a candidate for reconfiguring as a "slow street," indicating that emergency access via Harold Way is not a critical function of the street.) As stated in the DAP EIR and as is standard City practice, the Berkeley Fire Department and Berkeley Police

Department would review any proposed changes to the current Emergency Access and Evacuation routes prior to modification, and would confirm at that time that the proposed improvements would not impede emergency access. For these reasons, this impact is **less than significant**.

h) As stated in the DAP EIR, no part of the Downtown Area is within an area formally identified as subject to wildland fire hazards. The project site is within a completely urbanized area, approximately one mile from the Berkeley Hills. Development of the proposed project would therefore not increase exposure to wildland fire hazards in any significant way, although such hazards cannot be completely ruled out because there have historically been wildland fires in the undeveloped hillsides east of the Downtown Area that have threatened the area. However, the project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, and this impact is **less than significant**.

Conclusion

With existing regulations and normal standards of use, the project's impacts related to Hazards and Hazardous Materials would be no greater than the less than significant impacts identified in the DAP EIR for the Plan as a whole. These issues **do not require further study in an EIR**.

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
IX. HYDROLOGY AND WATER QUALITY. Would the project:					
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☒	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☒	☐	☒	☐

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☒	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☒	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☒	☐
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☒	☐

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses hydrology and water quality impacts on pages 4-141 through 4-150. It addresses the following potential impacts, as summarized below: water quality standards; groundwater; alteration of existing drainage patterns resulting in erosion or flooding; urban runoff in relation to storm drainage system capacity and increased pollutants; flood hazards; and inundation by seiche, tsunami, or mudflow.

Water Quality Standards

Development under the DAP would result in demolition and/or construction activity that could generate pollutants that might adversely affect urban runoff. Operational activities, such as landscape maintenance, could also pollute urban runoff if chemicals used in these activities were to come into contact with rainfall or runoff. However, proponents of any development project in the Downtown Area would be required to comply with all City of Berkeley requirements under the NPDES permit, and construction contractors are responsible for implementing and monitoring erosion and sedimentation control/drainage plans to ensure that contaminants are not released into urban runoff, in order to prevent significant adverse impacts to water quality. Taken together, these measures were determined to reduce potential adverse impacts to water quality to a level of less than significant.

Groundwater

Because it is located in a dense urban area, the Downtown Area is almost fully paved over. Urban runoff is collected and carried via existing storm drain pipes and channelized creeks, and does not provide significant groundwater recharge. The DAP would not result in a significant increase in impermeable surfaces in the Downtown Area, and would thus not significantly reduce recharge. Also, the groundwater underneath the area is not used for human consumption or other use. Development under the DAP would not deplete groundwater in the area, or result in substantial interference with groundwater recharge, and this impact was determined to be less than significant.

Alteration of Existing Drainage Patterns Resulting in Erosion or Flooding

Development under the DAP would not modify the course of any existing stream or river, except for potential realignment of a portion of Strawberry Creek through the proposed Center Street Plaza, which would require site-specific evaluation of drainage-related effects. Outside of this potential proposal to realign a portion of Strawberry Creek, the DAP would not result in alteration of existing drainage patterns resulting in erosion or flooding, and this impact was determined to be less than significant.

Urban Runoff in Relation to Storm Drainage System Capacity and Increased Pollutants

Because the Downtown Area is fully developed and highly urbanized, the vast majority of development under the DAP would be redevelopment of already-paved areas, and would not result in any significant increase in stormwater runoff which would be likely to exceed existing storm drainpipe capacity or creek culvert capacity, or increase pollutants in stormwater runoff. This impact was determined to be less than significant.

Flood Hazards

No portion of the Downtown Area is located within a 100-year flood hazard area, and development under the DAP would therefore not result in the placement of any housing units within a 100-year flood hazard area, or placement of any structures within a 100-year flood hazard area that could impede or reduce flood flows. The Downtown Area is also not located in an area subject to inundation in the event of a dam or levee failure. The DAP was determined to have no impact related to flood hazards.

Inundation by Seiche, Tsunami, or Mudflow

The Downtown Area is located well above sea level and nearly two miles from the nearest edge of San Francisco Bay. Any risk of inundation by seiche, tsunami or mudflow in the Downtown Area would be remote, and would not be increased as a result of development under the DAP. The DAP was determined to have no impact in this regard.

Project-Specific Impacts

a, f) As discussed in the DAP EIR, proponents of any development project in the Downtown Area, including the currently proposed project, are required to comply with all City of Berkeley requirements under its NPDES permit, and construction contractors are responsible for implementing and monitoring erosion and sedimentation control/drainage plans to ensure that contaminants are not released into urban runoff, in order to prevent significant adverse impacts to water quality. The Geotechnical Feasibility Report (Appendix C) states that groundwater levels are estimated to be 15 feet below existing grade, which is above the level of deepest excavation associated with project construction. It recommends waterproofing the concrete slabs and walls for the basements rather than installing permanent dewatering mechanisms. However, dewatering would be required during excavation and until the waterproof slabs and walls are installed. As discussed in Section VIII, *Hazards and Hazardous Materials*, soils beneath the project could contain contamination,

and the discharge resulting from the dewatering could therefore also be contaminated. However, as discussed in Section VIII, the project would be subject to standard conditions of the City of Berkeley's Toxics Management Division (TMD) requiring that a Soil and Groundwater Management Plan (SGMP) be submitted to the TMD with the project's building permit application and be approved by TMD prior to issuance of the building permit. The SGMP is required to identify procedures for soil and groundwater management, including identification of pollutants and disposal methods, and is required to comply with the hazardous materials and waste management standards required by Berkeley Municipal Code Section 15.12.100, the San Francisco Bay Regional Water Quality Control Board's Order No. R2-2009-0074 C3 and C6, California hazardous waste generator regulations (Title 22 California Code of Regulations (CCR) 66360 et seq.), and the East Bay Municipal Utility District's Ordinance 311. Additionally, as discussed in Section VI, *Geology and Soils,* the City of Berkeley would require compliance with the recommendations of the Geotechnical Report for the project (Appendix C). Section 7.1 of the Geotechnical Report contains recommendations for construction dewatering at the project site. Additionally, any dewatering activities would be required to comply with all City of Berkeley requirements under its NPDES permit. Section 17.20.070 of the Berkeley Municipal Code stipulates the following:,

A. It is unlawful to discharge any matter into the storm drain system such that the discharge results in or contributes to a violation of any National Pollutant Discharge Elimination System (NPDES) permit issued to the discharger and administered by the state of California under authority of the U.S. Environmental Protection Agency, including the NPDES permit issued to the City of Berkeley and others (NPDES Permit No. CA0029831, on file in the office of the City Clerk) and any amendment, revision or reissuance thereof, and whether such discharge is separately considered or when combined with other discharges.

B. Each industrial discharger, discharger associated with construction activity, or any other discharger described in any general NPDES permit regulating stormwater discharges, as may be adopted by the U.S. Environmental Protection Agency, the State Water Resources Control Board, or the California Regional Water Quality Control Board, San Francisco Bay Region, shall submit to the appropriate agency a notice of intent to comply with said permit and undertake all other activities required by any general stormwater permit applicable to such discharges.

C. Each discharger identified in any individual NPDES permit regulating stormwater discharges shall comply with and undertake all activities required by such permit.

Section 17.20.050 of the Berkeley Municipal Code contains the following requirements for construction and development:

1. Any construction contractor performing work in the City shall provide filter materials at catch basins to retain any debris, dirt, or other pollutants generated by such work to prevent said pollutants from flowing into the City's storm drain system.

2. Any applicant for a building or grading permit from the City shall, as a condition of receiving such permit, sign a certification stating that the applicant has read and shall use, to the maximum extent practicable, applicable portions of the state stormwater best management

practices manual for construction activity, a copy of which shall be available to the applicant where building and grading permits are obtained.

3. *Any applicant for a building or grading permit from the City who is subject to the state NPDES construction general permit shall, as a condition of receiving such permit, provide evidence that the applicant has submitted a notice of intent to the state Water Resources Control Board as required by said permit.*

4. *The City Manager may establish controls on the volume and rate of stormwater runoff from new developments and redevelopments as may be appropriate to minimize the discharge and transport of pollutants into the storm drain system.*

As stated under the DAP EIR, construction contractors are responsible for implementing and monitoring erosion and sedimentation control/drainage plans to ensure that the above requirements are being met, and that contaminants are not released into urban runoff, in order to prevent significant adverse impacts to water quality. For all the reasons stated above, the project would not violate water quality standards or otherwise substantially degrade water quality, and this impact would be **less than significant with mitigation incorporated**.

b) The project site, like the Downtown Area in general, is already developed, and the proposed project would not increase impermeable areas in a way that would significantly interfere with groundwater recharge. This impact would be **less than significant**.

c-e) The project site is already fully developed with impervious surfaces. Development of the proposed project would therefore not increase the amount of impervious surfaces on the site, and would therefore not increase runoff. The project would also not introduce new uses that would produce an increase in polluted runoff compared to existing uses. For example, no surface parking is proposed that could lead to runoff of automotive fluids into the storm drain system. The project includes 10,268 square feet of 13th floor terrace space with outdoor cooking and entertaining facilities, community gardens, and fireplace area; roughly 2,900 square feet of this terrace space would be landscaped. The project also includes 11,045 square feet of usable balconies and terraces for selected units, and ground-floor courtyard space. These spaces would or may include landscaping that could have the potential to produce polluted runoff from sources such as chemical fertilizers. However, a technical memorandum prepared by Telamon Engineering Consultants, Inc. in February 2013 (Appendix E) found that the landscaped area on the 13th floor terrace could potentially be used for bio-treatment of runoff, and roughly 1,196 square feet of flow through planter area for the ground-floor courtyard that could potentially be used for bio-treatment area. It concluded that the proposed project would be able to meet the Alameda County Clean Water Program, "C.3 Storm Water Technical Guidance."

For all the above reasons, the proposed project would not alter existing drainage patterns in a manner that would result in erosion or flooding, or increase stormwater runoff which would be likely to exceed existing storm drainpipe capacity or creek culvert capacity, or increase pollutants in stormwater runoff. This impact would be **less than significant**.

g-i) As stated in the DAP EIR, no portion of the Downtown Area, including the project site, is located within a 100-year flood hazard area or an area subject to inundation in the event of a dam or levee failure. The proposed project would therefore have **no impact** related to these hazards.

j) The project site is located at an elevation of approximately 180 feet above sea level, and is nearly two miles from the nearest edge of San Francisco Bay. It is also not near any major inland body of water such as a large lake that could produce a seiche. It is not in an area subject to mudflows. Any risk of inundation by seiche, tsunami or mudflow at the project site would be remote, and would not be increased as a result of project development. The proposed project would therefore have **no impact** related to these hazards.

Conclusion

With existing regulations and normal standards of use, the project's impacts related to Hydrology and Water Quality would be no greater than the less than significant impacts identified in the DAP EIR for the Plan as a whole. These issues **do not require further study in an EIR**.

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
X. LAND USE AND PLANNING. Would the project:					
a) Physically divide an established community?	☐	☐	☒	☒	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses land use and planning-related impacts on pages 4-151 through 4-174. The DAP EIR found that impacts in all impact categories for this topic would be less than significant without the need for mitigation. The DAP EIR discussions of these impact areas are summarized below.

- Physical Division of an Established Community. Development under the DAP would not include components that would physically divide the existing community. Future development would take place largely on existing parcels in the Downtown Area. Street modifications anticipated within the Downtown Area under the DAP could be expected to facilitate more efficient circulation and transit operations, enhancing connections between established neighborhoods in Berkeley.

- Introduction of New Land Uses that Could Conflict with Existing Land Uses. The Downtown Area is largely already developed in a mix of urban land uses. Implementation of the DAP would be expected to replace some existing uses and buildings to add new residential units, office space, and commercial services to support those living and working in the Downtown Area. These uses would be similar in character, density and intensity to the uses that are currently found in the Downtown Area. Implementation of the DAP would not introduce new uses that would conflict with established uses in the Downtown Area.

- Conflict with Applicable Land Use Plans, Policies or Regulations. Implementation of the DAP would not fundamentally conflict with any of the City of Berkeley's land use plans, policies or regulations adopted for the purpose of avoiding or mitigating effects that could result in adverse physical changes in the environment. The DAP was developed to provide specific policy guidance for future development in the Downtown Area, consistent with the land use plans, policies and regulations of the City. Adoption of the DAP would make it an amendment to the Berkeley General Plan, which would effectively eliminate any conflict with General Plan Policies, reducing any potential impact to a level of less than significant.

- Conflict with Habitat Conservation Plan/Natural Community Conservation Plan. There are currently no approved Habitat Conservation Plans or Natural Community Conservation Plans applicable to the Downtown Area. Implementation of the DAP would not conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan.

Project-Specific Impacts

a) Consistent with the discussion in the DAP EIR for the plan area as a whole, the proposed project would be constructed on existing parcels in the Downtown Area. The project would occupy a portion of an existing city block that is already developed with structures. It would not involve construction of a physical feature (e.g., a highway or rail line) or removal of an existing means of access (e.g., a road or bridge linking different portions of a community) that would represent a physical division of an established community.

b) Consistent with the discussion in the DAP EIR for the plan area as a whole, the proposed project would not introduce new land uses that do not already exist in the Downtown area. There are residential and retail uses adjacent to the project site, and the proposed movie theaters would replace existing movie theaters. The project site was modeled in the DAP EIR with a taller building than proposed, and its development would be within the overall buildout assumptions for both use and scale within the Core Area, which includes development on several Core sites with buildings of 180 to 225 feet in height.

The project site's General Plan Land Use classification is Downtown. The Downtown classification is intended to "encourage, promote, and enhance development that will increase the residential population in the Downtown, provide new high density, transit-oriented housing opportunities, and support a vital city center. Uses appropriate for this area include: medium- and high-density housing, regional- and local-serving arts, entertainment, retail, office, cultural, open space, civic uses, and institutional uses and facilities. It is General Plan policy to increase the residential population in the Downtown." The project, as a mixed-use building with entertainment, retail, and a high residential density near transit opportunities would be consistent with this vision.

The Downtown Area Plan (DAP) provides additional, specific land use guidance within the Downtown area. The DAP classifies the project site as Core Area. (Site and surrounding DAP land use classifications are shown in Figure 34.) The DAP includes the following discussion of development potential in the Core Area: "Because of immediate access to BART, multiple bus lines, and walk-to conveniences, provisions for the Core Area allow the tallest buildings, including three buildings up to 180 feet."

The General Plan and DAP also have a number of policies that are applicable to the proposed project; a discussion of project consistency with selected policies follows. The emphasis is on the DAP policies, as the DAP was developed to provide specific policy guidance for future development in the Downtown Area, consistent with the land use plans, policies and regulations of the City including the General Plan. As specified in the environmental checklist (see appendices G and N to the CEQA *Guidelines*), the discussion focuses on policies adopted for the purpose of avoiding or mitigating an environmental effect.

General Plan Policies.

Policy LU-2 Preservation. *Protect Berkeley's character by identifying, restoring, and preserving historic buildings. (Also see Urban Design and Preservation Policies UD-1 through UD-3.)*

Inconsistent. This policy calls for protection of identified historic resources. While the project would preserve the c.1910-1913 Shattuck Hotel Landmark structure, it also includes demolition or alteration of latter Hotel additions, and therefore would not fully comply with this policy. As reflected in the City's larger context of policies and regulations, there are circumstances where demolition or alteration of historic resources may be permitted depending on the value of the resource and potential benefits of the proposed project as a whole. Nevertheless, this policy inconsistency is a potentially significant impact and will be discussed in the Infill EIR.

Policy UD-16 Context. *The design and scale of new or remodeled buildings should respect the built environment in the area, particularly where the character of the built environment is largely defined by an aggregation of historically and architecturally significant buildings. (Also see Land Use Policies LU-3, LU-4, LU-7, LU-17, and LU-21.)*

Policy UD-17 Design Elements. *In relating a new design to the surrounding area, the factors to consider should include height, massing, materials, color, and detailing or ornament.*

Inconsistent. The proposed project is surrounded on three sides by historically and architecturally significant buildings. The alteration of one of these structures, the Shattuck Hotel, and introduction of a larger building of contemporary design and materials into this context, could result in incompatibility. This potential policy inconsistency is a potentially significant impact and will be discussed in the Infill EIR.

Policy UD-18 Contrast and Cohesiveness. *The overall urban experience should contain variety and stimulating contrasts achieved largely through contrast between different areas each of which is visually cohesive.*

Consistent. The proposed project would introduce a larger building employing contemporary design and materials to the site vicinity, which would provide architectural contrast and variety.

Policy UD-19 Visually Heterogeneous Areas. *In areas that are now visually heterogeneous, a project should be responsive to the best design elements of the area or neighborhood.*

Policy UD-20 Alterations. *Alterations to a worthwhile building should be compatible with the building's original architectural character.*

Action:

A. In cases where a well-designed building's original character has since been destroyed by a poorly designed remodel, new alterations to reverse those changes can be used to improve the character of the area.

Consistent. As noted above, the proposed project would contribute a dramatic contrast in architecture between its own contemporary modernist lines, materials, and massing, and the Mission Revival style of the c. 1910-13 hotel building. The step back on the fifth floor of the proposed project's Kittredge Street frontage would result in its subordination to the Shattuck Hotel's Kittredge façade, allowing it and its tiled hip-roof corner element to remain prominent along the block from the street frontage viewing locations. The project would maintain a generally continuous street wall at the edge of the abutting streets up to where the building would step back toward the interior of the site. The proposed building would step down to 54 feet (five stories) along the street fronts, and would be about 10 feet shorter than the adjacent Shattuck Hotel, but would be about three feet taller than the height of the public library across Kittredge Street.

The Downtown Design Guidelines specific guidelines for new construction, many of which serve to implement these policies as projects are taken through the City's design review and decision making processes. The Design Review Committee and Zoning Adjustments Board must consider the project's adherence to these policies and the Downtown Design Guidelines in their recommendations and decisions, and ultimately determine consistency with both the Design Guidelines and the DAP. This process continues throughout the discretionary development review process until the building permit process begins. This Infill Environmental Checklist's discussion of consistency with design policies that apply largely to design details necessarily addresses only the broad policy and Design Guideline parameters, recognizing that design details evolve through the review process.

> ***Policy UD-31 Views.*** *Construction should avoid blocking significant views, especially ones toward the Bay, the hills, and significant landmarks such as the Campanile, Golden Gate Bridge, and Alcatraz Island. Whenever possible, new buildings should enhance a vista or punctuate or clarify the urban pattern.*

Inconsistent. As discussed in Section I, *Aesthetics*, significant views of the hills or Campanile would not be blocked by the proposed project. However, the project would block a portion of the view of the Bay and Alcatraz Island from the base of the Campanile. As also discussed in Section I, *Aesthetics*, pursuant to California State law aesthetic impacts of a mixed-use project on an infill site within a transit priority area may not be considered significant impacts on the environment. Therefore, although this potential policy inconsistency is acknowledged, the impact itself cannot be considered significant per CEQA on aesthetic grounds alone.)

Downtown Area Plan Policies.

> ***Policy LU-1.5: Downtown Intensities & Building Heights.*** *To advance Downtown as a vibrant city center and encourage car-free options near transit, accommodate urban intensities by using building heights that are appropriate and feasible, as indicated in Table LU-1 and "Figure LU-1, Land Use & Building Heights." All new buildings shall deliver significant public benefits, many of which should be in proportion to building height (see Policy LU-2.1). Buildings exceeding a height of 85 feet shall be subject to shadow studies and visual analysis, – and buildings exceeding a height of 120 feet shall be subject to wind analysis – to avoid detriment to residential areas, public streets and public open spaces, and if necessary require modifications to the project design including setbacks and stepbacks to reduce view and shadow impacts (see policies under Goals ES-4, LU-2, and HD-1, as well as footnotes in Table LU-1). Provide appropriate transitions to Residential areas that surround Downtown as described in Policies LU-4.2.*
>
> ***Policy HD–4.2: Solar, Visual & Wind Impacts.*** *Design and position new buildings to avoid significant adverse solar-, visual- or wind-related impacts on important public open spaces. Also provide for adequate natural light in residential units through appropriate building form (see Policies ES-3.3 and LU-4.2, and Table LU-1).*
>
> *a) Strengthen standards and guidelines to better address potential solar access and wind impacts.*
> *b) For buildings exceeding 85 feet, use solar, visual and wind simulations to evaluate and refine design alternatives.*

Consistent. Shadow impacts are discussed under Item I, *Aesthetics*, and were determined to be less than significant. Wind impacts are discussed below. Regarding public benefits, see the discussion of Policy LU-2.2 below. The project site is not adjacent to a residential area.

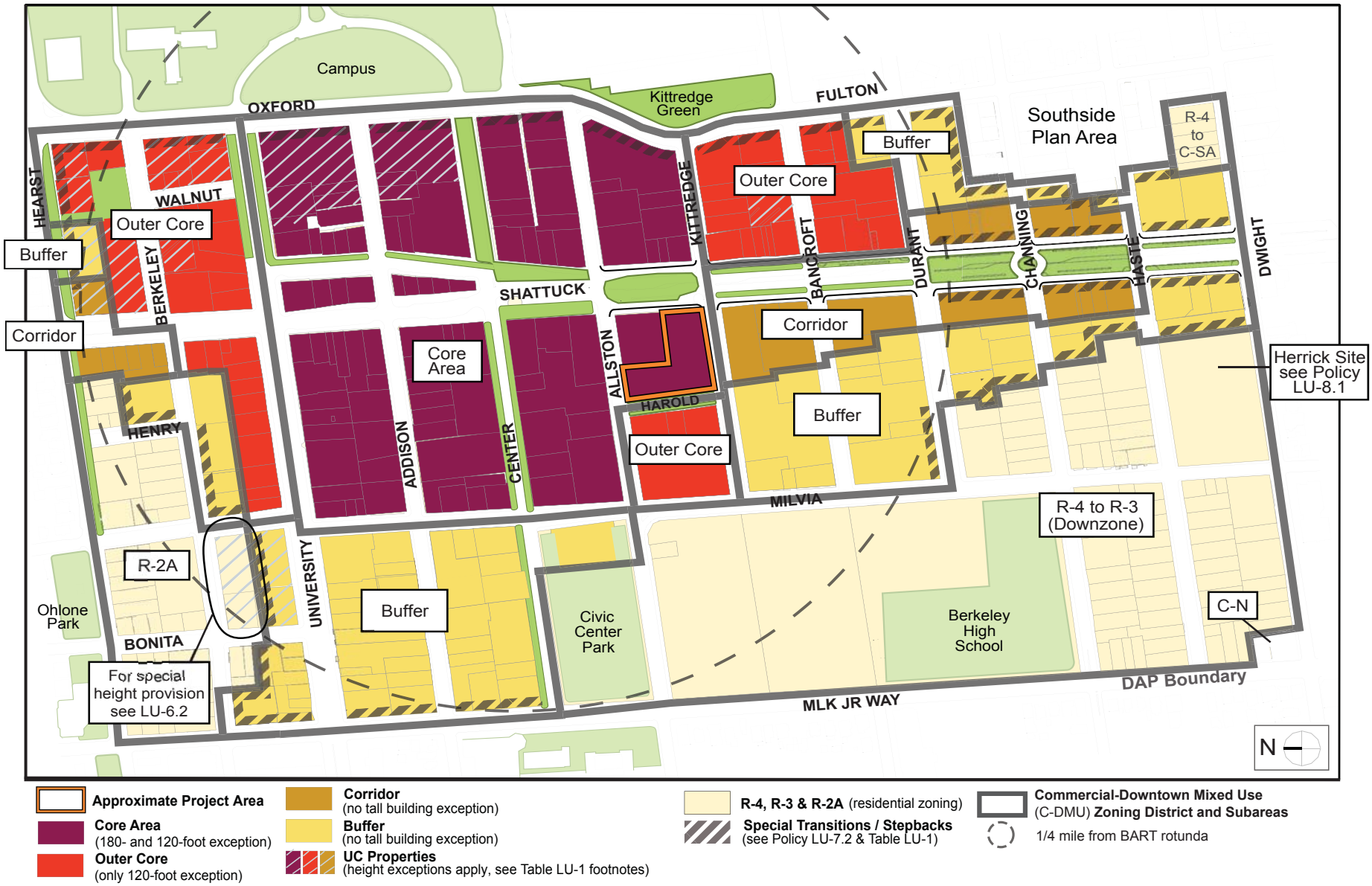
The 2009 DAP EIR discusses wind impacts on Page 4-35. It acknowledges that new buildings could increase winds at ground level and that impacts could be significant, but that adoption of DAP policies including LU-1.5 would ensure that wind impacts for DAP buildout would be less than significant.

Donald Ballanti prepared a *Wind and Comfort Impact Analysis* (January 2014; included in Appendix F to this report)) summarizing potential wind impacts associated with the proposed project. Westerly winds (west to east) are the most frequent and strongest winds in the project vicinity during all seasons. This is the primary wind direction during the spring and summer months when sea breezes predominate. The second most frequent winds in the area are southerly (south to north), which is the wind direction associated with winter storms, and is historically the direction of the strongest winds in the Bay Area. The annual average wind speed measured at Alameda Naval Air Station is 7.7 miles per hour and annual average wind speed at the project site would be somewhat less than this.

The project area gently slopes to the west and has no significant terrain features. Building heights in the vicinity range from single-story construction to the 12-story (173 and 180 feet, respectively) office towers at Center Street and Shattuck Avenue. The adjacent Shattuck Hotel is five stories in height. Most buildings around the project site are in the two- to five-story range. The project is partially wind-sheltered by existing structures for the important westerly and southeasterly wind directions.

CEQA guidance does not list any specific criterion for the evaluation of wind effects of a project. San Francisco and Oakland have established both standards and criteria for the evaluation of wind impacts. CEQA significance levels in San Francisco and Oakland are based on pedestrian hazard. For the purposes of CEQA, San Francisco and Oakland have established a pedestrian wind hazard criterion of one occurrence per year of winds greater than 36 mph as representing a significant adverse impact. The DAP EIR includes the same threshold (Page 4-9). This wind hazard criterion developed by San Francisco and adopted by Oakland is based on research conducted in several locations and would be appropriate for a project located in Berkeley. Since the ambient wind (undisturbed by buildings) in Berkeley seldom exceeds 36 mph, a project must substantially increase winds at pedestrian levels for this threshold to be exceeded. For this analysis, the project is considered to have a potentially significant wind impact if the exposure, orientation and massing of the structure can be expected to substantially increase ground-level winds in pedestrian corridors or public spaces near the project site.

The *Wind and Comfort Impact Analysis* determined that the lower portion of the proposed project (consisting of the first five floors) would only be partially exposed to prevailing winds, and would not be expected to significantly affect ground level winds. The upper portions of the building would be exposed to prevailing winds, but the massing of the project is such that the wind accelerations generated would be located over rooftops of adjacent buildings or at decks/terraces within the project itself. It should also be noted that



Source: City of Berkley, 2012

Site and Surrounding Downtown Area Plan Land Use Classifications

Figure 34

the building's design in relation to wind is consistent with the Downtown Design Guidelines, which call for articulation and stepbacks to reduce winds (see Downtown Design Guidelines Figure 40 and its caption: "Consider ways to mitigate potential wind shear impacts from taller buildings by using upper story setbacks, architectural projections and recesses, and trees").

The only area on or adjacent to the project site and proposed project identified as potentially subject to a substantial increase in winds that could affect comfort levels would be the rooftop decks of the project itself. This would be a private space, and building management would have a range of options to address the associated potential discomfort of its residents, such as providing shelter in the form of porous materials or structures (vegetation, hedges, screens, latticework, perforated or expanded metal), which offer superior wind shelter compared to a solid surface. Impacts related to wind would be less than significant.

Policy LU-4.1: Transit-Oriented Development. *Encourage use of transit and help reduce regional greenhouse gas emissions, by allowing buildings of the highest appropriate intensity and height near BART and along the Shattuck and University Avenue transit corridors (see Goal ES-3).*

a) Require efficient use of available sites and help attain goals related to vitality. Adopt minimum building heights as provided in Table LU 1 in effect while in an active pursuit of the use permit. If LPC designates a positive determination, the project reverts to standard zoning review process. LPC action appealable to City Council.

- *Design Review Commission and Zoning Adjustment Board (ZAB) process not to exceed a combined total of 210 days; ZAB action appealable to City Council.*

Consistent. The project site is within the Core Area and is within two blocks of a major transit hub, and the proposed project includes a high residential density, with a total of 302 units on site. The proposed units range from studios to three-bedrooms and include affordable units.

Policy LU-4.2: Development Compatibility. *Encourage compatible relationships between new and historic buildings, and reduce localized impacts from new buildings to acceptable levels. The size and placement of new buildings should: reduce street-level shadow, view, and wind impacts to acceptable levels; and maintain compatible relationships with historic resources (such as street wall continuity in commercial areas). See policies under Goals ES-4 and HD-1, and Policy LU-1.5.*

a) Revise zoning provisions and amend the Downtown Design Guidelines to provide for appropriate controls on setbacks and building bulk (such as through the use of floor area ratios and maximum horizontal dimensions), and rules for street-level open space and other devices. Emphasize measurable standards that are easy to understand and apply.

b) Strengthen zoning and the Downtown Design Guidelines to better address solar access and wind impacts. For buildings exceeding 85 feet, use solar, visual and wind simulations to evaluate and refine design alternatives.

Policy HD-1.1: Historic Buildings & Sites. *Preserve historic buildings and sites of Downtown, and provide where appropriate for their adaptive reuse and/or intensification.2*

a) *Retain Landmarks and Structures of Merit in Downtown. Designate, where appropriate, additional properties as Landmarks or Structures of Merit.*
b) *When evaluating potential modifications, adaptive reuse or intensification of designated or sufficiently documented historic resources, in addition to applying the Landmarks Preservation Ordinance, the proposed work must also be evaluated for conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. Where applicable, the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes, must also be applied. At a minimum, historic facades should be maintained and/or rehabilitated and the scale and character of additions must be compatible with the historic building.*
c) *For the most common practices and alterations, compile reference materials that describe appropriate maintenance and façade improvements document, and where additional information can be obtained. Develop materials using community participation. Make these materials available to property owners, contractors, and architects.*
d) *Allow flexibility in parking and other standards, such as exemption from on-site open space requirements, when such buildings are substantially and appropriately preserved or restored as part of a development project. Review and, if necessary, revise standards that may discourage historic rehabilitation and adaptive reuse. Identify potential sources of financing, tax relief (such as through the Mills Act), grants, and a full range of other incentives and resources for historic preservation, such as those relating to accessibility and seismic upgrading. Provide this information to owners of historic resources (see Policies ES-4.1, LU-2.1 and LU-4.3).*

Inconsistent. The proposed project would include alteration or removal of historic structures and introduction of a new building adjacent to existing historic structures to remain, activities which could be considered inconsistent with these policies. This potential inconsistency would be potentially significant and will be studied in an Infill EIR. (See discussion under policies LU-1.5 and HD-4.2 above regarding wind impacts.)

Policy AC-2.1: Pedestrian Safety and Amenities. *Improve the safety, attractiveness and convenience of pedestrian routes within Downtown – and to and from surrounding areas. Encourage a wide range of pedestrian amenities to meet the needs and interests of those who live and work in and near Downtown (see policies under Goals HD-4 and in the Streets and Open Space chapter).*

a) *Adopt a Streets and Open Space Improvement Plan with policies and implementing actions, including provisions for adequate sidewalk width, shortening pedestrian crossing distances at intersections, and new midblock pedestrian crosswalks where justified by high volumes of pedestrians and a long distance between intersections.*
b) *To reduce pedestrian-vehicle conflicts, minimize driveway curb cuts to the extent feasible, and where they must occur: avoid making driveways too wide or creating uneven surfaces where driveways cross sidewalks.*
c) *Maintain sidewalks, crosswalks, plazas, and other pedestrian environments so that they are safe, clean and in good repair.*
d) *Regularly evaluate indicators of pedestrian safety, and adjust implementation priorities to improve pedestrian safety.*

Policy AC-3.3: Pedestrian Impacts. *Locate and design new parking in ways that minimize negative impacts upon the pedestrian quality of Downtown (see Policy HD-4.1).*

a) With new development, discourage parking on-site to increase space available for street-level retail and activity.
b) Minimize driveway curb cuts to make Downtown more safe and attractive for pedestrians. Locate, design, and size entrances and exits to parking to minimize impact on the pedestrian realm, such as through traffic management, exit mirrors, and warning lights.
c) Consolidate parking to minimize visual and other negative impacts from parking. Enlarge the capacity of existing parking garages as feasible, through management practices and/or physical improvements.
d) Discourage use of more than 25% of a building's street-level area for parking. Place parking below grade when feasible. When below grade parking is deemed infeasible, above grade parking structures should face streets and public open spaces in ways that support pedestrian safety and activity. Surface parking should be prohibited along streets.

Policy AC-3.2: New Parking. *Provide sufficient parking for expected growth by evaluating future parking needs, funding parking facilities, and promoting alternatives to the car. In addition, replace on-street parking lost to street and other improvements within off-street garages. Consolidate parking in shared facilities to the extent possible.*

a) Parking facilities should be planned as part of a Parking/TDM program to address future parking needs, replace on-street parking lost to improvements, and evaluate locations for potential parking garages, and encourage visitors to park once and experience Downtown on foot and/or via low-cost shuttles/transit (see Policy AC-4.5).
b) Allow fees to be paid in lieu of on-site parking, and apply revenues toward transit enhancements (see Policy AC-1.3). Encourage developers to pay fees in lieu of on-site parking, especially commercial projects that bring large numbers of new commuters Downtown.
c) Consider revisions to parking standards and programs to better accomplish policies of the DAP. Analyze such revisions as part of a consolidated Parking/TDM program and as a way to reduce impediments to the preservation and the adaptive reuse of historic buildings.
d) Prohibit new driveways on Shattuck and University Avenues in Downtown except when it can be demonstrated that no other site access options exist or where other alternatives would have greater negative impacts.
e) Monitor the amount of on-site parking that new development includes and, if excessive, develop standards for maximum allowable on-site parking.
f) Expand electric car and hybrid plug-in location through standards and guidelines, and encourage their connection to local renewable energy sources.
g) New development should provide effective parking and TDM measures (see Policy LU- 2.1 and AC-1.3).

Consistent. The project site currently has one curb cut, which would be removed. One curb cut is proposed; therefore the number of curb cuts on the block would not be increased. Because the project requires parking and vehicular access, one curb cut is the minimum practical. The curb cut would only be as wide as necessary to accommodate vehicle ingress and egress. Parking would be entirely below grade and would serve the entire project site.

The project includes streetscape enhancements, as discussed under Project Description, which would improve the pedestrian environment and pedestrian safety and circulation at the corner of Harold Way and Kittredge Street. The project includes "unbundled" parking, transit passes for residents, 11 electric car charging stations and six car-share spaces.

c) There are currently no approved Habitat Conservation Plans or Natural Community Conservation Plans applicable to the project site or its immediate surroundings. The project would therefore not conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan.

Conclusion

The project would have no impact regarding division of an established community, as identified in the DAP EIR for the Plan as a whole. The project would have no impact regarding Habitat Conservation Plans or Natural Community Conservation Plan, also as identified in the DAP EIR for the Plan as a whole. The DAP EIR identified the potential for wind impacts associated with development allowed under the DAP, and required project-specific study to identify and address such impacts; a project-specific study was performed, and impacts were determined to be less than significant. Therefore, impacts related to consistency with policies regarding wind would be less than significant. However, while the project would be generally consistent with the majority of applicable General Plan and DAP policies, it would be potentially inconsistent with selected policies regarding preservation and protection of cultural resources; this is a **potentially significant impact that will be studied in an Infill EIR.**

	Significant Impact	**Less Than Significant or Less than Significant with Mitigation Incorporated**	**No Impact**	**Analyzed in the Prior EIR**	**Substantially Mitigated by Uniformly Applicable Development Policies**
XI. 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?	☐	☐	☒	☒	☐
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?	☐	☐	☒	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR identified no known mineral deposits of local importance or value to the region or residents of the State, or locally-important mineral resource recovery sites, within the Downtown Area. Consequently, the DAP EIR identified no impacts on mineral resources from development anticipated under buildout of the Downtown Area Plan.

Project-Specific Impacts

a,b) Because the project site is located in a highly urbanized area without known mineral resources of value, impacts would remain as identified in the DAP EIR. The proposed project would have **no impact** on mineral resources.

Conclusion

As the project would have no impact – the same as the impacts identified in the DAP EIR for the Plan as a whole – this issue **does not require mitigation or further study in an EIR**.

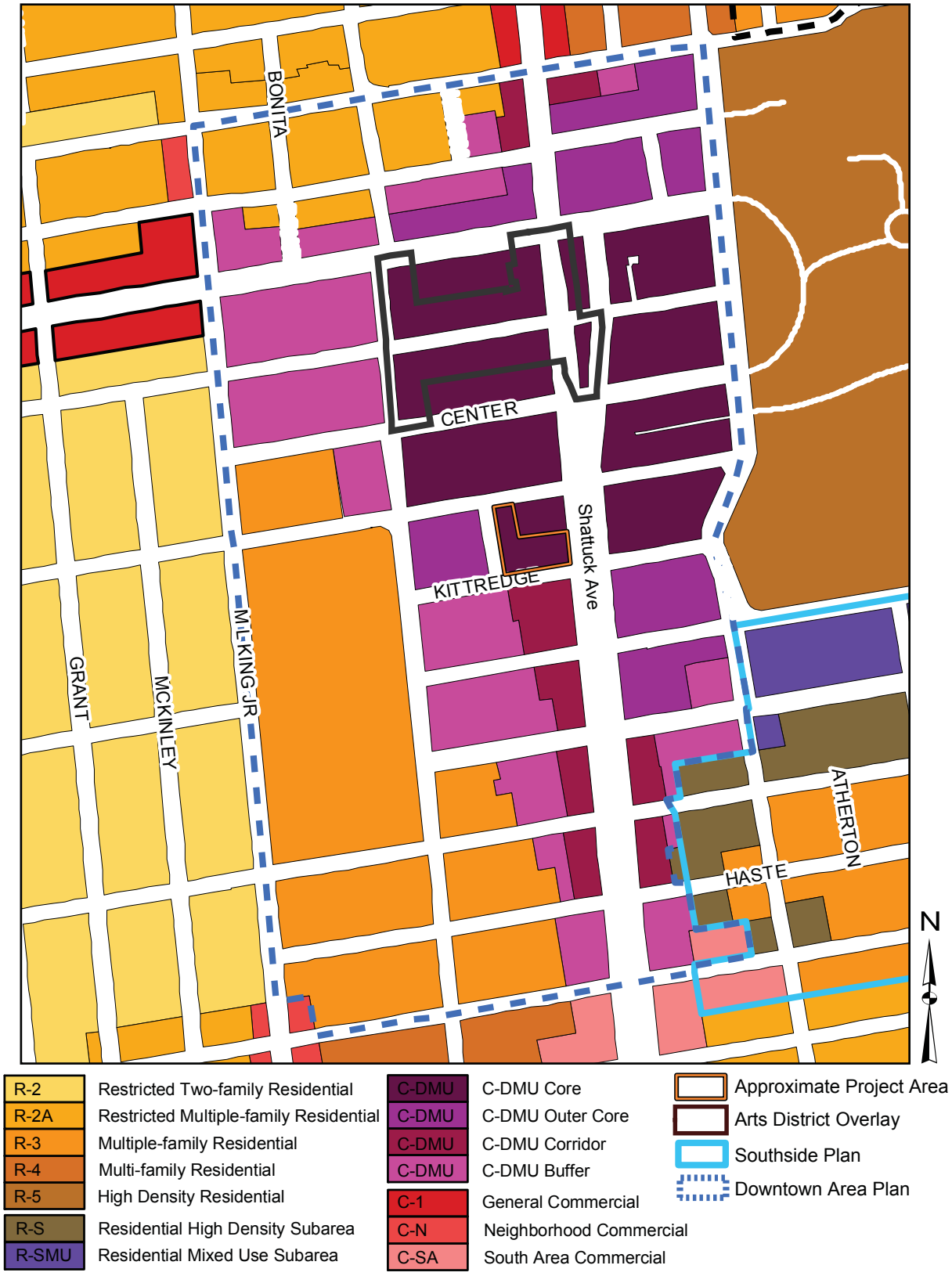
	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
XII. NOISE. Would the project result in:					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☒	☐

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐	☐
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses noise and vibration impacts on pages 4-195 through 4-205. The DAP EIR examined a range of potential impacts related to noise and vibration, including exposure of new development to excessive noise levels; exposure of Downtown area residents to noise associated with commercial activities and/or mechanical equipment; increased traffic noise, a cumulative increase in Downtown area noise levels; traffic noise; and construction-related noise and vibration. Impacts were assessed in the context of adopted planning documents, including the City's 2003 General Plan. The DAP EIR identified the following mitigation measures that would be applicable to the current proposed project:

- *Impact NOI-1:* Exposure to Excessive Noise Levels. New development under the DAP (particularly residential uses adjacent to principal streets) could be exposed to excessive noise levels. With completion of the development anticipated under the DAP, noise levels along many Downtown Area roadways would exceed those considered compatible with exterior residential land uses (60 dBA Ldn), a potentially significant impact. Where exterior noise levels exceed 70 dBA Ldn, such as along University Avenue and Shattuck Avenue, residential units would not be able to meet the 45-dBA Ldn interior standard simply through typical construction methods. This would be a potentially significant impact. Retail units developed under the DAP along most of the area roadways would meet the exterior commercial land use compatibility guideline of 70 dBA Ldn established in the Noise Element. Exterior noise levels would exceed 70 dBA Ldn along University Avenue and Shattuck Avenue. This would be a *potentially significant* impact.



Site and Surrounding Zoning Classifications

Source: City of Berkley, 2014

Figure 35

- *Mitigation NOI-1:* Site-Specific Noise Studies/Site Planning/Noise Control Treatments. Future residential units proposed under the DAP would be exposed to outdoor noise levels in excess of 60 dBA Ldn and indoor noise levels in excess of 45 dBA Ldn, which would exceed the City's and state's established land use compatibility thresholds. In areas where residential development would be exposed to an Ldn of greater than 60 dBA, site-specific noise studies should be conducted to determine the area of impact and to present appropriate mitigation measures, which may include the following:
  - Utilize site planning to minimize noise in shared residential outdoor activity areas by locating these areas behind the buildings, in courtyards, or orienting the terraces to alleyways rather than streets, whenever possible.
  - The California Building Code and the City of Berkeley require project-specific acoustical analyses to achieve interior noise levels of 45 dBA Ldn or lower in residential units exposed to exterior noise levels greater than 60 dBA Ldn. Building sound insulation requirements would need to include the provision of forced-air mechanical ventilation in noise environments exceeding 70 dBA Ldn so that windows could be kept closed at the occupant's discretion to control noise. Special building construction techniques (e.g., sound-rated windows and building façade treatments) may be required where exterior noise levels exceed 65 dBA Ldn. These treatments include, but are not limited to, sound rated windows and doors, sound rated exterior wall assemblies, acoustical caulking, etc. The specific determination of what treatments are necessary will be conducted on a unit-by-unit basis during project design. Result of the analysis, including the description of the necessary noise control treatments, will be submitted to the City along with the building plans and approved prior to issuance of a building permit. Feasible construction techniques such as these would adequately reduce interior noise levels to 45 dBA Ldn or lower.

  Implementation of the above measure would reduce the impact to a level of *less than significant*.

- *Impact NOI-5:* Construction Noise. Businesses and residences throughout the Downtown Area would be intermittently exposed to high levels of noise throughout the planning horizon. Construction would elevate noise levels at adjacent businesses and residences by 15 to 20 dBA or more, a *significant* impact.

  - *Mitigation NOI-5:* Develop Site-Specific Noise-Reduction Programs and Implement Noise Abatement Measures During Construction. Prior to the issuance of building permits, the applicant shall develop a site specific noise reduction program prepared by a qualified acoustical consultant to reduce construction noise impacts to the maximum extent feasible, subject to review and approval of the Zoning Officer. The noise reduction program shall include appropriate time limits for construction (7:00 AM to 7:00 PM on weekdays and between the hours of 9:00 AM and 8:00 PM on weekends or holidays) as well as

technically and economically feasible controls to meet the requirements of the Berkeley Municipal Code. The noise reduction program should include, but shall not be limited to, the following available controls to reduce construction noise levels as low as practical:

- Construction equipment should be well maintained and used judiciously to be as quiet as practical.
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.
- Utilize "quiet" models of air compressors and other stationary noise sources where technology exists. Select hydraulically or electrically powered equipment and avoid pneumatically powered equipment where feasible.
- Locate stationary noise-generating equipment as far as possible from sensitive receptors when adjoining construction sites. Construct temporary noise barriers or partial enclosures to acoustically shield such equipment where feasible.
- Prohibit unnecessary idling of internal combustion engines.
- If impact pile driving is required, pre-drill foundation pile holes to minimize the number of impacts required to seat the pile.
- Construct solid plywood fences around construction sites adjacent to operational business, residences or other noise-sensitive land uses where the noise control plan analysis determines that a barrier would be effective at reducing noise.
- Erect temporary noise control blanket barriers, if necessary, along building facades facing construction sites. This mitigation would only be necessary if conflicts occurred which were irresolvable by proper scheduling. Noise control blanket barriers can be rented and quickly erected.
- Route construction related traffic along major roadways and away from sensitive receptors where feasible.
- Businesses, residences or other noise-sensitive land uses within 500 feet of construction sites should be notified of the construction schedule in writing prior to the beginning of construction. Designate a "construction liaison" that would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. Conspicuously post a telephone number for the liaison at the construction site.

Although the above measures would reduce noise generated by the construction of individual projects, the impact would remain significant and unavoidable as a result of the extended period of time that adjacent receivers would be exposed to construction noise.

- *Impact NOI-6:* Construction-Related Vibration. Residences, businesses, and historic structures within or in the vicinity of the Downtown Area would be exposed to

construction-related vibration during the excavation and foundation work of the buildings constructed under the DAP, a *significant* impact.

- *Mitigation NOI-6:* Avoidance of Pile-Driving/Site-Specific Vibration Studies/Monitoring/Contingency Planning. The following measures are recommended to reduce vibration from construction activities:
    - Avoid impact pile-driving where possible. Drilled piles causes lower vibration levels where geological conditions permit their use.
    - Avoid using vibratory rollers and tampers near sensitive areas.
    - In areas where project construction is anticipated to include vibration-generating activities, such as pile-driving in close proximity to existing structures, site-specific vibration studies should be conducted to determine the area of impact and to present appropriate mitigation measures that may include the following:
        - Identification of sites that would include vibration compaction activities such as pile-driving and that have the potential to generate groundborne vibration, and the sensitivity of nearby structures to goundborne vibration. Vibration limits should be applied to all vibration-sensitive structures located within 200 feet of the project. A qualified structural engineer should conduct this task.
        - Development of a vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted, set up a vibration monitoring schedule, define structure-specific vibration limits, and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions.
        - Construction contingencies would be identified for when vibration levels approached the limits.
        - At a minimum, vibration monitoring should be conducted during initial demolition activities and during pile-driving activities. Monitoring results may indicate the need for more or less intensive measurements.
        - When vibration levels approach limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures.
        - Conduct post-survey on structure where either monitoring has indicated high levels or complaints of damage has been made. Make appropriate repairs or compensation where damage has occurred as a result of vibration.

It may not be possible to avoid using impact pile-drivers, vibratory rollers, and tampers entirely during the construction of projects in the Downtown Area. Due to the density of development in the area, some of these activities may take place near sensitive structures. In these cases, the mitigation measures listed above would not be sufficient to reduce groundborne vibration to a level of less than significant. Therefore, this impact would be considered *significant and unavoidable*.

Mitigation Measures NOI-1, NOI-5, and NOI-6 would apply to the proposed project. However, the DAP EIR concluded that impacts related to construction-related noise and vibration (Impacts NOI-5 and NOI-6) would be significant and unavoidable.

Project-Specific Impacts

a, c) The project would locate new residences in areas exposed to potentially excessive noise levels, and result in new long-term sources of operational noise, including increased traffic noise on area roadways. Potential impacts associated with long-term sources of noise are discussed below.

Exposure to Excessive Noise Levels. The project would introduce new residential land uses adjacent to local roadways, potentially exposing sensitive receptors to noise levels that would exceed those considered compatible with exterior residential land uses (60 dBA Ldn). As described in the DAP EIR, where exterior noise levels exceed 70 dBA Ldn, residential units may not meet the 45-dBA Ldn interior standard through typical construction methods. Existing and future noise levels along Allston Way and Kittredge Street were estimated using traffic volumes provided in the traffic impact analysis conducted by the IBI Group (April 2014) using the Federal Highway Administration's (FHWA) Traffic Noise Model (TNM) Look-Up version 2.5 (refer to Appendix G for output). The results of this analysis are shown in Table 14.

Table 14
Estimated Roadway Noise Levels

Allston Way		Kittredge Street	
Existing AM	**Existing PM**	**Existing AM**	**Existing PM**
67.1 dBA	66.6 dBA	65.5 dBA	65.2 dBA
2020 Plus Project AM	**2020 Plus Project PM**	**2020 Plus Project AM**	**2020 Plus Project PM**
67.4 dBA	66.9 dBA	66.6 dBA	66.7 dBA
2035 Plus Project AM	**2035 Plus Project PM**	**2035 Plus Project AM**	**2035 Plus Project PM**
68.5 dBA	68.0 dBA	67.5 dBA	67.6 dBA

Sources: See Appendix G for Traffic Noise Model Look-Up version 2.5 noise estimates.

As shown in Table 14, under existing conditions noise levels at 32.8 feet from roadway centerlines (the shortest distance available in TNM Look-Up) are not expected to exceed a one-hour Leq (the average noise level over a one-hour period) of 67.1 dBA along either Allston Way or Kittredge Street. Under 2020 Plus Project conditions, estimated noise levels would not exceed a one-hour Leq of 67.4 dBA along either Allston Way or Kittredge Street, and under 2035 Plus Project conditions estimated noise levels would not exceed a one-hour Leq of 68.5 dBA along either Allston Way or Kittredge Street (for all conditions the AM peak hour along Allston Way resulting in the highest estimated roadway noise levels). The estimated traffic noise levels are during peak hour conditions would typically be similar to (and would not be expected to exceed) the Ldn (which represents a weighted 24-hour average). Therefore, new residential units would not be exposed to noise levels that would exceed 70 dBA Ldn, and the 45-dBA Ldn interior standard described in Impact NOI-1 of the DAP EIR would be achieved in all new residential units through typical construction methods.

The project would be consistent with the requirement in DAP Mitigation Measure NOI-1 that shared residential outdoor areas be located behind buildings, in courtyards, or orienting terraces to alleyways rather than streets, whenever possible. Impacts would be within those identified in the DAP EIR for the Plan as a whole, and would be **less than significant**.

Commercial/Mechanical Noise. The project would introduce new commercial land uses adjacent to new and existing residential land uses; however, the types of commercial uses proposed are not anticipated to include substantial loading or unloading activities, operation of heavy mechanical equipment, or other uses that would result in noise that would exceed the City of Berkeley Municipal Code Limits. Currently, loading and unloading activities occur at the site associated with the existing building. Potential impacts would be similar to those anticipated in the DAP EIR for the Plan as a whole, and would be **less than significant.**

Traffic Noise. As shown in the traffic impact analysis prepared by the IBI Group (April 2014), the project would result in an incremental increase in vehicle trips to and from the project site. Project-generated traffic would incrementally increase noise levels on area roadways.

Existing peak hour traffic volumes for the AM and PM hours were compared with the expected peak hour traffic volume increases associated with the proposed project (all traffic volumes were based on the traffic impact analysis), because they represent the busiest traffic conditions. Table 15 illustrates the increase in roadway traffic along the studied roadway segments with the greatest increase in traffic for the AM and PM peak hours.

Table 15
Project Contribution to Area Roadway Traffic Levels during AM and PM Peak Hours

Roadway Segment	Existing Peak Hour (trips)	Existing Peak Hour Net Project Change (trips)	Project Increase Compared to Existing Traffic
AM Peak Hour			
Allston Way between Milvia Street and Martin Luther King Jr. Way	486	1	0.2%
Shattuck Avenue between Kittredge Street and Bancroft Way	1,721	0	0.0%
Kittredge Street between the Proposed Project Driveway and Milvia Street	113	13	11.5%

Table 15
Project Contribution to Area Roadway Traffic Levels during AM and PM Peak Hours

Roadway Segment	Existing Peak Hour (trips)	Existing Peak Hour Net Project Change (trips)	Project Increase Compared to Existing Traffic
PM Peak hour			
Allston Way between Milvia Street and Martin Luther King Jr. Way	461	7	1.5%
Shattuck Avenue between Kittredge Street and Bancroft Way	1,879	12	0.6%
Kittredge Street between the Proposed Project Driveway and Milvia Street	99	35	35%

Source: Draft 2211 Harold Way Traffic and Parking Study, IBI Group, March 2014.

As indicated in Table 15, the highest traffic volume increases for both the AM and PM peak hours are on Kittredge Street between the proposed project driveway and Milvia Street, where the increases would be 11.5% and 35%, respectively. No other change in peak hour traffic resulting from the project would be expected to exceed a 1.5% increase in peak hour vehicle trips. In general, a doubling of vehicle traffic is required in order to produce a 3 dBA increase in traffic-related noise, which is the minimum increase that is perceptible by most people. Project-added vehicle trips would not increase existing traffic more than 35 percent, less than the doubling (200 percent) of traffic that would result in a perceptible increase in traffic noise. Therefore, the noise increase from new vehicle traffic associated with the proposed project would not result in a significant increase in traffic noise, and would be lower than anticipated in the DAP EIR. Impacts associated with traffic noise would be within those identified in the DAP EIR for the Plan as a whole and would be **less than significant**.

b, d) Project construction could intermittently generate high noise levels as well as vibration on and adjacent to the project site. The existing 1959 Hink's Building would be demolished and a portion of the Shattuck Hotel would be removed to prepare the site for construction of the proposed project, including alteration of the underground areas. Grading and excavation would be required for site preparation and excavation for the subterranean parking garage. The maximum depth to the bottom of the lowest proposed foundation would be approximately 34 feet below the existing street-level grade. Pile driving would not be required; rather, a mat foundation (a type of continuous thick-slab foundation supporting the entire structure) varying from approximately three to six feet in thickness is proposed. Demolition and construction would require approximately 18-24 months. Temporary noise associated with demolition and construction activities may adversely affect nearby residential uses. Vibration associated with excavation and foundation work may impact

nearby residences, businesses, and other structures. The main sources of noise during construction activities would be the heavy machinery used in demolition, grading, excavation, and building construction. Potential impacts associated with temporary sources of construction noise and vibration are discussed below.

Construction Noise. Table 16 demonstrates the maximum noise levels associated with the use of heavy equipment at construction sites. As shown therein, average noise levels associated with the use of heavy equipment at construction sites can range from about 74 to 101 dBA at 50 feet from the source, depending upon the types of equipment in operation at any given time and phase of construction (FHWA, 2006).

Table 16
Typical Construction Equipment Noise Levels

Equipment	Acoustical Usage Factor (%)[1]	Measured Lmax (dB at 50 feet)
Augur Drill Rig	20	84
Backhoe	40	78
Compactor (ground)	20	83
Dozer	40	82
Dump Truck	40	76
Excavator	40	81
Flat Bed Truck	40	74
Front End Loader	40	79
Generator	50	81
Grader	40	83
Pickup Truck	40	75
Pneumatic Tools	50	85
Roller	20	80
Scraper	40	84
Warning Horn	5	83
Welder/Torch	40	74

[1] *The average fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.*
Source: FHWA, 2006.

Maximum noise levels from construction equipment would not be expected to exceed 91 dBA at 50 feet from the source. This assumes up to four pneumatic tools being used simultaneously, which increases the maximum sound level by approximately 6 dBA. Overall, project construction activity may require more pneumatic tools than this assumption; however, it is unlikely that multiple pneumatic tools would be in use simultaneously at the same location on the project site. Therefore, this assumption represents a reasonable worst-case estimate of potential noise from construction activity on the site.

Noise-sensitive uses near the project site include residential units located within the Library Gardens Apartments, on the south side of Kittredge Street, within 100 feet of potential

construction activity. These land uses would be exposed to temporary noise levels during project construction. Table 17 shows noise levels at various distances from construction activity, based on a standard noise attenuation rate of 6 dBA per doubling of distance.

Table 17
Construction Noise Levels at Various Distances from Project Construction

Distance from Construction	Maximum Noise Level at Receptor (dBA)
25 feet	97
50 feet	91
100 feet	87
250 feet	77
500 feet	71

As shown in Table 17, construction noise levels could be up to 94 dBA at 25 feet from the project site boundary. These potential construction noise levels are within with those anticipated by the DAP EIR, which determined that businesses and residences throughout the Downtown Area would be intermittently exposed to elevated noise levels throughout the planning horizon of the DAP. The project would be subject to DAP Mitigation Measure NOI-5, which requires the use of available controls to reduce construction noise levels, including equipment mufflers, temporary noise barriers, and neighbor notification. Adjacent and nearby sensitive noise receptors would be exposed to noise levels within those anticipated in the DAP EIR for the Plan as a whole; impacts associated with temporary construction noise would remain **significant.**

Vibration. Residences adjacent to the project site may be exposed to construction-related vibration during the demolition, excavation, and foundation work. Residential land uses would not be exposed to significant vibration impacts during the day because vibration impacts affect residents the most if sleep is disturbed. Section 13.40.070 of the Berkeley Community Noise Ordinance restricts construction activity that involves operating tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7:00 PM and 7:00 AM, or 8:00 PM and 9:00 AM on weekends or holidays. Therefore, construction vibration impacts on residential sensitive receptors would be **less than significant**.

Tuan and Robinson Structural Engineers, Inc. conducted a vibration analysis (March 2014) to determine if vibrations from project construction would potentially affect the existing adjacent structures, which could result in damage to historic resources. For a discussion of potential impacts to historic resources associated with vibration, refer to Item V, *Cultural Resources*.

e, f) The project is not located within an airport land use plan, within two miles of a public airport or public use airport, or within the vicinity of a private airstrip. Impacts associated with airport noise were not discussed in the DAP EIR; however, **no impacts** would occur.

Conclusion

Potential noise impacts associated with the project would be within the impacts identified in the DAP EIR for the Plan as a whole with implementation of the mitigation measures listed above, and would incorporate mitigation measures required by the DAP EIR. Therefore, environmental effects related to noise and vibration (potential vibration effects on historic resources are discussed in Section V. *Cultural Resources*) **do not require further study in an EIR**.

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
XIII. POPULATION AND HOUSING. Would the project:					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☒	☐	☐	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses population and housing impacts on pages 4-206 through 4-218. As noted therein, "2,734 people were living within the Downtown Area at the time of the 2000 Census," and "the 2007 Downtown Area population may now be approximately 3,000." Within the Downtown Area, the Alameda County Congestion Management Agency (ACCMA) estimated that the population of the ten traffic analysis zones (TAZs) totaled 4,761 in 2000, and projected that the population living in the Downtown TAZs would increase to 5,414 by 2015 and to 6,528 by 2030 under a "Baseline" scenario (without the DAP). The DAP EIR estimated that new residential units developed as a result of the DAP could increase the population of the area by approximately 3,252 new residents, increasing the total Downtown Area population to an estimated 9,780 persons. The DAP EIR noted that population growth in the Downtown Area

is not unanticipated, as General Plan Policy H-16 encourages the construction of new medium- and high-density housing on major transit corridors (e.g., Shattuck Avenue and University Avenue in the Downtown Area). The DAP EIR concluded that "Implementation of the DAP would not result in substantial population or housing growth beyond that already anticipated under the City's General Plan, and the DAP-related impact would be less than significant," and that DAP-related impacts to population and housing were less than significant, and no mitigation measures were required or identified.

Project-Specific Impacts

a) The proposed project would develop the site with a mix of uses, including 302 residential units, and therefore would directly increase population growth on the project site. Based on the City of Berkeley's General Plan Housing Element, adopted in 2010, for housing projects of five or more units, it can be assumed that the household size averages 1.73 persons (Berkeley, 2002). Therefore, it is assumed that the proposed project would increase the local population by up to 516 persons. However, this population growth would not be considered substantial in the context of existing population in Berkeley, and would be within the population projections in the DAP EIR. The anticipated population growth associated with the project represents approximately 15 percent of the potential population growth that would result from the DAP, and less than 10 percent of the Downtown Area's projected 2015 population (the earliest year for which the proposed project would be operational).

   In addition, the project does not include infrastructure improvements that would extend roadways or infrastructure into areas which do not currently support residential or other urban uses. Therefore, the proposed project would neither directly nor indirectly increase population growth in Berkeley beyond that planned for by the City in the DAP, and impacts would be **less than significant**.

b, c) No occupied or vacant residential structures would be demolished to accommodate the project. Therefore, the proposed project would not result in displace existing housing or people. **No impact** would occur.

Conclusion

As the project would have a less than significant impact on population and housing, and would be within the impacts identified in the DAP EIR for the Plan as a whole – this issue **does not require mitigation or further study in an EIR**.

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
XIV. PUBLIC SERVICES.					
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☒	☐	☒	☒
Fire protection?	☐	☒	☐	☒	☒
Police protection?	☐	☒	☐	☒	☒
Schools?	☐	☒	☐	☒	☒
Parks?	☐	☒	☐	☒	☐
Other public facilities?	☐	☒	☐	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses impacts to public services in Section M, on pages 4-219 through 4-233. Each of the following public services is discussed separately within Section M:

Fire Protection and Emergency Medical Services

The DAP EIR states that "…the DAP could result in an increase in the population of the Downtown Area by up to 3,252 new residents during the planning period. This increase in the number of Downtown Area residents could result in additional service calls to the Berkeley Fire Department" (the BFD). However, the DAP EIR concludes that, because the level of development anticipated under the DAP is generally consistent with that anticipated under the Berkeley General Plan, "…it is not expected that such development would generate a need for new or expanded facilities to support fire protection and emergency response providers, and

the impact would be less than significant." It also notes that the BFD would continue to be required to exercise its review authority to review new development for such impacts, as required by Mitigation Measure SVC-6a and Mitigation Measure SVC-6b of the City's 2001 General Plan EIR.

Police Protection

The DAP EIR states that the potential population increase resulting from the DAP could result in additional service calls to the Berkeley Police Department. However, the DAP EIR concludes that, because the level of development anticipated under the DAP is generally consistent with that anticipated under the Berkeley General Plan, "it is not expected that such development would generate a need for new or expanded police facilities, and the impact would be less than significant." It also notes that the BPD would continue to review individual development projects to determine whether or not significant adverse effects to police response times could result. It also notes that Mitigation Measure SVC-4 of the City's General Plan EIR requires the City to annually review police staffing development trends and crime trends to determine whether additional police staffing is needed.

Schools

The DAP EIR concludes that "The level of development anticipated under the DAP is not expected to result in demand for school services that would exceed the existing or planned capacity of the District, and the District would not anticipate the need to develop new facilities or expand existing facilities to accommodate an increased number of school-age residents who might be living in the Downtown Area following development under the DAP." It also notes that "Project developers in the Downtown Area would be required to pay all applicable school impact fees to the Berkeley Unified School District, which (under California law) would effectively reduce any school-related impacts that might be associated with such development to a level of less than significant." It also notes that Mitigation Measure SVC-5 of the City's General Plan EIR requires the City and Berkeley Unified School District (BUSD) to continue to work together to evaluate the impacts of new development on BUSD facilities.

Parks

The DAP EIR states that, although the population increase potentially resulting from the DAP could potentially "place additional pressure on the only City park in the area: Martin Luther King Jr. Memorial Park at the Civic Center", residents in the Downtown Area would continue to have access to public open space on the campus of U.C. Berkeley, which could relieve pressure on this park. It concluded that DAP-related impacts related to possible physical deterioration of existing parks would therefore be less than significant.

Library Services

The DAP EIR states that, although the population increase potentially resulting from the DAP could place additional demands on the Berkeley Central Library, this increase would result in the ratio of items in this library's collection to Berkeley residents dropping only slightly, from

3.12 items per Berkeley resident to 3.03 items per Berkeley resident. The DAP EIR determined that no new library facilities, and no expansion of existing library facilities, would be needed to serve the new residents of the Downtown Area, and this impact would be less than significant.

Health and Human Services

The DAP concludes that, although the potential population increase of 3,252 new residents in the Downtown Area "could place additional demands on providers of health and human services in Berkeley," that "the additional population in the Downtown Area would not be likely to require new health/human services facilities or expansion of existing health/human services facilities, and the DAP-related impact would be less than significant."

Project-Specific Impacts

a) As described in Section XIII, *Population and Housing*, the proposed project would involve development of the site with a mix of uses, including 302 residential units, and therefore would lead to an estimated direct increase in population growth on the project site of 516 persons, which is within ABAG and DAP growth projections. Potential public services impacts, if any, would result from the increased demand on public services resulting from this population growth. The potential for the project to result in such impacts to public services is analyzed below for the following public services: fire protection and emergency medical services; police protection; schools; parks; library services; and health and human services.

   Fire Protection and Emergency Medical Services

   Because the proposed project would increase the local population by up to 516 persons, which is well within the projected total population growth attributed to the DAP of 3,252 new residents during the planning period, it would not result in substantial population or housing growth beyond that already anticipated under the DAP EIR. Therefore, like the DAP EIR itself, the project would not generate a need for new or expanded facilities to support fire protection and emergency response providers, and this impact would be **less than significant**.

   Police Protection

   The DAP EIR concludes that, because the level of development anticipated under the DAP is generally consistent with that anticipated under the Berkeley General Plan, "it is not expected that such development would generate a need for new or expanded police facilities, and the impact would be less than significant." As stated above, the population growth resulting from the proposed project would be well within that envisioned under the DAP EIR. The project's 302 new residential units and cinema and retail/restaurant space are within the projected buildout of the DAP EIR. The BPD is still required to review individual development projects such as the project to determine whether or not significant adverse effects to the City's ability to provide police services that might increase response times could result; and Mitigation Measure SVC-4 of the City's General Plan EIR, which requires the City to annually review police staffing development trends and crime trends to

determine whether additional police staffing is needed, still applies. For these reasons, project impacts related to police protection services would be **less than significant**.

Schools

As stated in the DAP EIR, The Berkeley Unified School District has not established student generation rates to estimate the number of students that might be anticipated with new development. However, because the amount of development under the project would fall within that envisioned under the DAP EIR, the findings of that EIR in relation to school services, as discussed above, would apply to the project. Consequently, the project would not result in demand for school services that would exceed the existing or planned capacity of the District, and would not require new facilities or expand existing facilities to accommodate an increased number of school-age residents who might be living in the Downtown Area following development of the project. While the BUSD does not currently impose school impact fees, it does receive funding from several parcel taxes and general obligation bonds that help finance facilities improvements (Berkeley Public Schools, May 2014). Lastly, Mitigation Measure SVC-5 of the City's General Plan EIR, which requires the City and the BUSD to continue to work together to evaluate the impacts of new development on BUSD facilities, would continue to apply. For these reasons, project impacts related to school facilities would be **less than significant**.

Parks

The project site is located within walking distance (approximately 0.2 miles, or a roughly five minute walk) from Martin Luther King Jr. Memorial Park at the Civic Center. The DAP EIR states that population increases resulting from buildout of the DAP would "place additional pressure on the only City park in the area: Martin Luther King Jr. Memorial Park at the Civic Center", and new residents of the project site could lead to greater use of this park. However, the project site is also located within walking distance (approximately 0.25 miles) of the Eucalyptus Grove/Grinnell Natural Area, as well as the large area of lawn between Oxford Street and The Crescent, both of which are on the campus of U.C. Berkeley. As stated in the DAP EIR, the availability of these and other open space resources on the campus would make DAP-related impacts related to possible physical deterioration of existing parks less than significant. Because the project would not lead to population growth beyond that analyzed in the DAP EIR, the project's impact on parks would also be **less than significant**.

Library Services

The Berkeley Central Library is located directly across Kittredge Street from the southern boundary of the project site. New residents at the project site resulting from the project may use this and other libraries in Berkeley and surrounding areas, resulting in increased use of these facilities. However, the DAP EIR concluded that no new facilities or expansion of existing facilities would be required to serve residents of the Downtown Area due to the population increase resulting from buildout of the DAP. Because the potential population increase resulting from the project would be well within that forecast under the DAP, this

conclusion remains valid, and impacts to library facilities and services would be **less than significant**.

Health and Human Services

The Alta Bates Summit Medical Center is located approximately ½ mile south of the project site. New residents at the project site resulting from the project may use this and other medical facilities in Berkeley and surrounding areas, resulting in increased use of these facilities. However, the DAP EIR concluded that the additional population in the Downtown Area would not be likely to require new health/human services facilities or expansion of existing health/human services facilities, and this impact would be less than significant. Because the potential population increase resulting from the project would be well within that forecast under the DAP, this conclusion remains valid, and impacts to health and human services would be **less than significant**.

Conclusion

As the project would have a less than significant impact on public services – the same as the impacts identified in the DAP EIR for the Plan as a whole – this issue **does not require mitigation or further study in an EIR**.

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
XV. RECREATION.					
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☒	☐	☐	☐
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?	☐	☐	☒	☐	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses recreational resources impacts on pages 4-234 through 4-237. As noted therein, public recreational facilities in the Downtown Area are limited. The DAP EIR states that "The major open space in the Downtown Area is the approximately three-acre Martin Luther King Jr. Memorial Park in the Civic Center area, which provides limited recreational opportunities on a large lawn, but supports a number of outdoor events (e.g., Cinco de Mayo, 'How Berkeley Can You Be?', etc.). The playing fields/track and warm pool at the Berkeley High School area also used by the public when not in use for physical education classes, team practices, and school sporting events. The YMCA also provides its members and guests with indoor recreation and fitness facilities." The DAP EIR concluded that there would be no DAP-related impacts to recreational resources, and no mitigation measures were required or identified.

Project-Specific Impacts

a) Residents of the project site would use local parks in the vicinity of the project. According to the General Plan Open Space and Recreation Element, the acres of parkland available to city residents increases to over 10 acres per 1,000 residents. If the 198-acre Claremont Canyon Regional Reserve is included, the figure increases to over 12 acres per 1,000 residents.

   The playing fields/track and warm pool at Berkeley High School are also used by the public when not in use for physical education classes, team practices, and school sporting events. The YMCA also provides its members and guests with indoor recreation and fitness facilities. The nearest park is the Martin Luther King Jr. Memorial Park in the Civic Center area, and the nearest regional park is Tilden Park, which is owned by the East Bay Regional Park District (EBRPD). The park is approximately two miles from the site and includes over 2,000 acres of open space, hiking trails, and recreational facilities. In addition, the UC Berkeley campus is located one block east of the site. Although the project would incrementally increase use of community and regional parks and recreation facilities, the City exceeds its goal of two park acres per 1,000 people, and the increase in use would be within that anticipated by the DAP EIR, and is not expected to result in substantial physical deterioration of these facilities. In addition, the proposed project would include an on-site outdoor common area for use by project residents, further ensuring that the project's impacts on local parks and recreational facilities would be **less than significant**.

b) The proposed project involves the redevelopment of the existing project site with residential and commercial uses. As discussed above, the project does not require the construction or expansion of off-site public recreational facilities; therefore, development of the proposed project would not result in additional environmental effects beyond those described in this document. **No impact** would occur.

Conclusion

As the project would have no impact on recreational resources – the same as the impacts identified in the DAP EIR for the Plan as a whole – this issue **does not require mitigation or further study in an EIR**.

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

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☒	☐	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses transportation/traffic impacts on pages 4-270 through 4-325. The DAP EIR analysis for year 2030 buildout of the Plan assumed that the Downtown Area would accommodate up to 3,100 new residential units and up to 1,000,000 square feet of non-residential floor space (the vast majority of which would be related to University of California, Berkeley, projects).

The DAP EIR examined a range of potential impacts related to transportation and traffic, including unacceptable level of service (LOS) at the Martin Luther King Jr. Way/Hearst Avenue Intersection, the Martin Luther King Jr. Way/Allston Way Intersection, the Milvia Street/University Avenue Intersection, the Milvia Street/Center Street Intersection, the Shattuck Avenue/Center Street Intersection, the Shattuck Avenue/Allston Way Intersection, the Shattuck Avenue/Bancroft Way Intersection, the Shattuck Avenue/Durant Avenue Intersection, the Oxford Street/Hearst Avenue Intersection, the Oxford Street/University Avenue Intersection, the Oxford Street/Allston Way Intersection, increased AM peak hour congestion along Ashby Avenue eastbound between Adeline Street and Telegraph Avenue, DAP-related reduction of emergency access along Center Street, and increased traffic along Milvia Street adversely affecting bicycle boulevard operations. Impacts were assessed in the context of adopted planning documents and were based on the IBI Group's *Berkeley Downtown Area Plan – Program Environmental Impact Report Traffic Impact Analysis*. The DAP EIR identified the following mitigation measures related to intersections and other traffic impacts that may be affected by the current proposed project:

- *Impact TRA-2:* Unacceptable LOS during PM Peak Hour at Martin Luther King Jr. Way/Allston Way Intersection. LOS changes from D in Year 2030 Baseline condition to F in Year 2030 With Project condition. The likely cause of this impact is the increase in traffic volumes due to increased development anticipated under the DAP. The existing geometry of this intersection is one through-right and one through-left lane for northbound and southbound directions, one through-left and one right-turn lane for eastbound and westbound directions. In 2030 With Project condition (which would maintain the existing geometry), the intersection of Martin Luther King Jr. Way and Allston Way would operate at LOS F in the PM peak hour, a *potentially significant* impact.

- *Mitigation TRA-2:* Modify Lane Configuration at Martin Luther King Jr. Way/Allston Way Intersection. The eastbound lane configuration should be changed, turning the existing through-left lane to left turn only and the right lane to a through-right. A right turn lane to Martin Luther King Jr. Way in the southbound direction should be added, changing the through-right lane to through only. This mitigation measure would result in changing the LOS to D, with delay of 49.8s. The implementation of this mitigation measure requires re-striping of Allston Way west of Martin Luther King Jr. Way to accommodate the lane changes, and the acquisition of right-of-way north of Allston Way to accommodate the southbound right tum lane. This measure is not anticipated to cause significant impacts to pedestrian traffic.

  Implementation of this measure would reduce the DAP-related impact to a level of *less than significant*.

- *Impact TRA-5:* Unacceptable LOS during PM Peak Hour at Shattuck Avenue/Center Street Intersection. LOS E occurs in Year 2030 Baseline condition, but deteriorates to F in Year 2030 With Project condition. The likely cause of this impact is the reconfiguration of the Downtown Area street network, in particular the changes in the number of lanes on Shattuck Avenue. Shattuck Avenue is a one-way street, with four lanes in the southbound direction: one through-left, two through lanes and one through-right lane. In the eastbound and eastbound directions, there is one through-left lane. In 2030 With Project condition (with Shattuck Avenue converted into a two-way street, with one through and one left tum lane in the northbound direction and one through and one right tum lane in the southbound direction, with Center Street closed to traffic east of Shattuck Avenue and the eastbound direction having one right tum lane and one left tum lane), the intersection of Shattuck Avenue and Center Street would operate at LOS F in the PM peak hour, a *potentially significant* impact.

  - *Mitigation TRA-5:* Modify Lane Configuration at Shattuck Avenue/Center Street. The significant impact at this intersection can only be mitigated by restoring Shattuck Avenue to provide two traffic lanes in the northbound direction. The proposed mitigation measure would add one lane to Shattuck Avenue in the northbound direction, changing lane configuration to one left tum lane and two through lanes. This mitigation measure would result in change of LOS to D, with delay of 42.6s in the PM peak hour. The implementation of this mitigation measure would require the removal of the parking spaces in the northbound direction of Shattuck Avenue, the reconfiguration of the southeast sidewalk, and the re-striping of Shattuck Avenue in the block south of Center Street. This improvement would result in the loss of about eight on-street parking spaces, but is not anticipated to generate significant impact with regard to parking.

    Implementation of this measure would reduce the DAP-related impact to a level of *less than significant*.

- *Impact TRA-6:* Unacceptable LOS during PM Peak Hour at Shattuck Avenue/Allston Way Intersection. LOS D occurs in Year 2030 Baseline condition, and deteriorates to F in

Year 2030 With Project condition. This impact results from the combination of the increase in vehicle traffic due to increased development anticipated under the DAP and the reconfiguration of the Downtown Area street network. This impact is connected to the changes proposed on Shattuck Avenue under the DAP. With the existing geometry, in the northbound and southbound directions, the lane configuration is one left tum, one through and one through-right lane. In the eastbound and westbound directions, there is one lane that allows all movements. In 2030 With Project condition (with the existing intersection geometry changed to loose a through lane in the northbound and southbound directions, but maintained in the eastbound and westbound directions), the intersection of Shattuck Avenue and Allston Way would operate at LOS F in the PM peak hour, a *potentially significant* impact.

- *Mitigation TRA-6:* Modify Lane Configurations at Shattuck Avenue/Allston Way Intersection. The existing number of lanes (three) in the northbound and southbound directions should be maintained, changing lane configurations to one left tum lane, one through lane and one right tum lane. One right tum lane should be added to the westbound direction, changing the existing lane to a through-left only. This mitigation measure would change the forecast LOS to D, with delay of 37.6s in the PM peak hour. The proposed mitigation measure would maintain the single through lane concept of the Shattuck Boulevard plan, but would widen the street cross section by providing a right tum lane in the northbound and southbound directions. On Allston Way, the implementation of the proposed mitigation measure requires the removal of on-street parking to accommodate the new lane configuration. This measure is not anticipated to cause significant impacts to pedestrian traffic. The anticipated loss of six on-street parking spaces on Alston Way and none spaces on Shattuck Avenue is not expected to generate significant impacts.

  Implementation of this measure would reduce the DAP-related impact to a level of *less than significant*.

- *Impact TRA-7:* Unacceptable LOS during PM Peak Hour at Shattuck Avenue/Bancroft Way Intersection. LOS B occurs in Year 2030 Baseline condition, and deteriorates to E in Year 2030 With Project condition. This impact results from the combination of the increase in trips due to increased development under the DAP and the reconfiguration of the Downtown Area street network. This impact is associated with the changes proposed to lane geometries on Shattuck Avenue. The existing geometry of this intersection is one left tum lane and two through lanes in the northbound and westbound directions, one through and one through right lane in the southbound direction, and one right tum lane in the eastbound direction. Bancroft Way is also a Bicycle Boulevard. In 2030 With Project condition (with the northbound direction configuration changed to one left tum lane and one through-right lane and reducing the southbound direction to one lane, maintaining the existing lane configuration in the eastbound and westbound directions), the intersection of Shattuck Avenue and Bancroft Way would operate at LOS E in the PM peak hour, a *potentially significant* impact.

- *Mitigation TRA-7:* Modify Lane Configurations at Shattuck Avenue/Bancroft Way Intersection. The existing number of lanes in the southbound direction should be maintained, changing lane configuration to one through-left lane and one through-right lane. This mitigation measure would result in change of LOS to D, with delay of 37.6s in the PM peak hour. The proposed mitigation measure would not maintain the single through concept of the Shattuck Boulevard plan. On Shattuck Avenue, the implementation of this mitigation measure would require the reconfiguration of the parking spaces and sidewalk in the southbound direction and the re-striping of the segment of the block north of Bancroft Way. This measure is not anticipated to cause significant impacts to pedestrian traffic.

  Implementation of this measure would reduce the DAP-related impact to a level of *less than significant*.

- *Impact TRA-8:* Unacceptable LOS during AM and PM Peak Hours at Shattuck Avenue/Durant Avenue Intersection. LOC C occurs in the AM peak hour and LOS B occurs in the PM peak hour in Year 2030 Baseline condition, and both periods experience deterioration to LOS F in Year 2030 With Project condition. The likely cause of this impact is the reconfiguration of lane geometry on Shattuck Avenue. The existing geometry of this intersection is one left tum, one through and one through right lane in the northbound and southbound directions. Durant Avenue is a one-way street with one through-left and one through-right lane in the eastbound direction. In 2030 With Project condition (with northbound and southbound directions both changed to one left tum lane and one through right lane, and existing lane configurations in eastbound and westbound directions maintained), the intersection of Shattuck Avenue and Durant Avenue would operate at LOS F in the AM peak hour and LOS F in the PM peak hour, a *potentially significant* impact.

  - *Mitigation TRA-8:* Modify Lane Configurations at Shattuck Avenue/Durant Avenue Intersection. The existing number of lanes in the northbound direction should be maintained, changing the lane configuration to one left tum lane, one through and one right tum lane. This mitigation measure will result in change of LOS to B in the AM peak hour (17.8s delay). LOS C is achieved in the PM peak hour (21.6s delay) applying the mitigation measures described above plus a 20s increase in cycle time. On Shattuck Avenue, the implementation of this mitigation measure would require the reconfiguration of the parking spaces and sidewalk in the northbound direction and the re-striping of the segment in the block south of Durant Avenue. This measure is not anticipated to cause significant impacts to pedestrian traffic.

    Implementation of this measure would reduce the DAP-related impact to a level of *less than significant*.

- *Impact TRA-11:* Unacceptable LOS during PM Peak Hour at Oxford Street/Allston Way Intersection. LOS E occurs in the PM peak hour in Year 2030 Baseline condition, and experiences deterioration to LOS F in Year 2030 With Project condition. The likely cause

of this impact in the increase in vehicle trips due to increased development under the DAP. Existing geometry at this intersection is one through-left and one through lane in the northbound direction, one through and one through-right lane in the southbound direction and eastbound configuration with one lane only allowing right and left turns only. In 2030 With Project condition (with the existing geometry), the intersection of Oxford Street and Allston Way would operate at LOS F in the PM peak hour, a *potentially significant* impact.

- *Mitigation TRA-11:* Modify Lane Configurations at Oxford Street/Allston Way Intersection and Alter Signal Cycle Timing. One lane should be added in the southbound direction, changing the lane configuration to two through and one right tum lane. One lane should be added to the northbound direction, changing the configuration to one left tum and two through lanes. One lane should be added in the eastbound direction, changing the configuration to one left tum lane and one right tum lane. Cycle length should be increased to 25s and to provide a protected left tum signal phase in the northbound direction. This mitigation measure would result in change of LOS to C in the Pm peak hour, with delay of33.6s. On Oxford Street, the implementation of this mitigation measure would require the removal of 5 of the parking spaces in the southbound direction and the re-striping of the segment in the block north of Allston Way. In the northbound direction there is the need to use the median space, as well as re-stripe the roadway. On Allston Way, the addition of the extra lane would require the loss of 4 on-street parking spaces on the south side of the street, as well as restriping. This measure is not anticipated to cause significant impacts to pedestrian traffic. The loss of on-street parking spaces on Oxford Street and Allston Way is not anticipated to generate significant impacts.

  Implementation of this measure would reduce the DAP-related impact to a level of *less than significant*.

- *Impact TRA-13:* DAP-Related Reduction of Emergency Access along Center Street. Under the DAP, The proposed closure of Center Street between Shattuck Avenue and Oxford Street would eliminate the existing emergency access to several buildings located along this segment of Center Street. This would represent a *potentially significant* impact.
  - *Mitigation TRA-13:* Incorporate Emergency Access Lane in Design for Center Street Pedestrian Corridor. In order to maintain adequate emergency access to buildings located along Center Street between Shattuck Avenue and Oxford Street, the design of the proposed Center Street pedestrian corridor shall be required to incorporate a clear area, a minimum of 20 feet in width, where permanent and temporary structures, landscaping, and other physical features are prohibited. This area shall be designated as an emergency access lane, and must be accessible from both Shattuck Avenue and Oxford Street.

    Implementation of this measure would reduce the DAP-related impact to a level of *less than significant*.

Mitigation Measures TRA-2, TRA-5, TRA-6, TRA-7, TRA-8, TRA-11, and TRA-13 would apply to intersections and other traffic operations that would be potentially affected by the proposed project. The DAP EIR concluded that, with implementation of required mitigation measures, impacts related to transportation/traffic would be reduced to a level of less than significant.

Project-Specific Impacts

Traffic Impact Analysis Methodology. A traffic impact analysis is being prepared for the project. The existing conditions analysis will be based on existing traffic volumes obtained through new traffic counts conducted in December 2013. Future conditions traffic volumes were obtained through the Alameda County Transportation Commission (ACTC) regional traffic model forecasts for 2020 and 2035. Specific intersection turning movement volumes were obtained by applying an annual growth factor obtained from the model forecasts to existing traffic volumes.

Thresholds of Significance. Per the City's Traffic Impact Report Guidelines (City of Berkeley, September 2005), the traffic impact analysis for the project will assess Level of Service (LOS) for signalized intersections and determine the significance of project and cumulative impacts using the following standards:

- *The Highway Capacity Manual (Transportation Research Board, 2000) defines levels of service based on average seconds of delay per vehicle. The upper threshold for LOS D is 55 sec/veh and for LOS E is 80 seconds/vehicle. The average delay can be significantly affected by signal timing at a signalized intersection. In general, traffic impact analyses should retain cycle lengths, phase minimums, and phasing that occur for existing conditions. Phase lengths can be adjusted but should not adversely affect signal coordination. Any major changes need to be documented and fully justified.*
- *The City has established significance thresholds based on the fact that for a given level of traffic on critical movements, the delay increases at a greater rate as LOS F is approached. The following average delay thresholds have been established: LOS D to E=2 seconds; LOS E and LOS E to F=3 seconds.*
- *The volume-to-capacity ratio (v/c) is also an important indicator of capacity and should be included as part of all Level of Service tables. It can indicate the extent to which the signal timing is optimal and provides a useful indicator for over-saturated conditions. However, v/c's are not utilized for identifying level of service. As the delay can increase dramatically with small increases of traffic after LOS F has been reached, a threshold of an increase of 0.01 in the volume-to-capacity ratio will be used.*
- *Intersection level of service is dependent on a variety of factors. In general, existing timing and phasing should be retained for scenarios with and without the project. In this way, the only variable is the traffic volume, which ensures a valid comparison of project impacts. Nevertheless, with the approval of City staff, mitigations can include changes in signal timing; but care must be taken to ensure that these changes do not affect operations at adjacent signals. Finally, where closely spaced signals exist, estimated queue lengths should be provided to demonstrate whether or not there are potential impacts on upstream intersections or on access to turn lanes.*

a, b) Existing and future traffic impacts associated with the project are discussed below.

Existing and Future Year 2020 Traffic Operations. Based on preliminary traffic generation estimates, under existing conditions, all study intersections are forecast to operate at LOS C or better with project traffic. Similarly, under Future Year 2020 conditions, all but one of the study intersections is forecast to operate at acceptable levels of service. The intersection of Shattuck Avenue and Durant Avenue is forecast to operate at LOS D in both the no project and with project conditions. However, the proposed project's contribution to the delay (1.8 seconds) would not result in a new significant traffic impact at this intersection in this horizon year.

Future Year 2035 Traffic Operations. Based on preliminary traffic generation estimates, under Future Year 2035 conditions, the project is forecast to contribute to significant traffic impacts at the following intersections:

- Shattuck Avenue & Center Street – AM Peak Hour
- Shattuck Avenue & Bancroft Way – AM & PM Peak Hour
- Shattuck Avenue & Durant Avenue – AM & PM Peak Hour
- Shattuck Avenue & Kittredge Street – AM & PM Peak Hour

The intersections of Shattuck Avenue at Center Street, Bancroft Way, and Durant Avenue were all identified as significantly impacted in the DAP EIR. At the intersections of Shattuck Avenue at Center Street and Shattuck Avenue at Durant Avenue, DAP EIR Mitigation Measures TRA-5 and TRA-8 would also mitigate the impacts identified for the proposed project. DAP EIR Mitigation Measure TRA-5 requires the City to maintain two northbound lanes on Shattuck Avenue at the Center Street intersection. The northbound lane configuration would be one left turn lane and two through lanes (with one of the through lanes being a through/right lane in Center Street east of Shattuck remains open to vehicles). DAP EIR Mitigation Measure TRA-8 requires the City to provide one left turn lane, one through lane, and one right turn lane in the northbound direction on Shattuck Avenue at Durant Avenue. For these two intersections, the proposed project would be required to contribute its fair share to the implementation of these two DAP EIR mitigation measures, and impacts would be reduced to a level of **less than significant**, and would be within those identified in the DAP EIR for the Plan as a whole.

At the intersection of Shattuck Avenue and Bancroft Way, DAP EIR Mitigation Measure TRA-7 calls for maintaining two southbound lanes on Shattuck Avenue as a shared through/right lane and a through lane; however, Mitigation Measure TRA-7 would not fully address the identified impact for this project. The impact at the intersection of Shattuck Avenue and Bancroft Way is **potentially significant**.

The intersection of Shattuck Avenue and Kittredge Street was not analyzed in the DAP EIR. Therefore, the impact forecast to occur here is attributed solely to the proposed project, and is **potentially significant**.

These impacts, and the potential for others, will be assessed and confirmed through a completed technical traffic impact analysis which will be included in the Infill EIR.

c) The project would not result in any change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. Impacts associated with air traffic patterns were not discussed in the DAP EIR; however, **no impacts** would occur as a result of the proposed project.

d) The DAP EIR determined that the roadway network changes proposed as part of the DAP did not include any identified hazardous design features, and that the DAP would not incorporate any design features that could increase traffic hazards. The proposed project does not include modifications to the existing off-site transportation network that would result in potential transportation hazards not anticipated in the DAP EIR. The main pedestrian entrance to the proposed movie theater would be from Shattuck Avenue; the primary residential pedestrian access would be through the lobby on Harold Way; and retail access would be to each storefront along Allston Way, Harold Way and Kittredge Street. The existing private alley from Allston Way would remain as a service entrance for the hotel and the proposed project. All access to the project site would be designed in accordance with applicable City standards.

   The project includes installation of a speed table to calm traffic and to enhance the public right-of-way providing access to the Berkeley Central Library, the Armstrong College Property, the Library Gardens and the project. This improvement would be refined and finalized in coordination with City staff, in accordance with applicable City standards, and would not result in any hazards to local vehicle, bicycle, or pedestrian circulation, or to pedestrian access to the site. As described in the traffic impact analysis, the project driveway configuration is anticipated to provide for adequate traffic operations during both the AM and PM peak hours. Adequate sight distance is also provided. Therefore, the proposed project's potential impacts related to potential design hazards would be **less than significant**, and would be within those identified in the DAP EIR for the Plan as a whole.

e) The project includes limited off-site public improvements, including bulb-outs on both sides of Harold Way and installation of a speed table to calm traffic and to enhance the public right-of-way providing access to the Berkeley Central Library, the Armstrong College Property, the Library Gardens and the project. These improvements would be refined and finalized in coordination with City staff, in accordance with applicable City standards, and would not modify any existing roadway or emergency access route that would result in inadequate emergency access.

   It should be noted that the DAP suggests that Harold Way may be a candidate for reconfiguring as a "slow street," indicating that emergency access via Harold Way is not a critical function of the street. The proposed project's potential impacts related to emergency access would be **less than significant**, and would be within those identified in the DAP EIR for the Plan as a whole.

f) Pedestrian access to the project site would be incorporated from all four fronting street sidewalks. The main entrance to the proposed movie theater would be from Shattuck

Avenue; the primary residential access would be through the lobby on Harold Way; and retail access would be to each storefront along Allston Way, Harold Way and Kittredge Street. The existing private alley from Allston Way would remain as a service entrance for the hotel and the proposed project.

The project includes limited off-site, public streetscape and mobility improvements, such as a bulb-out on Harold Way that would accommodate public bicycle racks, replacement of tall street lights with shorter pedestrian-scaled lights, additional pedestrian scaled lights on Harold Way, and installation of a speed table to calm traffic and to enhance the public right-of-way providing access to the Berkeley Central Library, the Armstrong College Property, the Library Gardens and the project. These improvements would be refined and finalized in coordination with City staff, in accordance with applicable City standards, and would not modify any existing roadway or emergency access route that would result in inadequate emergency access. With implementation of these improvements for pedestrian and bicycle access, and also considering the project's close proximity to several AC Transit and UC Berkeley Shuttle bus stops serving a number of bus lines, as well as the Downtown Berkeley BART Station on Shattuck Avenue between Allston Way and Addison Street, the project would not conflict with any adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

As described in the traffic impact analysis, the project is anticipated to contribute positively to the pedestrian and bicycle environment surrounding the project site, and it is not anticipated that the project will have a significant adverse impact on the existing and future transit routes serving Downtown Berkeley. In addition, dense mixed-use development in this transit-rich and heavy pedestrian traffic area of Downtown Berkeley was envisioned in the DAP and analyzed in the DAP EIR. Therefore, impacts would be **less than significant**, and would be within those identified in the DAP EIR for the Plan as a whole.

Conclusion

The project would not result in significant impacts, or impacts not studied in the DAP EIR, related to air traffic patterns, traffic hazards, inadequate emergency access, or conflicts with adopted policies, plans, or programs regarding alternative transportation. For these issue areas, impacts would be within those studied in the DAP EIR for buildout within the plan area as a whole. However, the project could result in level of service impacts at intersections that exceed or differ from those identified in the DAP, and therefore will **require further study in an Infill EIR**.

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☒	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☒	☐	☒	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☒	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☒	☐	☒	☐

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☒	☐	☒	☐

Downtown Area Plan EIR Summary

The DAP EIR discusses impacts on utilities and service systems on pages 4-326 through 4-349. This discussion addresses the issues of water supply, wastewater, stormwater runoff, streets and sidewalks, gas/electricity/telecommunications, and solid waste and recycling.

Water Supply

According to the DAP EIR, development anticipated in the Downtown Area under the DAP would generate demand for 0.76 million gallons per day (mgd) of water, including 0.42 mgd for residential uses and 0.34 mgd for non-residential uses. However, the DAP EIR found that projections in the East Bay Municipal Utility District's 2005 Urban Water Management Plan had assumed such an increase in water demand. Furthermore, the application of City ordinances to conserve water used in landscaping and install low-flow plumbing fixtures would limit future increases in water demand within the Downtown Area. Therefore, the DAP EIR identified impacts on water supply as less than significant.

Wastewater

Wastewater generated in the City of Berkeley flows to a plant operated by the East Bay Municipal Utility District (EBMUD), which the DAP EIR identified as providing secondary treatment for up to 168 mgd. With an average dry-weather flow of 80 mgd, the EBMUD treatment plant had an available capacity of 88 mgd. Thus, the DAP EIR found that the plant would be able to accommodate increased wastewater flow from Downtown Area. However, individual development projects proposed under the Downtown Area Plan could exceed the capacity of the existing local sanitary sewer conveyance system. In the absence of a completed System Evaluation & Capacity Assurance Plan to ascertain the capacity of sewer lines and needed capital improvements, the DAP EIR found a potentially significant impact from improvements to sewer lines. The following mitigation measure was required to subject individual projects to site-specific analysis of sewer lines.

- *Mitigation UTIL-1: Site-Specific Analysis of Project-Related Effects on the Sanitary Serwer Conveyance System/Project-Related Contribution to Necessary Capacity Expansion.* As individual development projects are proposed in the Downtown Area, each project will be subject to site-specific analysis by the City of Berkeley to determine whether the development proposed would exceed the capacity of the sanitary sewer conveyance system that directly serves the project. In the event that existing sanitary sewer

modeling demonstrates that sanitary sewer conveyance system capacity would be exceeded by the proposed project, then the project proponents and the City shall enter into negotiations to determine the financial contribution required from the project proponents to enable the City to expand sanitary sewer conveyance capacity as necessary to accommodate the project as proposed.

Stormwater Runoff

As discussed in the DAP EIR, the Downtown Area is almost entirely impermeable with little diversion or slowing of runoff before it enters drainpipes and Strawberry Creek. Given the already developed nature of the Downtown Area, the EIR found that implementation of the DAP would not result in significant increase in impervious surface area. Furthermore, compliance with the City's NPDES permit and Stormwater Ordinance (Chapter 17.20 of the Berkeley Municipal Code) would reduce impacts to a less than significant level.

Streets and Sidewalks

During construction of developments anticipated under the DAP, the movement of heavy trucks and construction equipment has the potential to damage streets and sidewalks. However, the City requires pre- and post-construction surveys of street conditions as standard conditions of approval. Any damage to sidewalks during construction would be repaired or replaced at property owner's expense. Therefore, the DAP EIR identified physical impacts on streets and sidewalks as less than significant.

Gas/Electricity/Telecommunications

The DAP EIR found that implementation of the Downtown Area Plan would not result in significant increase in dependence on non-renewable energy resources or in substantial increases in peak or base-period energy use. Compliance with Title 24 of the California Energy Code and with the City's Energy Conservation Ordinance would reduce energy use. In addition, the City's commitment to reducing GHG emissions would reduce energy demand from non-renewable sources. Impacts would be less than significant.

Solid Waste and Recycling

The DAP EIR identified impacts on the capacity of landfills as less than significant. The Vasco Road Landfill was determined to have enough capacity to accommodate solid waste generated from the Downtown Area through 2024, with or without implementation of the DAP. In addition, impacts related to regulatory compliance were found to be less than significant, based on compliance with the City's Solid Waste Management Plan requires compliance with statutes and regulations related to solid waste in the Downtown Area.

Project-Specific Impacts

a-g)

Water Supply.

The DAP EIR demonstrates that anticipated water demand in this area has been accounted for in EBMUD's water demand projections and that development occurring under the Downtown Area Plan would not require any changes to those projections. Because the proposed project would be within the maximum buildout of the project site as anticipated under the Draft DAP, it is not anticipated that EBMUD would need new or expanded entitlements to serve the proposed project.

However, EBMUD's Urban Water Management Plan 2010 found that, in the event of a single-year or multi-year drought, the utility's water supply would be insufficient in future years and would require supplementation (EBMUD, 2011). Due to water scarcity, future users of the project site (and all EBMUD customers) should plan for shortages in times of drought. Thus, EBMUD imposes a system capacity charge on new developments to fund system maintenance and the development of new water sources. The project applicant would be required to pay this fee and undertake measures to conserve water.

The project would substantially reduce water use relative to standard building practices by attaining a LEED Gold (or equivalent) rating. To attain this rating, the project would reduce overall water use by at least 20% and water for landscaping by 50%, according to the green building checklist submitted to the City as part of the project application package. Landscaping would consist of drought-tolerant plants, and captured rainwater would be used for irrigation. Furthermore, the installation of water-efficient toilets, urinals, faucets, and shower-heads – project features reflected in the green building checklist submitted to the City as part of the project application package – is expected to achieve 40-percent reductions in water use, according to the applicant's completed green building checklist. These water conservation measures would reduce the project's burden on municipal water supply and wastewater systems. Because the project applicant's proposed measures would reduce overall water use by at least 20%, the City's existing water entitlements would be sufficient to serve the proposed project, and the construction of new water treatment facilities or the expansion of existing facilities would not be required. Impacts would be **less than significant**.

Wastewater.

As discussed above, the DAP EIR requires that individual developments proposed in the Downtown Area undergo site-specific analysis of the capacity of sanitary sewer lines that would convey wastewater from the project site. Based on the conceptual utilities plan for the project, a new sanitary sewer line eight inches in diameter would be constructed on-site leading to an existing 12-inch sewer main under Allston Way. In compliance with Mitigation Measure UTIL-1 from the DAP EIR, the City of Berkeley Department of Public Works was consulted to ascertain the project's site-specific impact on sanitary sewer lines. City staff responded that existing sewer lines adjacent to the project site would have adequate capacity to serve the site, and that the installation of a connection to an existing sewer line would not generate any

significant environmental impacts (Aikenhead, personal communications, May 2, 2014). In addition, as noted in the DAP EIR, the wastewater treatment plant operated by EBMUD has an available capacity of 88 mgd and could accommodate development in accordance with the Downtown Area Plan. Water conservation as part of achieving a LEED Gold (or equivalent) rating, as discussed above, would further reduce wastewater output. Therefore, the proposed project would not require the construction of wastewater infrastructure and would have a **less than significant** impact.

Stormwater Runoff.

As discussed in Section IX, *Hydrology and Water Quality*, the proposed project would involve infill development on a site that consists entirely of hardscape. Given the already developed nature of the site, the proposed project would not result in an increase in impervious surface. Moreover, the project would include features that reduce the volume of stormwater runoff and improve water quality. Precipitation would infiltrate into planters in roof gardens, while captured rainwater would irrigate landscaped areas. With such low-impact development (LID), Telamon Engineering Consultants calculated that stormwater flow is expected to be compliant with Alameda County's obligations under Provision C.3 of its Municipal Regional Stormwater Permit (to which the City of Berkeley is a co-permittee) (Telamon, 2013). Therefore, the proposed project would not require the construction of new or expanded off-site facilities for stormwater drainage and would have a **less than significant** impact related to stormwater runoff.

Streets and Sidewalks.

As discussed in the DAP EIR, construction could result in physical damage to streets and sidewalks, although the City would require pre- and post-construction surveys of street conditions and repair or replacement of any damage to sidewalks at property owner's expense. Therefore, the proposed project would have **less than significant** physical impacts on streets and sidewalks.

Gas/Electricity/Telecommunications.

Because the project is within the buildout assumptions used in the DAP EIR for the plan area as a whole, service by and consumption of these utilities would be within that considered in the DAP EIR. It should also be noted that the City's General Plan, Community Design Guidelines, and Zoning Regulations include policies that reduce energy use from buildings and equipment, including design standards that maximize passive ventilation and cooling systems and use of natural lighting within buildings, and energy efficiency performance standards for proposed buildings taller than 50 feet. The project would be conditioned to comply with these existing requirements. Furthermore, according to the proposed project's green building checklist from December 2012 (submitted to the City as part of the project application package), it is expected that efficient design and on-site renewables would achieve a minimum energy savings of 24 percent. Rooftop solar panels for hot water and electric power generation would reduce dependence on non-renewable energy. Therefore, impacts related to energy use would be **less than significant**.

Solid Waste and Recycling.

Solid waste from the project site would be disposed of at the Vasco Road Landfill, which the DAP EIR found to have sufficient capacity to accommodate solid waste from the Downtown Area through the year 2024 including assumed buildout under the DAP. Diversion of solid waste from the project site into the recycling stream would substantially reduce the project's impact on landfill capacity. The 2013 California Green Building Standards Code (CALGreen) would require the diversion of at least 50 percent of solid waste from construction and demolition for high-rise residential projects. For the diversion of solid waste during operation of the project, LEED certification (or equivalent) would require the provision of a 275-square foot central collection area for recycling. According to the green building checklist for the proposed project (on file with the Planning Department as part of the project application), it is expected to achieve a 75 percent diversion rate. Therefore, the proposed project would not result in greater impacts on landfill capacity or regulatory compliance related to solid waste than anticipated in the DAP EIR. Impacts would be **less than significant**.

Conclusion

As the project would have less than significant impacts related to utilities and service systems – the same as the impacts identified in the DAP EIR for the Plan as a whole – this issue **does not require mitigation or further study in an EIR**.

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.					
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☒	☐

	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporated	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☒	☐

a) As discussed in this environmental checklist under item IV, *Biological Resources*, the project does not have the potential to 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, or reduce the number or restrict the range of a rare or endangered plant or animal. Nor are significant impacts to prehistoric or archaeological resources anticipated. However, the project would involve demolition or alteration of a historic structure that has the potential to be considered an example of a major period of California history. **This topic will be evaluated in the EIR.**

b) The project has the potential to have cumulatively considerable impacts in one issue area: historic resources. **This topic will be evaluated in the EIR.**

c) As discussed throughout this environmental checklist but particularly under items I, *Aesthetics;* III, *Air Quality*; VI, *Geology and Soils*; VII, *Greenhouse Gas Emissions*; VIII, *Hazards and Hazardous Materials*; XII, *Noise*; and XIV, *Public Services*; **with adherence to the identified mitigation measures, the project would not have environmental effects which would cause substantial adverse effects on human beings**, either directly or indirectly.

Authority: Public Resources Code 21083, 21094.5.5
Reference: Public Resources Code Sections 21094.5 and 21094.5.5

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