13

Sophie Hahn
Councilmember District 5

SUPPLEMENTAL AGENDA MATERIAL

for Supplemental Packet 2

Meeting Date: **November 14, 2023**

Item Number: **13**

Item Description: **Amendments to Berkeley Municipal Code Title 23 (Zoning Ordinance), the Zoning Map, General Plan Land Use Diagram, and the General Plan Relating to the Southside Zoning Implementation Program of the 2023-2031 Housing Element Update**

Submitted by: **Councilmember Sophie Hahn**

Proposing for consideration measures to increase green space, trees, and public space for students and residents, compensate the community for increased land values, support low income housing models, and protect historic resources.

Councilmember Sophie Hahn
City of Berkeley, District 5

ACTION CALENDAR
November 14, 2023

TO: Honorable Mayor and Members of the City Council

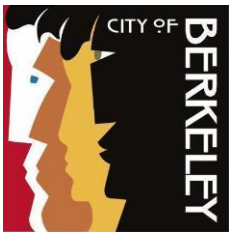
FROM: Councilmember Sophie Hahn

SUBJECT: Supplemental 2 Recommendations for Amendments to Berkeley Municipal Code, the Zoning Map, General Plan Land Use Diagram, and the General Plan Relating to the Southside Zoning Implementation Program of the 2023-2031 Housing Element Update

RECOMMENDATION

The Southside upzoning before us today significantly increases potential housing production in an area with a large number of students, and can be expected to increase the number of students and other community members who can reside in areas close to UC Berkeley. For students, the ability to live close to campus will significantly increase the positive experience of attending college, and hopefully the concentration of students in areas adjacent to the University can alleviate some of the pressure exerted on other residential areas of Berkeley, where the lack of housing for an increasing number of students has resulted, over time, in displacement of lower income longer-term residents, in particular in areas of Berkeley that formerly housed large African American communities.

The proposal before us today likely comes close to doubling the development potential of the project area - a significant increase. It should be noted as well that most of the Southside upzoning referrals were made prior to the State increasing density bonuses to 50% and in some cases 100%, so an increase in development potential had already taken place even without action by the City of Berkeley. State density bonuses are tied to the provision of additional affordable housing; upzoning at the local level, as presented to us today, bestows significant additional value to existing property owners - without requiring an increase in housing affordability or other significant community benefits. The proposal before us also reduces open space requirements in an area with essentially no parks, adjacent to a campus that has already significantly reduced green spaces through the development of academic buildings and facilities, and is likely to continue to fill in green spaces over time.



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The following suggestions address some of these impacts. Upzoning at the proposed scale is a huge win for housing, and for student housing in particular. I believe we still have room to express some of our other values as we continue to actively address the extreme housing shortage in our City, for UC Students, and regionally, and invite my colleagues to consider the following:

1. Consider requiring green roofs and/or terraces - of any kind - in the Southside area being upzoned. These could be accessible green roof decks or terraces with trees and landscaping, farms growing food or flowers, or green roofs that are not accessible, but provide the benefits of cooling, carbon sequestration, and more. As we fully urbanize this area, with tall buildings and no setbacks or lot coverage limits, we risk creating an area subject to excessive heat, and a lack of trees and greenery.

2. Consider requiring main living areas and bedrooms have windows. Berkeley's codes do not include standards for units to include widows, as maximum lot coverage standards have traditionally had the indirect effect of making windows "inevitable." When maximum lot coverage standards are removed, as is proposed here, there is a disincentive to create buildings in "O" and "U" configurations, which are the shapes that allow for ample windows, light, and air. The new zoning standards proposed would allow for "solid block" buildings without light and air shafts. Requiring windows in units and specifically for both "living areas" and bedrooms will force developers to design units with access to natural light, air, and ensure students and other residents aren't subject to substandard living conditions.

3. Consider requiring sidewalk widening throughout the area via front setbacks, and green front-of-building amenities on major pedestrian corridors such as Telegraph, Durant, Bancroft, College, and possibly additional or all streets. The significant increase in density being proposed via local upzoning - amplified by the larger State bonuses now provided, as well as the trend towards very small unit sizes - will likely result in a doubling and possible tripling of the number of people living in the area. As the number of people increases, it is imperative that the width of sidewalks also increases.

   Currently, there is significant pedestrian spillage into the street on Telegraph Avenue during peak times of use. Doubling or tripling the number of residents in the area will significantly exacerbate these conditions on Telegraph and on other major pedestrian streets, and possibly throughout the area. Urbanized areas

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have wider sidewalks that currently exist in Berkeley's Southside areas. There are only two ways to increase sidewalk capacity - the City can extend into what is now street area, at its own expense, displacing other current street uses (transit, bikes, vehicles) or buildings can be required to be set back from the front lot line, and wider sidewalks and other useable green and quasi-public space provided by property owners.

The wonderful proposal for "optional" landscaped and activated areas in front of buildings should be enshrined as a requirement, and potentially expanded to include sidewalk widening, on all major pedestrian corridors. This will ensure that, as the area is developed and population increases, the ground floor experience is lively, green, and accommodates the volume of new residents that upzoning invites to the area. Standards for expansion of sidewalks - inward towards buildings - via front setbacks, should also be incorporated throughout, to ensure that as population increases, sidewalk widths are also increased. Strict requirements for property owners to regularly maintain the sidewalks, landscaping and other amenities in front of their buildings - with penalties for noncompliance - can ensure these areas remain in good condition in perpetuity.

4. Consider requiring both traditional "Open Space" and indoor amenities. The additional value being conferred on these properties via local upzoning, and the amplification of local upzoning through density bonuses, is significant. There is no reason why properties cannot provide both open space and indoor shared amenities. These are both necessary for the wellbeing of students and other residents. Combined with a green roof requirement, outdoor open space requirements should not be difficult to achieve. Decks, terraces, and other amenities are important in more urbanized environments, especially in areas without parks. The Southside area has no City parks, and the University's only "open space," People's Park, is programmed to be partially developed, reducing the amount of green space in the area. The campus cannot be relied upon as open and green space for students and other residents, as green space is continually reduced through addition of buildings on-campus.

5. Consider referring to the City and LPC to pro-actively study and landmark all historic and cultural buildings and sites in the area, to ensure historic/cultural buildings and sites - of which there are several in the area being upzoned are appropriately protected. Landmarked status does not preclude development of a parcel, or even removal of an historic resource, but would require a permitting process that takes into account the historic or cultural value of the site. We can

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meet our housing needs without unduly impacting historic and cultural resources. This would require a budget allocation to support the work of researching and potentially landmarking sites on an expedited basis. Historic and cultural resources have traditionally been "protected" de facto because development pressures were less intense. As we upzone, we increase pressure to remove older buildings and sites, and the potential for loss of historic and cultural resources is significantly increased.

6. Consider how affordable student housing can be incorporated into the upzoning. Many low-income students attend UC Berkeley, including many who are first in their family to attend college. Some experience homelessness during their time as students. The upzoned area includes numerous cooperative housing developments ("the Co-ops"). As we upzone, pressure on those parcels increases as well, without any assurance that Co-ops - if displaced - might be replaced with similar low-income and cooperative housing. Provision must be considered for affordable cooperative and other student housing via the upzoning being proposed. Significant additional value is being conferred on property owners, which is amplified via significant State bonuses - some of which are "earned" by simply adhering to local inclusionary requirements, resulting in a State-level "reward" for doing something already required by the City. Some or all of this value should be recaptured in the form of additional affordable housing requirements at the local level.

   Of particular value would be to require all Berkeley-mandated affordable housing to be built on site, and to remove the option of fees in lieu of affordable housing for this area. As we create an expanded "student area," we must ensure that low-income students can also live close to campus. Allowing developers to fee-out of their affordable housing requirements will deepen the divisions between affluent and low-income students. Requiring all affordable housing to be built on site will ensure low-income students are fully integrated into student living and campus life. Affordable housing built elsewhere in Berkeley, via developer fees, cannot replicate the experience of living near campus, and the time savings, access to libraries and student amenities, and important extracurricular and social life that are so critical to student success.

I urge my colleagues to consider how these ideas can be incorporated into the action we are being asked to take, and potentially continue the item so staff can return specific proposals/amendments that accommodate these considerations.

Office of the City Manager

PUBLIC HEARING
November 21, 2023
(Continued from November 14, 2023)

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Jordan Klein, Director, Planning and Development Department

Subject: Amendments to Berkeley Municipal Code Title 23 (Zoning Ordinance), the Zoning Map, General Plan Land Use Diagram, and the General Plan Relating to the Southside Zoning Implementation Program of the 2023-2031 Housing Element Update

RECOMMENDATION

Conduct a public hearing and upon conclusion:

1. Adopt a first reading of an Ordinance amending Title 23 of the Berkeley Municipal Code to increase residential development potential in the Southside Plan Area, per Program 27— Priority Development Areas, Commercial and Transit Corridors and Program 33—Zoning Code Amendment: Residential of the 2023-2031 Housing Element Update

2. Adopt a Resolution:

    a. Adopting an Addendum to the 2023-2031 Housing Element Update Environmental Impact Report (EIR); and

    b. Approving and adopting General Plan map and text amendments to re-designate certain parcels and update certain land use designations to be consistent with the associated Ordinance amendments.

3. Refer to the City Manager to analyze prevailing wage requirements, as recommended in Planning Commission's letter dated September 15, 2023; and refer a budget allocation of $50,000 for this project to the FY2025 budget process.

SUMMARY

The Department of Planning and Development is proposing amendments to the City's Zoning Ordinance (Title 23), in response to City Council referrals, recent changes in State laws, and the requirements of the City's 2023-2031 Housing Element, to increase residential development potential—particularly for student-oriented housing—within the Southside Plan Area. The proposed amendments also include non-substantive

technical corrections to ensure consistency throughout the Zoning Ordinance. The full text of the zoning ordinance changes can be found in ***Attachment 1***. A summary table that identifies each Zoning Ordinance section and the proposed changes is in ***Attachment 2.*** The Resolution adopting the Addendum to the Housing Element EIR (***Attachment 3***) and the General Plan map and text amendments can be found in ***Attachment 4***.

FISCAL IMPACTS OF RECOMMENDATION

The proposed zoning changes are intended to increase the development potential for properties in the Southside. This could result in higher property tax revenues. These changes also allow for larger development projects compared to the current zoning regulations, so on average, the City can expect to collect more development fees. These fees may include those for affordable housing (BMC 23.328), child care if the projects involve non-residential uses (BMC 22.20), and public art (BMC 6.13). Additionally, the Berkeley Unified School District Facilities Fee could be expected to generate increased revenues.[1]

As more buildings, residents, businesses, employees, customers and vehicles are added to the City, there is likely to be an increased demand for fire and emergency services. This would likely require the deployment of additional emergency responders and response apparatus, and the expansion of existing or creation of new infill deployment facilities. There may also be a need for additional staff to accommodate the increased workload to administer and process permits, answer and dispatch 911 calls, conduct fire and life safety plan checks, and perform building inspections. Additional comments from the Fire Department can be found in ***Attachment 10***.

CURRENT SITUATION AND ITS EFFECTS

The Southside Zoning Implementation Program is a Strategic Plan Priority Project, advancing the City's goal to create affordable housing and housing support services for our most vulnerable community members.

"The Southside" refers to the area located on the south side of the UC Berkeley campus, roughly bounded by Bancroft Way, Dwight Way, Fulton Street and Prospect Street (***Attachment 6,*** *and* ***Figures 1*** *and* ***2,*** *below*).

City staff have prepared Zoning Ordinance and zoning map changes to adjust district boundaries and create or modify objective development standards, including building height, minimum residential density, floor area ratio (FAR), lot coverage, setbacks, and ground-floor residential uses, to increase residential development potential—particularly

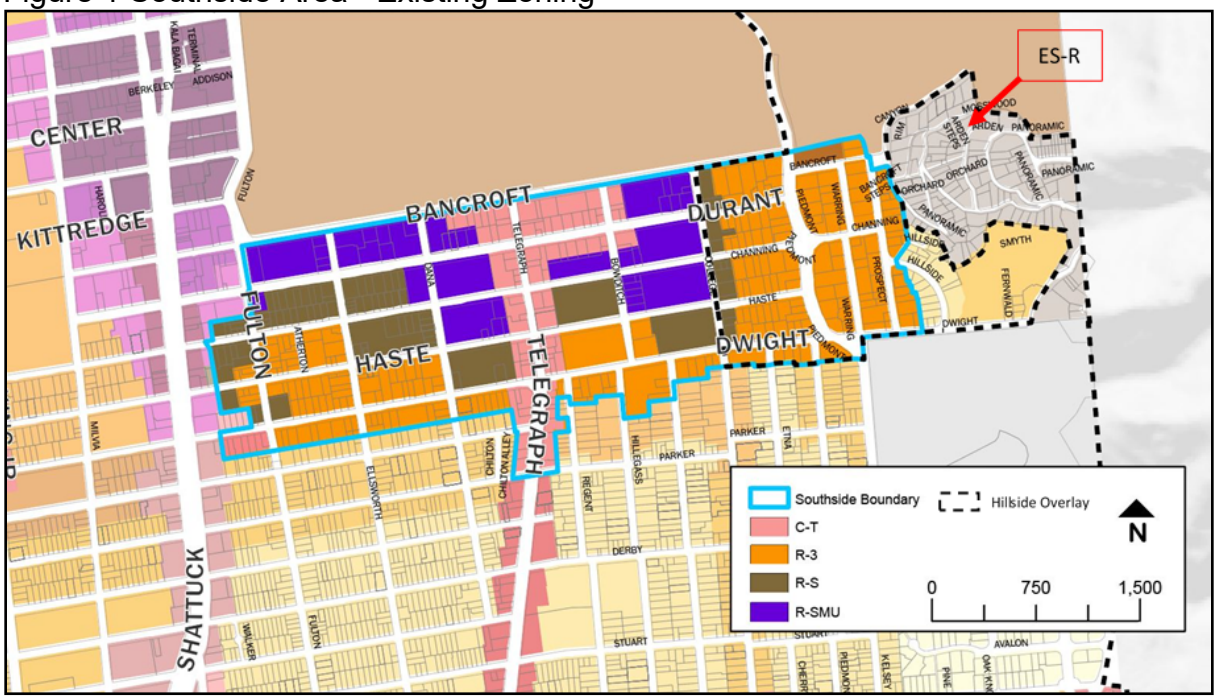
[1] April 2023. Berkeley Unified School District (BUSD) School Facility Fees. https://www.berkeleyschools.net/wp-content/uploads/2023/04/BUSD-School-Facility-Fee-Notice-7.28.22-002.pdf

student-oriented housing—in the following zoning districts within the Southside (***Figure 1***):

- Multiple-Family Residential (R-3) and Hillside Overlay (R-3(H))
- Residential Southside (R-S) and Hillside Overlay (R-S(H))
- Residential Southside Mixed-Use (R-SMU)
- Telegraph Commercial (C-T)

The Southside also includes seven parcels zoned C-SA, but no changes are proposed for those parcels. In addition, the zoning district boundary adjustments require conforming General Plan Land Use text and map amendments.

Figure 1 Southside Area - Existing Zoning



Detailed descriptions of the proposed zoning changes and General Plan text and map amendments, and a detailed rationale for each proposed change, can be found in the staff report for the Planning Commission's September 6, 2023 meeting (***Attachments 7 and 8). Table 1*** provides a summary of the recommended changes for each development standard and the policy rationale for each recommendation.

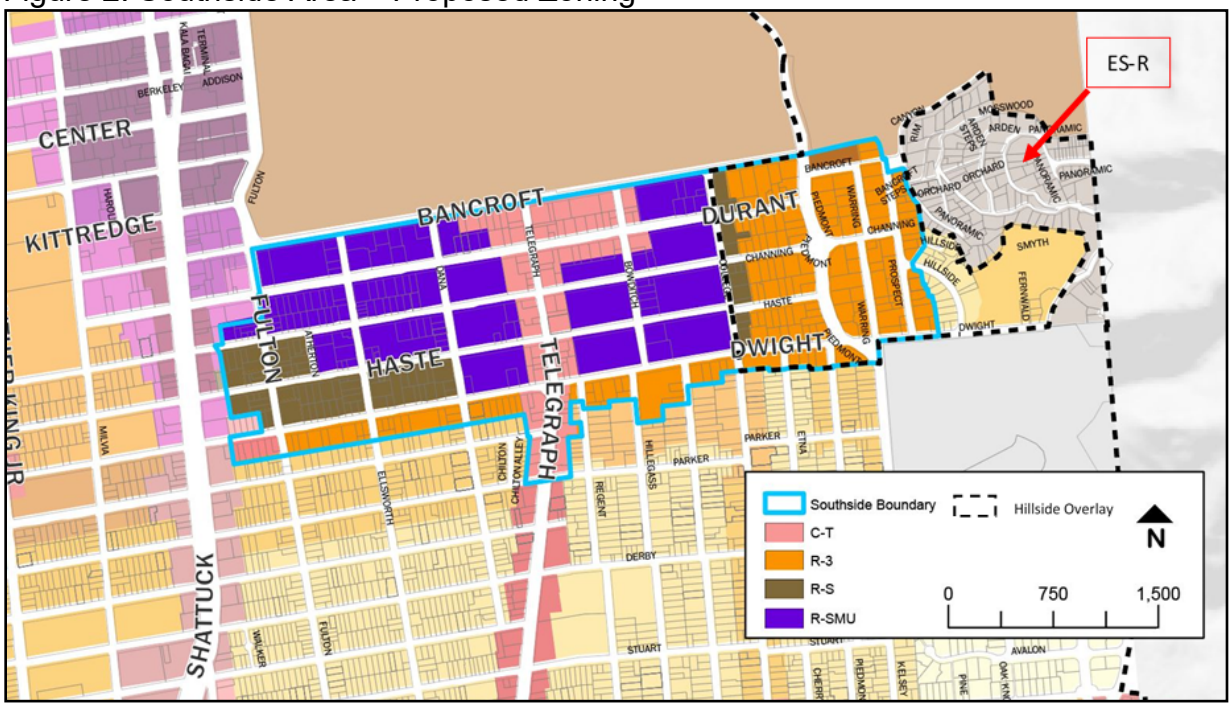
Table 1. Summary of Proposed Southside Development Standards

Development Standard and Recommendation	Policy Goal
Floor Area Ratio (FAR) Set a maximum FAR	• Allow flexibility in project design • Provide predictability for the review process and outcome • Facilitate calculations for State Density Bonus and possible local density bonus
Lot Coverage Remove maximum requirement	• Encourage housing development through increasing capacity • Increase predictability of development outcomes through objective standards • Increase flexibility through a menu of options for open space and residential amenities • Increase ease of compliance through simplified standards
Setbacks Reduce setbacks and remove Use Permit exceptions	
Open Space • Reduce requirement and increase flexibility in meeting open space standard • Set requirement to a per 1,000 square foot of gross residential floor area standard, rather than per unit	
Building Separation Remove minimum requirement	
Building Height Set a maximum height limit and remove Use Permit exceptions	
Density • Set a minimum dwelling unit-per-acre standard (du/acre) • Remove minimum lot size requirement	• Help meet Housing Element goals to achieve Regional Housing Needs Allocation (RHNA) • Set a density measurement (units/acre) that is aligned with State Law

The proposed zoning changes are summarized below:

- *Zoning boundary adjustments (**Figure 2**)*:
    - *R-SMU Expansion.* The R-SMU zoning district would expand into areas currently zoned R-S (west of Telegraph) and R-3 (east of Telegraph).
    - *R-S Expansion.* The R-S district would expand into areas currently zoned R-3 in the southwest of the Southside Plan Area.

Figure 2. Southside Area – Proposed Zoning



- *Allowing ground floor residential uses in the C-T:* Currently, residential uses are not permitted on the ground floor in the C-T zoning district. The proposed zoning changes would permit ground floor residential uses as long as there is an active commercial use occupying the first 30 feet of depth from the property line.
- *Establishing a maximum Floor Area Ratio (FAR)*: Currently, there is no maximum FAR in the R-3, R-S and R-SMU zoning districts. The proposed zoning changes include maximum FARs for all zoning districts in the Southside based upon approximately 95 percent of a parcel's maximum zoning envelope, including height and setback requirements.
- *Establishing minimum densities*: Currently, there are no minimum densities for development in the Southside. The proposed zoning changes include minimum densities, in dwelling units per acre, for development in the R-S (100 du/acre); R-SMU (150 du/acre); and C-T (200 du/acre) zoning districts. The proposed zoning changes also include a minimum density for the R-3 zoning district (60 du/acre) which only applies to R-3 parcels in the Southside Plan Area.
- *Removing lot coverage maximums*. Currently, each zoning district includes a maximum lot coverage standard. The proposed zoning changes remove lot coverage maximums and regulate building bulk through FAR, setbacks and building height standards.

- *Establishing new objective building height standards*. The proposed zoning changes include increases in maximum heights, and the removal of the ability to exceed maximum heights with a permit (***Table 2***).

  Table 2. Maximum Heights

	R-3	R-S	R-SMU	C-T North of Dwight	C-T South of Dwight
Existing	35 feet (increase with AUP)	35 feet (Up to 45 feet with UP)	60 feet	65 feet (Up to 75 feet with UP)	50 feet (Up to 65 feet with UP)
Proposed	45 feet	55 feet	85 feet	85 feet	

- *Establishing new objective setback standards*. The proposed changes include reductions in required setbacks and the removal of the ability to further reduce setbacks with a permit.
- *Establishing new open space requirements*. Currently, required open space is measured in square feet per unit. The proposed zoning changes instead base required open space on the total square footage of residential floor area. This change acknowledges that student-oriented housing in the Southside may not always consist of regular housing units, but may include Group Living Accommodations. This move towards basing open space requirements off residential floor area is consistent with the recently-adopted change in methodology for calculation of the affordable housing fee.

  The proposed zoning changes also allow a project to provide up to 50 percent of the total amount of required usable open space through shared residential amenities that may be indoors (such as multipurpose rooms or fitness areas) and incentivizes pedestrian-oriented amenities on the ground floor along the building frontage.
- *Removing building separation requirements*. Currently, buildings located on a single lot are required to be separated from one another by a minimum of 8 feet, with the required separation increasing as the building gets taller. The proposed Southside Area zoning changes include eliminating building separation requirements and applying Building and Fire Code requirements for fire rating and separation.

BACKGROUND

The City Council has referred to staff to consider and codify zoning standards to encourage the creation of additional residential development and affordable homes in the Southside (***Attachment 9***). Further purposes include:

- Addressing State laws that seek to reduce time involved in permitting processes through by-right and ministerial approvals.
- Implementing housing programs identified in the 2023-2031 Housing Element Update.
- Increasing certainty for applicants and community members by removing subjective judgements from project approvals.
- Reducing the administrative costs and burden associated with needing to provide qualitative justifications for discretionary review.

Council Referrals

The Southside Plan was adopted in 2011. Since 2016, the City Council has forwarded five referrals to increase housing production and the overall development potential in the Southside by considering and codifying new zoning regulations for streamlined processes and less restrictive objective development standards (***Table 3***). These referrals directed staff to reduce the development costs and administrative burden associated with discretionary review processes. Two additional Council referrals related to the Southside Area are pending (***Table 4***).

Table 3. Southside Zoning Implementation Program - City Council Referrals

Community Benefits within C-T (7/12/2016)	Allow increased development potential in the Telegraph Commercial (C-T) District between Dwight Avenue and Bancroft Avenue and develop community benefit requirements, with a focus on labor practices and affordable housing.
Non-Commercial Ground Floor in C-T (4/4/2017)	Create a Use Permit process to allow non-commercial use on the ground floor in appropriate locations, where commercial might otherwise be required. A pilot project is suggested for the C-T District.
Increase Height and FAR (10/31/2017)	Facilitate student housing by increasing the height and Floor Area Ratio (FAR) in the portions of the R-SMU, R-S and R-3 District which are located within the Southside area west of College Avenue.
Increase Student Housing (5/1/2018)	Convert commercial space into residential use within all districts in the Southside located west of College Avenue.
More Student Housing Now (11/27/2018)	Convert commercial space in the C-T to residential use, expand the Car-Free Housing overlay in the Southside, allow two high-rises for student housing, and consider micro-units and modular units.

Table 4. Pending Additional Southside City Council Referrals

Pilot Density Program in C-T (5/30/2017)	Develop a pilot Density Bonus program for the C-T District to generate in-lieu fees that could be used to build housing for homeless and extremely low-income residents.
Southside Impact Fee Nexus Study (2/14/2023)	Establish a development impact fee for projects within the Southside Plan boundary for the purpose of funding Southside public realm improvements.

State Laws Related to Housing
The City is required by State law to identify objective zoning standards for the purpose of defining housing development projects that qualify for protections under the Housing Accountability Act (HAA) and to define a base project for the purposes of calculating density bonuses pursuant to the State Density Bonus Law.

2023-2031 Housing Element Update
The recently adopted and certified Housing Element Update includes two implementation programs relating to this effort: 1) Program 27—Priority Development Areas, Commercial and Transit Corridors intended to increase housing capacity and production; and 2) Program 33—Zoning Code Amendment: Residential, to study and establish residential objective standards to provide clarity and predictability, as well as establish a minimum density standard expressed in “units per acre” to ensure adequate baseline capacity to meet housing targets and achieve Housing Element compliance.

Community Outreach
The proposed amendments are based on input from community engagement through the Housing Element Update and specific outreach related to the proposed changes in the Southside, as well as prior meetings with the City Council, Planning Commission, and the Southside Environmental Impact Report (EIR) Subcommittee.

In the past two years, staff have presented the proposed Southside zoning amendments to the following advisory bodies (***Table 5***) and community organizations (***Table 6***).

Table 5. Presentations to City Commissions and Committees (2022-2023)

September 20, 2022	City Council worksession on Residential Objective Standards, including proposed zoning changes to promote Middle Housing in lower density districts and encourage increased housing capacity in the Southside.[2]
October 14, 2022	City/University of California (UC)/Students Relations Committee presentation and discussion.
November 2, 2022	Planning Commission presentation and discussion.

[2] September 20, 2022. Council Worksession Residential Objective Standards on Middle Housing and the Southside. https://berkeleyca.gov/sites/default/files/documents/2022-09-20%20WS%20Item%2001%20Residential%20Objective%20Standards.pdf

April 19, 2023	Planning Commission presentation and discussion.
May 18, 2023	Design Review Committee presentation and discussion.
June 15, 2023	Design Review Committee presentation and discussion.
September 6, 2023	Planning Commission public hearing and recommendation.

Table 6. Presentations to Community Organizations (2021-2023)

September 14, 2022	East Bay for Everyone (EB4E)
September 26, 2022	UC Berkeley Campus Planning
October 4, 2022	The Associated Students of the University of California (ASUC) Housing Commission
October 5, 2022 January 19, 2023	Southside Neighborhood Consortium (SNC)
October 4, 2022	Berkeley Design Advocates (BDA)
February 8, 2023	Berkeley Architectural Heritage Association (BAHA)

Staff also conducted in-person events at the Berkeley Harvest Festival (October 15, 2022) and on Sproul Plaza (October 18, 2022) to collect community feedback, and conducted an online survey (November 27, 2022 to December 18, 2022) to seek feedback from UC Berkeley students.[3]

Planning Commission Recommendation – September 6, 2023
Pursuant to BMC 22.04.020 (Master Plan Amendment Procedures) and 23.412 (Zoning Ordinance Amendments), the Planning Commission held a duly noticed public hearing on September 6, 2023 to review and make a recommendation to the City Council on the proposed zoning changes, General Plan text and map amendments, and the Housing Element EIR Addendum.

At that meeting, the Planning Commission unanimously voted[4] to take the following actions:

1. The Planning Commission recommended, without amendment, adoption of the proposed zoning changes, General Plan text and map amendments, and the Housing Element EIR Addendum; and

[3] December 2022. Final Summary Southside Area UC Student Housing Survey. https://berkeleyca.gov/sites/default/files/documents/FinalSummary_Southside%20Area%20UC%20Student%20Housing%20Survey%20-%2019%20December%202022.pdf
[4] September 6, 2023. Planning Commission: Item 10: Southside Zoning Amendment. Moved: Vincent; Seconded: Marthinsen; Ayes: Merker, Vincent, Oatfield, Marthinsen, Moore, Yung, Hauser, Frank. Noes: None. Abstain: None. Absent: Mikiten. (8-0-0-1)

2. The Planning Commission directed Commissioner Oatfield and Chair Vincent to draft a letter to the City Council on the Commission's behalf to accompany the Commission's recommendation (***Attachment 5***). The letter includes statements on the following topics:

    a. ***Prevailing Wage Requirements.*** A proposal from Commissioner Frank (Alternate) to include prevailing wage as part of the proposed zoning changes within Title 23 Zoning of the BMC.

    b. ***Land Value Capture and Community Benefits.*** A request for clarification from the City Council on provisions for land value capture and community benefits per the Council's July 25, 2017 resolution (No. 68,133-N.S.).

    c. ***Master Leasing.*** A request for clarification from the City Council on the City's agreement with the University of California regarding master leasing of private developments.

Prevailing Wage: Inclusion of a prevailing wage requirement for construction projects in the Southside would be a significant new addition to the currently proposed zoning amendments. As part of the recommended action, staff propose that the City Council adopt a referral, including a budget referral for associated consulting services, for analysis of potential prevailing wage requirements. Such a change would merit detailed technical analysis to determine any effects of these policies on project feasibility, projected housing buildout, potential constraint on housing production (in accordance with state law), and potential accompanying actions to offset these potential impacts. Staff notes there are currently no labor or workforce standards included in BMC Title 23 (Planning Code). The recently-adopted HARD HATS ordinance, which includes healthcare and apprenticeship standards that apply to development projects, is included in BMC Title 13 (Public Peace, Morals and Welfare).

Land Value Capture and Community Benefits: In response to City Council's referral regarding value capture and community benefits, the Planning Commission in 2019 found that the proposed zoning changes would increase funding for affordable housing, which is the primary community benefit outcome. In March 2022, Planning Commission considered and approved an affordable housing fee that scales up, meaning that developers will contribute more to affordable housing as their projects become larger.

The City Council has also recently referred a Southside Impact Fee Nexus Study to establish a development impact fee specifically for projects in the Southside Plan boundary for the purpose of funding Southside public realm improvements. Additionally, the HARD HATS ordinance includes workforce-related benefits for larger projects, such as those that are encouraged by the proposed zoning changes. City Council has also referred consideration of a Southside Local Density Bonus Program, which would offer

incentives to developers who provide funding for affordable housing in the Southside. Staff do not recommend any additional action at this time.

Master Leasing: The City and the University of California are actively engaged in discussions regarding the University's practice of master leasing off-campus residential buildings. In July, 2021 the City and the University entered a settlement agreement to resolve mutual claims around development impacts and processes. Section 4.10 of that agreement states:

> *4.10 The University and the City will collaborate in good faith to reach an agreement regarding the University's master leasing of off-campus residential buildings, and will meet and confer in an effort to reach such an agreement within one year of the Effective Date. The University and City contemplate that such an agreement will set a date by which the University would reduce or eliminate its use of master leasing of residential facilities, excepting only temporary leasing necessary to create surge space during the renovation or construction of campus housing facilities. This Section does not require either party to enter into such an agreement, but the parties shall use their good faith best efforts to do so.*

It is staff's understanding that the University of California has not entered into a master lease agreement with a private development partner for at least the past four years. Staff do not recommend any additional action at this time.

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

Housing Element Update EIR
Development projections for this project and all reasonably foreseeable growth resulting from development contemplated by the City's updated Housing Element and the University of California Berkeley's Long-Range Development Plan were analyzed in the Environmental Impact Report (EIR) for the 2023-2031 Housing Element Update ("Housing Element Update EIR"), which was certified by the City Council on January 18, 2023.[5]

Issues relating to environmental impacts on public services, particularly as they relate to fire protection services, emergency access, and wildfire issues, were analyzed in the Housing Element Update EIR for all reasonably foreseeable growth resulting from development contemplated by the City's updated Housing Element and the University of California Berkeley's Long Range Development Plan. The specific impact analyses are found in the following impact sections of the Housing Element Update EIR: (1) Section 4.13 (Public Services and Recreation); (2) Section 4.14 (Transportation); (3) Section 4.17 (Wildfire).

[5] Housing Element Update 2023-2031 Final EIR.
https://berkeleyca.gov/sites/default/files/documents/ATT%202%20FEIR_RTC.pdf

EIR Addendum
The Housing Element Update EIR assumed that approximately 1,000 additional dwelling units would be feasible with implementation of this project. Staff found that the changes to the development standards as currently proposed would allow approximately 2,650 additional dwelling units, an increase in development potential compared to the amount analyzed in the EIR of approximately 1,650 units, which requires supplemental CEQA review.

The proposed Southside Zoning Implementation Program would amend the Zoning Code and Zoning Map to increase residential development potential consistent with the Housing Element Update. The Southside Zoning Implementation Program does not allow for any additional growth other than that authorized by the 2023-2031 Housing Element, which was analyzed in the Housing Element Update EIR. Therefore, an Addendum to the Housing Element EIR was prepared, as the zoning amendments would have no new or substantially more severe significant environmental effects than were analyzed for the growth contemplated by the 2023-2031 Housing Element. (See CEQA Guidelines Section 15164.) The impact analyses in the Addendum that correspond to the impact discussion in the EIR are found in Addendum Sections 5.13 (Public Services and Recreation), impacts on Fire Protection (pp. 72-73); 5.14 (Transportation), impacts on emergency access (pp. 75, 76-77); and 5.17 (Wildfire). The discussion in these Addendum sections reviewed the previous analyses conducted in the Housing Element Update EIR, including previously adopted mitigation measures, and concluded that no new or substantially more severe significant impacts would occur, and no new mitigation measures are required.

RATIONALE FOR RECOMMENDATION

The proposed zoning changes and General Plan text and map amendments align with commitments made by the City Council with the adoption of the 2023-2031 Housing Element Update. These changes also reflect the guidance provided to staff through five specific City Council referrals. Staff engaged with various community stakeholders and facilitated multiple meetings involving both the City Council and Planning Commission to discuss and refine these proposals. The feedback received during these sessions has been incorporated into the proposed zoning changes.

ALTERNATIVE ACTIONS CONSIDERED

Over the course of developing the proposed zoning amendments, staff considered zoning changes and development standards that would have resulted in a smaller increase in development potential than the proposed zoning changes, as well as:

- **Lot Coverage.** Currently, zoning districts in the Southside include lot coverage standards that restrict total development to a certain percentage of the total area of a lot. An initial draft of the proposed zoning changes included a revision to these standards, permitting a greater percentage of a lot to be developed. The

proposed zoning changes, however, remove all lot coverage standards, instead regulating the bulk of development through setbacks, height and FAR.

- **Maximum Density.** An initial draft of the proposed zoning changes included a maximum density expressed in units per acre. Based on feedback from the Planning Commission to eliminate caps on housing, the proposed zoning removes a maximum density standard. Staff also found that a unit per acre measurement does not correlate directly with population density for student-oriented housing typologies, which can range widely from small studios to group living accommodations to large shared units.

CONTACT PERSON

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ATTACHMENTS

1. Ordinance – Zoning Ordinance Text Amendments
2. Reference Matrix – Southside Zoning Ordinance Amendments
3. Addendum to the 2023-2031 Housing Element Update EIR
4. Resolution - General Plan Map and Text Amendments
5. Planning Commission Letter, September 21, 2023
6. Existing and Proposed Zoning Map
7. Planning Commission Report, September 6, 2023.
8. Existing and Proposed Development Standards Tables
9. Referenced City Council Referrals
    a. Community Benefits within C-T (7/12/2016)
    b. Allow Non-commercial Use on the Ground Floor in C-T (4/4/2017)
    c. Increase Height and FAR in the R-SMU, R-S and R-3 (10/31/2017)
    d. Increase Student Housing (5/1/2018)
    e. More Student Housing Now (11/27/2018)
    f. Pilot Density Program in C-T (5/30/2017)
    g. Southside Impact Fee Nexus Study (2/14/2023)
10. Fire Department Comments
11. Public Hearing Notice

ORDINANCE NO. -N.S.
SOUTHSIDE ZONING AMENDMENTS

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1. That Berkeley Municipal Code Section 23.106.035 is hereby added to read:

23.106.035 – Floor Area, Gross Residential

A. **Gross Residential Floor Area Defined**. Gross residential floor area means the total floor area of all of the following:

1. Residential units.
2. In a Group Living Accommodation (GLA), common rooms/lounges and supporting facilities such as kitchens and restrooms.
3. Habitable attic.
4. Mezzanine or loft within a residential unit.

B. **Residential Unit Defined**. Residential unit means any Dwelling Unit, any Live/Work Unit, or any bedroom of a GLA except a GLA in a University-recognized fraternity, sorority or co-op; provided, however, that for purposes of this section, "residential unit" shall not include any Accessory Dwelling Unit or Junior Accessory Dwelling Unit.

Section 2. That Berkeley Municipal Code Section 23.106.100 is hereby added to read:

23.106.100 – Residential Density

A. **Residential Density Defined**. The ratio of the number of dwelling units on a lot to the lot area as measured in acres.

B. **Measurement**. Residential density shall be calculated by dividing the total number of dwelling units on a lot by the total lot area in acres, rounded to the nearest whole number. Accessory Dwelling Units and Junior Accessory Dwelling Units are not included in the minimum or maximum density established by the underlying zoning district (see Section 23.306.020).

Section 3. That the following lines under the category "Residential Uses" in Table 23.202-1 (Allowed Uses in Residential Districts) within Berkeley Municipal Code 23.202.020 (Allowed Land Uses) are hereby amended to read:

ZC = Zoning Certificate AUP = Administrative Use Permit UP(PH) = Use Permit NP = Not Permitted * Use-Specific Regulations Apply **Required permits for specific uses are set forth in the R-BMU Master Development Permit (MDP). See 23.202.150(A) and 23.202.150(D)	RESIDENTIAL DISTRICTS											USE-SPECIFIC REGULATIONS Applies to uses with an asterisk following the permit requirement (e.g., ZC*)
	R-1	R-1A	ES-R	R-2	R-2A	R-3	R-4	R-5	R-S	R-SMU	R-BMU**	
Residential Uses												
Dwellings												
Single-Family	UP(PH)	UP(PH)	UP(PH)	UP(PH)	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)*	UP(PH)*	NP	23.302.070(H)
Two-Family	NP	UP(PH)	NP	UP(PH)	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)*	UP(PH)*	NP	23.302.070(H)
Multi-Family	NP	NP	NP	UP(PH)	UP(PH)	UP(PH)*	UP(PH)*	UP(PH)	UP(PH)*	UP(PH)*	UP(PH)	23.302.070(H)
Group Living Accommodation	NP	NP	NP	NP	NP	UP(PH)*	UP(PH)*	UP(PH)	UP(PH)*	UP(PH)*	UP(PH)	23.302.070(H)
Senior Congregate Housing	NP	NP	NP	NP	See 23.302.070.~~H~~I-Use-Specific Regulations							
Mixed-Use Residential	NP	NP	NP	UP(PH)	UP(PH)	UP(PH)*	UP(PH)*	UP(PH)	UP(PH)	UP(PH)*	UP(PH)	23.302.070(H)

Section 4. That Berkeley Municipal Code Section 23.202.030(A)(1) is hereby amended to read:

1. Permits Required.

~~a. In all Residential Districts except for the ES-R district, residential additions require permits as follows:~~

~~i. Residential additions (up to 15 percent of lot area or 600 square feet, whichever is less): Zoning Certificate.~~

~~ii. Major residential additions (more than 15 percent of lot area or 600 square feet, whichever is less): AUP.~~

~~b.~~a. In the ES-R district, residential additions require permits as follows:

Text highlighted in gray consists of non-substantive technical edits and renumbering.

i. Residential additions up to 10 percent of lot area or 200 square feet, whichever is less: Zoning Certificate.

ii. Major residential additions more than 10 percent of lot area or 200 square feet, whichever is less: Use Permit.

b. In the R-3, R-S, R-SMU and C-T districts within the Southside Plan boundaries, any residential addition requires a Zoning Certificate.

c. In all other Residential Districts, residential additions require permits as follows:

i. Residential additions (up to 15 percent of lot area or 600 square feet, whichever is less): Zoning Certificate.

ii. Major residential additions (all other residential additions) AUP.

Section 5. That Berkeley Municipal Code Section 23.202.030(B) is hereby amended to read:

B. Adding Bedrooms.

1. In the R-1, R-1A, R-2, R-2A, and R-3 districts outside of the Southside Plan boundaries, adding a bedroom to a lot requires permits as follows:

a. Adding a first, second, third, or fourth bedroom to a lot: no permit required.

b. Adding a fifth bedroom to a lot: AUP.

c. Adding a bedroom to a lot beyond the fifth: Use Permit.

2. See Section 23.502.020.B - Defined Terms (“B” Terms) for bedroom definition.

3. In the ES-R district, any alteration to create a new bedroom in a single-family detached home on a single lot requires an AUP. See Section 23.202.070.H.6 (Land Use Intensification) for required finding.

3.4. In the R-3, R-S, or R-SMU districts within the Southside Plan boundaries, adding any bedroom to a lot requires a Zoning Certificate.

Section 6. That Berkeley Municipal Code Section 23.202.100(C) is hereby amended to read:

C. **Additional Permit Requirements.** See Subsections A of Section 23.202.030 (Residential Additions) and Subsection B of Section 23.202.030 (Adding Bedrooms).

Section 7. That Berkeley Municipal Code Section 23.202.100(E) is hereby amended to read:

E. **Development Standards.**

Text highlighted in gray consists of non-substantive technical edits and renumbering.

1. **Basic Standards.** See Table 23.202-11: R-3 Development Standards. ~~See Table 23.202-11: R-3 Lot and Height Standards, Table 23.202-12: R-3 Setback and Building Separation Standards, and Table 23.202-13: R-3 Lot Coverage Standards.~~

2. **Supplemental Standards.** Supplemental development standards that apply in the R-3 district are noted in Table 23.202-11: R-3 Development Standards. ~~Lot and Height Standards, Table 23.202-12: R-3 Setback and Building Separation Standards, and Table 23.202-13: R-3 Lot Coverage Standards.~~

TABLE 23.202-11: R-3 DEVELOPMENT STANDARDS

BASIC STANDARDS	OUTSIDE OF SOUTHSIDE PLAN	WITHIN SOUTHSIDE PLAN	SUPPLEMENTAL STANDARDS
Lot Area, Minimum			
New Lots	5,000 sq. ft.	No minimum	23.304.020 – Lot Requirements
Per Group Living Accommodation Resident	350 sq. ft. [1]	No minimum	
Residential Density			
Minimum (du/acre)	No minimum	60	23.106.100 – Residential Density
Maximum (du/acre)	No maximum	No maximum	
Usable Open Space, Minimum			
Per Dwelling Unit	200 sq. ft.	150 sq. ft. per 1,000 sq. ft. of gross residential floor area	23.304.090 – Usable Open Space
Per Group Living Accommodation Resident	90 sq. ft.		
Floor Area Ratio, Maximum	No maximum	3.0	
Main Building Height, Average			
New Buildings and Non-Residential Additions	35 ft. and 3 stories	45 ft.	23.304.050 – Building Height
Residential Additions	16 ft. [2]		
Lot Coverage, Maximum			
Interior and Through Lot	1 Story: 45%	100%	23.304.120 – Lot Coverage
	2 Stories: 45%		

Text highlighted in gray consists of non-substantive technical edits and renumbering.

	3 Stories: 30%		
Corner Lot	1 Story: 50%	100%	
	2 Stories: 50%		
	3 Stories: 45%		
Lot Line Setback, Minimum			23.304.030 - Setbacks
Front	15 ft.	10 ft.	
Rear	15 ft.	10 ft.	
Interior Side	1st Story: 4 ft.	4 ft.	
	2nd Story: 4 ft.		
	3rd Story: 6 ft.		
Street Side	1st Story: 6 ft.	4 ft.	
	2nd Story: 8 ft.		
	3rd Story: 10 ft.		
Building Separation, Minimum	1st Story: 8 ft.	No minimum	23.304.040 – Building Separation in Residential Districts
	2nd Story: 12 ft.		
	3rd Story: 16 ft.		
Notes: [1] One additional resident is allowed for remaining lot area between 200 and 350 square feet. [2] Maximum 35 ft. with an AUP.			

~~**TABLE 23.202-11: R-3 LOT AND HEIGHT STANDARDS**~~

~~**BASIC STANDARDS**~~		~~**SUPPLEMENTAL STANDARDS**~~
~~Lot Area, Minimum~~		~~23.304.020– Lot Requirements~~
~~New Lots~~	~~5,000 sq. ft.~~	
~~Per Group Living Accommodation Resident~~	~~350 sq. ft. [1]~~	

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Basic Standards		Supplemental Standards
Usable Open Space, Minimum		23.304.090– Usable Open Space
Per Dwelling Unit	200 sq. ft.	
Per Group Living Accommodation Resident	90 sq. ft.	
Floor Area Ratio, Maximum	No maximum	
Main Building Height, Average		23.304.050– Building Height
New Buildings and Non-Residential Additions	35 ft. and 3 stories	
Residential Additions	16 ft. [2]	
Notes: [1] One additional resident is allowed for remaining lot area between 200 and 350 square feet. [2] Maximum 35 ft. with an AUP.		

Table 23.202-12: R-3 Setback and Building Separation Standards

	Standards by Building Story			Supplemental Standards
	1st	2nd	3rd	
Lot Line Setbacks, Minimum				23.304.030 - Setbacks
Front	15 ft.	15 ft.	15 ft.	
Rear	15 ft.	15 ft.	15 ft.	
Interior Side	4 ft.	4 ft.	6 ft.	
Street Side	6 ft.	8 ft.	10 ft.	
Building Separation, Minimum	8 ft.	12 ft.	16 ft.	23.304.040- Building Height

Table 23.202-13: R-3 Lot Coverage Standards

	Standard Based on Building Height			Supplemental Standards
	1 story	2 stories	3 stories	
Lot Coverage, Maximum				23.304.120-Lot Coverage
Interior and Through Lot	45%	45%	30%	

Text highlighted in gray consists of non-substantive technical edits and renumbering.

~~Corner Lot~~	~~50%~~	~~50%~~	~~45%~~	

3. **~~Increase in Lot Coverage.~~** ~~Lot coverage may be increased for a project in an R-3 district located within the Southside Plan boundaries if an AUP is obtained with one or both of the following findings:~~

   ~~a. The increased coverage would enable a new rear dwelling on the lot; or~~

   ~~b. It would enable moving a historic building onto the lot.~~

Section 8. That Berkeley Municipal Code Section 23.202.110(E) is hereby amended to read:

E. **Development Standards.**

1. **Basic Standards.** See Table 23.202-124: R-4 Lot and Height Standards, Table 23.202-135: R-4 Setback and Building Separation Standards, and Table 23.202-146: R-4 Lot Coverage Standards.
2. **Supplemental Standards.** Supplemental development standards that apply in the R-4 district are noted in Table 23.202-124: R-4 Lot and Height Standards, Table 23.202-135: R-4 Setback and Building Separation Standards, and Table 23.202-146: R-4 Lot Coverage Standards.

TABLE 23.202-~~14~~12: R-4 LOT AND HEIGHT STANDARDS

BASIC STANDARDS		SUPPLEMENTAL STANDARDS
Lot Area, Minimum		23.304.020– Lot Requirements
New Lots	5,000 sq. ft.	
Per Group Living Accommodation Resident	350 sq. ft. [1]	
Usable Open Space, Minimum		23.304.090– Usable Open Space
Per Dwelling Unit	200 sq. ft.	
Per Group Living Accommodation Resident	90 sq. ft.	
Floor Area Ratio, Maximum	No maximum	
Main Building Height, Average		23.304.050– Building Height
New Buildings and Non-Residential Additions	35 ft. and 3 stories [2]	
Residential Additions	16 ft. [3]	

Text highlighted in gray consists of non-substantive technical edits and renumbering.

BASIC STANDARDS	SUPPLEMENTAL STANDARDS
Notes: [1] One additional resident is allowed for remaining lot area between 200 and 350 square feet. [2] Maximum 65 ft. and six stories allowed with Use Permit. [3] Height greater than 16 ft. up to 35 ft. allowed with an AUP. Height greater than 35 ft. up to 65 ft. and six stories allowed with a Use Permit.	

TABLE 23.202-135: R-4 SETBACK AND BUILDING SEPARATION STANDARDS

	STANDARDS BY BUILDING STORY						SUPPLEMENTAL STANDARDS
	1ST	2ND	3RD	4TH	5TH	6TH	
Lot Line Setbacks, Minimum							23.304.030–Setbacks
Front	15 ft.	15 ft.	15 ft.	15 ft.	15 ft.	15 ft.	
Rear	15 ft.	15 ft.	15 ft.	17 ft.	19 ft.	21 ft.	
Interior Side	4 ft.	4 ft.	6 ft.	8 ft.	10 ft.	12 ft.	
Street Side	6 ft.	8 ft.	10 ft.	12 ft.	14 ft.	15 ft.	
Building Separation, Minimum	8 ft.	12 ft.	16 ft.	20 ft.	24 ft.	28 ft.	23.304.040–Building Separation in Residential Districts

TABLE 23.202-1614: R-4 LOT COVERAGE STANDARDS

	STANDARD BASED ON BUILDING HEIGHT						SUPPLEMENTAL STANDARDS
	1 STORY	2 STORIES	3 STORIES	4 STORIES	5 STORIES	6 STORIES	
Lot Coverage, Maximum							23.304.120–Lot Coverage
Interior and Through Lot	45%	45%	40%	35%	35%	35%	
Corner Lot	50%	50%	45%	40%	40%	40%	

Section 9. That Berkeley Municipal Code Section 23.202.120(D) is hereby amended to read:

D. **Development Standards.**

1. **Basic Standards.** See Table 23.202-157: R-5 Lot and Height Standards, Table

Text highlighted in gray consists of non-substantive technical edits and renumbering.

23.202-168: R-5 Setback and Building Separation Standards, and Table 23.202-179: R-5 Lot Coverage Standards.

2. **Supplemental Standards.** Supplemental development standards that apply in the R-5 district are noted in Table 23.202-157: R-5 Lot and Height Standards, Table 23.202-168: R-5 Setback and Building Separation Standards, and Table 23.202-179: R-5 Lot Coverage Standards.

TABLE 23.202-157: R-5 LOT AND HEIGHT STANDARDS

BASIC STANDARDS		SUPPLEMENTAL STANDARDS
Lot Area, Minimum		23.304.020– Lot Requirements
New Lots	5,000 sq. ft.	
Per Group Living Accommodation Resident	175 sq. ft. [1]	
Usable Open Space, Minimum		23.304.090– Usable Open Space
Per Dwelling Unit	100 sq. ft.	
Per Group Living Accommodation Resident	35 sq. ft.	
Floor Area Ratio, Maximum	No maximum	
Main Building Height, Average		23.304.050– Building Height
New Construction	40 ft. and 4 stories [2]	
Residential Additions	18 ft. [3]	

Notes:
[1] One additional person is allowed for remaining lot area between 100 and 175 square feet.
[2] Maximum 65 feet and 6 stories allowed with a Use Permit.
[3] Height greater than 18 ft. up to 40 ft. allowed with an AUP. Height greater than 40 ft. up to 65 ft allowed with a Use Permit.

TABLE 23.202-168: R-5 SETBACK AND BUILDING SEPARATION STANDARDS

	STANDARDS BY BUILDING STORY						SUPPLEMENTAL STANDARDS
	1ST	2ND	3RD	4TH	5TH	6TH	
Lot Line Setbacks, Minimum							23.304.030– Setbacks
Front	10 ft.	10 ft.	10 ft.	10 ft.	10 ft.	10 ft.	
Rear	15 ft.	15 ft.	15 ft.	17 ft.	19 ft.	21 ft.	
Interior	4 ft.	4 ft.	6 ft.	8 ft.	10 ft.	12 ft.	

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Street Side	6 ft.	8 ft.	10 ft.	10 ft.	10 ft.	10 ft.	
Building Separation, Minimum	8 ft.	12 ft.	16 ft.	20 ft.	24 ft.	28 ft.	23.304.040–Building Separation in Residential Districts

TABLE 23.202-179: R-5 LOT COVERAGE STANDARDS

	STANDARD BASED ON BUILDING HEIGHT						SUPPLEMENTAL STANDARDS
	1 STORY	2 STORIES	3 STORIES	4 STORIES	5 STORIES	6 STORIES	
Lot Coverage, Maximum							
Interior and Through Lots	55%	55%	50%	45%	40%	40%	23.304.120–Lot Coverage
Corner Lots	60%	60%	55%	50%	45%	45%	

Section 10. That Berkeley Municipal Code Section 23.202.130(E) is hereby amended to read:

E. **Development Standards.**

1. **Basic Standards.** See Table 23.202-1820: R-S Development Standards.~~, Table 23.202-20: R-S Lot and Height Standards, Table 23.202-21: R-S Setback and Building Separation Standards, and Table 23.202-22: R-S Lot Coverage Standards~~

2. **Supplemental Standards.** Supplemental development standards that apply in the R-S district are noted in Table 23.202-1820: R-S DevelopmentLot and Height Standards~~, Table 23.202-21: R-S Setback and Building Separation Standards, and Table 23.202-22: R-S Lot Coverage Standards~~.

~~3.~~

TABLE 23.202 -1820: R-S LOT AND HEIGHT STANDARDSDEVELOPMENT STANDARDS

BASIC STANDARDS		SUPPLEMENTAL STANDARDS
Lot Area, Minimum		23.204304.020-Lot Requirements
New Lots	No minimum5,000 sq. ft.	
Per Group Living Accommodation Resident	No minimum 350 sq. ft.[1]	
Residential Density		23.106.100-Residential

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Minimum (du/acre)	100	Density
Maximum (du/acre)	No maximum	
Usable Open Space, Minimum	50 sq. ft. per 1,000 sq. ft. of gross residential floor area	23.304-.090-Usable Open Space
~~Per Dwelling Unit~~	~~50 sq. ft.~~	
~~Per Group Living Accommodation~~	~~20 sq. ft.~~	
Floor Area Ratio, Maximum	~~No maximum~~4.0	
Main Building Height, Maximum	55 ft.	23.304.050-Building Height
~~New Construction~~	~~35 ft. and 3 stories [2]~~	
~~Residential Additions~~	~~16 ft. [3]~~	
Lot Line Setbacks, Minimum		23.304.030-Setbacks
Front	No minimum	
Rear	4 ft.	
Interior Side	4 ft.	
Street Side	No minimum	
Building Separation, Minimum	No minimum	23.304.040-Building Separation in Residential Districts
Lot Coverage, Maximum	100%	23.304.120-Lot Coverage

~~Notes:~~

~~[1] One additional person is allowed for remaining lot area between 350 and 200 square feet.~~

~~[2] Maximum 45 feet and 4 stories allowed with a Use Permit if at least 50 percent of the total building floor area is designated for residential use and the ZAB finds that the project meets the purpose of the district.~~

~~[3] Maximum 35 feet and 3 stories allowed with an AUP. Maximum 45 feet and 4 stories allowed with a Use Permit if at least 50 percent of the total building floor area is designated for residential use and the ZAB finds that the project meets the purpose of the district.~~

~~**Table 23.202-21: R-S Setback and Building Separation Standards**~~

	~~STANDARDS BY BUILDING STORY~~	~~SUPPLEMENTAL~~

Text highlighted in gray consists of non-substantive technical edits and renumbering.

	1ST	2ND	3RD	4TH	STANDARDS
Lot Line Setback, Minimum					
Front	10 ft.	10 ft.	10 ft.	10 ft.	23.304.030-Setbacks
Rear	10 ft.	10 ft.	10 ft.	17 ft.	
Interior	4 ft.	4 ft.	6 ft.	8 ft.	
Street Side	6 ft.	8 ft.	10 ft.	10 ft.	
Building Separation, Minimum	8 ft.	12 ft.	16 ft.	20 ft.	23.304.040-Building Separation in Residential Districts

TABLE 23.202-22: R-S LOT COVERAGE STANDARDS

	STANDARD BASED ON BUILDING HEIGHT				SUPPLEMENTAL STANDARDS
	1 STORY	2 STORIES	3 STORIES	4 STORIES	
Lot Coverage, Maximum					23.304.120-Lot Coverage
Interior and Through Lot	65%	65%	60%	55%	
Corner Lot	70%	70%	65%	60%	

Section 11. That the Berkeley Municipal Code 23.202.140(E) is hereby amended to read:

F. **Development Standards.**

1. Basic Standards.

a. Table 23.202-2319: R-SMU Lot and Height Development Standards shows lot and height standards that apply in al areas in the R-SMU district.

TABLE 23.202-1923: R-SMU LOT AND HEIGHTDEVELOPMENT STANDARDS

BASIC STANDARDS		SUPPLEMENTAL STANDARDS
Lot Area, Minimum		23.304.020 - Lot Requirements
New Lots	No minimum5,000 sq. ft.	
Per Group Living Accommodation Resident	No minimum 350 sq.ft. [1]	

Text highlighted in gray consists of non-substantive technical edits and renumbering.

BASIC STANDARDS		SUPPLEMENTAL STANDARDS
Residential Density		23.106.100-Residential Density
Minimum (du/acre)	150	
Maximum (du/acre)	No maximum	
Usable Open Space, Minimum	40 sq. ft. per 1,000 sq. ft. of gross residential floor area	23.304.090 – Usable Open Space
Floor Area Ratio, Maximum	~~No maximum~~7.0	
~~Usable Open Space, Minimum~~		
~~Per Dwelling Unit~~	~~40 sq. ft.~~	~~23.304.090 – Usable Open Space~~
~~Per Group Living Accommodation Resident~~	~~20 sq. ft.~~	
Main Building Height, Maximum	~~60~~ 85 ft. ~~and 4 stories~~	23.304.050-Building Height
~~New Buildings~~	~~60 ft. and 4 stories~~	
~~Residential Additions~~	~~16 ft. [2]~~	
Lot Line Setbacks, Minimum		23.304.030-Setbacks
Front	No minimum	
Rear	4 ft.	
Interior Side	No minimum	
Street Side	No minimum	
Building Separation, Minimum	No minimum	23.304.040-Building Separation in Residential Districts
Lot Coverage, Maximum	100%	23.304.120-Lot Coverage
~~Notes:~~ ~~[1] One additional person is allowed for between 100 and 175 square feet of remaining lot area.~~ ~~[2] Maximum 60 feet and 4 stories allowed with an AUP, or up to the district limit with a UP(PH).~~		

~~b. Table 23.202-24 and Table 23.202-25 show setback, building separation, and lot coverage standards that apply to main buildings:~~

~~With dwelling units or group living accommodations; or~~

~~Are located north of Durant Avenue~~

2. **Supplemental Standards.** Supplemental development standards that apply in the R-SMU district are noted in Table 23.202-1923 ~~to Table 23.202-27~~.

~~3. **Increase in Building Height.**~~

~~a. The ZAB may approve a Use Permit to increase the allowed height of a main building or residential addition in the two subareas shown in Figure 23.202-2: R-SMU Subareas. Maximum allowed height is:~~

~~i. 75 feet and 5 stories in Subarea One; and~~

~~ii. 65 feet and 5 stories in Subarea Two.~~

~~**FIGURE 23.202-2: R-SMU SUBAREAS**~~

~~To approve the Use Permit for increased building height, the ZAB must make the following findings:~~

~~At least 50 percent of the total floor area is designated for residential use.~~

~~The project meets the purposes of the R-SMU district as stated in Section 23.202.140.A (District Purpose).~~

~~**Increase in Density for Group Living Accommodation.** The ZAB may approve a Use Permit to increase the density of a group living accommodation use (i.e., decrease the minimum lot area per group living accommodation room as shown in Table 23.202-~~

Text highlighted in gray consists of non-substantive technical edits and renumbering.

23:R-SMU Lot and Height Standards. To approve the Use Permit, the ZAB must make the following findings:
At least 50 percent of the total building floor area is designated for residential use.
The increased density will not be detrimental to the immediate neighborhood.
The project meets the purposes of the R-SMU district as stated in Section 23.202.140.A R-SMU Residential Southside District (District Purpose).
Table 23.202-24: R-SMU Setback and Building Separation Standards for Main Buildings with Dwelling Units or Group Living Accommodations or Located North of Durant Avenue

	Standards by Building Story					Supplemental Standards
	1st	2nd	3rd	4th	5th[1]	
Lot Line Setbacks, Minimum						
Front	10 ft.	10 ft.	10 ft.	10 ft.	10 ft.	23.304.030-Setbacks
Rear	10 ft.	10 ft.	10 ft.	17 ft.	19 ft.	
Interior	4 ft.	4 ft.	6 ft.	8 ft.	10 ft.	
Street Side	6 ft.	8 ft.	10 ft.	10 ft.	10 ft.	
Building Separation, Minimum	8 ft.	12 ft.	16 ft.	20 ft.	24 ft.	23.304.040-Building Separation in Residential Districts
[1] The 5th story regulations are not applicable to buildings with less than 50% residential floor area nor for buildings outside of Subareas 1 and 2 (even if located north of Durant Avenue).						

Table 23.202-25: R-SMU Lot Coverage Standards for Main Buildings with Dwelling Units or Group Living Accommodations Or Located North of Durant Avenue

	Standard Based on Building Height					Supplemental Standards
	1 story	2 stories	3 stories	4 stories	5 stories	
Lot Coverage, Maximum						
Interior and Through Lots	55%	55%	50%	45%	40%	23.304.120-Lot Coverage
Corner Lots	60%	60%	55%	50%	45%	

Table 23.202-26 and Table 23.202-27 show setback, building separation, and lot coverage standards that apply to main buildings:
Without dwelling units or group living accommodations: or
Located south of Durant Avenue.

Text highlighted in gray consists of non-substantive technical edits and renumbering.

~~Table 23.202-26: R-SMU Setback and Building Separation Standards for Main Buildings without Dwelling Units or Group Living Accommodations Or Located South of Durant Avenue~~

	Building Story Standard				Supplemental Standards
	1st	2nd	3rd	4th	
Lot Line Setback, Minimum					23.304.030-Setbacks
Front	15 ft.	15 ft.	15 ft.	15 ft.	
Rear	15 ft.	15 ft.	15 ft.	17 ft.	
Interior	4 ft.	4 ft.	6 ft.	8 ft.	
Street Side	6 ft.	8 ft.	10 ft.	10 ft.	
Building Separation, Minimum	8 ft.	12 ft.	16 ft.	20 ft.	23.304.040-Building Separation in Residential Districts

~~Table 23.202-27: R-SMU Lot Coverage Standards for Main Buildings without Dwelling Units or Group Living Accommodations or located South of Durant Avenue~~

	Standard Based on Building Height				Supplemental Standards
	1 story	2 stories	3 stories	4 stories	
Lot Coverage, Maximum					23.304.120-Lot Coverage
Interior and Through Lot	45%	50%	40%	35%	
Corner Lot	50%	50%	45%	40%	

~~**Increase in Lot Coverage.**~~

~~An AUP may be approve to increase lot coverage up to 100 percent for a main building that contains dwelling units, contains group living accommodations, or is located north of Durant Avenue.~~

~~To approve an AUP, a finding must be made that the increase is appropriate given the setbacks and architectural design of surrounding buildings.~~

Section 12. That the Berkeley Municipal Code 23.202.150(D) is hereby amended to read:

D. Ground-floor Uses. See Table 23.202-208: Permitted Street-Facing Ground Floor Uses.

TABLE 23.202-208: PERMITTED STREET-FACING GROUND FLOOR USES

Text highlighted in gray consists of non-substantive technical edits and renumbering.

FRONTAGE LOCATIONS	PERMITTED STREET-FACING GROUND FLOOR USES
Along Ashby and MLK	Non-Residential Uses or non-residential accessory spaces to residential buildings, such as community rooms. At least 50% of the combined frontage of MLK and Ashby must include active ground -floor uses. [1] Active uses at corner locations are encouraged.
Along Adeline	Non-Residential Uses or non-residential accessory spaces to residential buildings, such as community rooms.
Along Woolsey, Tremont [2], or fronting interior public spaces	Residential or Non-Residential Uses
Along Sacramento, along the Ohlone Greenway, or within 50 feet of any street corner	Residential or Non-Residential Uses
Along Delaware, Acton, or Virginia	Residential Uses
[1] Active uses are commercial uses ~~which generate regular and frequent foot traffic; such uses include businesses~~ in the following use categories: Retail; Personal and Household Services; Food and Alcohol Service, and Entertainment.	
[2] Public entrances for non-residential uses fronting Tremont Street must be located on Woolsey Street.	

Section 13. That the Berkeley Municipal Code 23.202.150(F)(1) and (2) are hereby amended to read:

F. Development Standards.

1. **Basic Standards.** See Table 23.202-2~~1~~8.
2. **Supplemental Standards.** Supplemental standards that apply in the R- BMU district are noted in Table 23.202-2~~1~~9.

TABLE 23.202-2~~1~~9: R-BMU DEVELOPMENT STANDARDS

		SUPPLEMENTAL STANDARDS
Lot Area, Minimum	No minimum	23.304.020-Lot Requirements
Private Usable Open Space, Minimum [1][2]		23.304.090-Usable Open Space
Per Dwelling Unit	40 sf/DU	23.304.090-Usable Open

Text highlighted in gray consists of non-substantive technical edits and renumbering.

		Space
Per Group Living Accommodation Resident	15 sf/resident	23.304.090- Usable Open Space
Public Open Space, Minimum		
Per Dwelling Unit	35 sf/unit	
Per Group Living Accommodation Resident	18 sf/resident	
Floor Area Ratio (FAR), Maximum	4.2	
Main Building Height, Maximum [3]	80 feet and 7 stories	23.304.050- Building Height
Residential Density, Minimum	75 dwelling units per acre	
[1] Private Usable Open Space may be provided as any combination of personal and common private space.		
[2] 50% of the Private Usable Open Space requirement may be fulfilled through the provision of an equal amount of additional Public Open Space.		
[3] Building Height Measurement: In the case of a roof with a parapet wall, building height shall be measured to the top of the roof and parapets may exceed the height limits by up to five feet by right.		

Section 14. That the following lines under the category “Residential Uses” in Table 23.204-1 (Allowed Uses in Commercial Districts) within Berkeley Municipal Code 23.204.020 (Allowed Land Uses) are hereby amended to read:

ZC = Zoning Certificate AUP = Administrative Use Permit UP(PH) = Use Permit NP = Not Permitted -- = Permitted with AUP, see 23.204.020(B) [#] = Table Note Permit Requirement * Use-Specific Regulations Apply	COMMERCIAL DISTRICTS											USE-SPECIFIC REGULATIONS
	C-C	C-U	C-N	C-E	C-NS	C-SA	C-T	C-SO	C-DMU	C-W	C-AC	
Residential Uses												
Dwellings												
Single-Family	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)	UP(PH)	23.204.060.B.3 ; 23.302.070(H)

Text highlighted in gray consists of non-substantive technical edits and renumbering.

ZC = Zoning Certificate AUP = Administrative Use Permit UP(PH) = Use Permit NP = Not Permitted -- = Permitted with AUP, see 23.204.020(B) [#] = Table Note Permit Requirement * Use-Specific Regulations Apply	COMMERCIAL DISTRICTS											USE-SPECIFIC REGULATIONS
	C-C	C-U	C-N	C-E	C-NS	C-SA	C-T	C-SO	C-DMU	C-W	C-AC	
Two-Family	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)	UP(PH)	23.204.060.B.3.i 23.302.070(H)
Multi-Family	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)	UP(PH)	23.204.060.B.3.i 23.302.070(H)
Group Living Accommodation	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)	UP(PH)	23.204.060.B.3.i 23.302.070(H)
Hotel, Residential	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)	UP(PH)	23.204.060.B.3.i 23.302.070(H)
Mixed-Use Residential	UP(PH)	UP(PH)*	UP(PH)	UP(PH)	UP(PH)	UP(PH)*	UP(PH)*	UP(PH)	UP(PH)	See Table 23.204-41	UP(PH)	23.204.060.B.3; 23.204.100.B.4.i 23.204.110.B.5.i 23.302.070(H)
Senior Congregate Housing	See 23.302.070.~~H~~I											

Section 15. That Berkeley Municipal Code Section 23.204.110(B)(5) is hereby amended to read:

5. **Residential ~~Only Buildings~~ Use, Ground Floor**. Residential uses are permitted on the ground floor where located behind a commercial use. The ground floor commercial use must meet the following standards:

   a. Occupy a minimum 30-foot depth of the ground floor, as measured from the ground floor street frontage, and

   ~~a.~~b. Occupy the full extent of the building frontage, excluding required utilities, driveways, pedestrian access and residential lobby. ~~Residential-only buildings are not permitted in the C-T district. Dwelling units and group living accommodations are allowed only above the ground floor in a mixed-use building.~~

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Section 16. That Berkeley Municipal Code Section 23.204.110(D) is hereby amended to read:

D. **Development Standards.**

1. **Basic Standards.** See Table 23.204-32: C-T Development Standards.

TABLE 23.204-32: C-T DEVELOPMENT STANDARDS

BASIC STANDARDS		SUPPLEMENTAL STANDARDS
Lot Area Minimum		23.304.020-Lot Requirements
New Lots	No minimum	
Per Group Living Accommodation Resident	No minimum ~~350 sq. ft. [1]~~	
Residential Density		23.106.100-Residential Density
Minimum (du/acre)	200	
Maximum (du/acre)	No maximum	
Usable Open Space, Minimum	40 sq. ft. per 1,000 sq. ft. of gross residential floor area	23.304.090-Usable Open Space
~~Space Per Dwelling Unit~~	~~40 sq. ft. [4]~~	
~~Per Group Living Accommodation Resident~~	~~No minimum~~	
Floor Area Ratio, Maximum	8.0	
~~South of Dwight Way~~	~~4.0~~	
~~North of Dwight Way~~	~~5.0 [2]~~	
Telegraph/Channing Parking Garage, APN 55-1879-6-1 ~~[3]~~	No maximum	
Main Building Height, Minimum	35 ft.	23.304.050-Building Height
Main Building Height, Maximum	85 ft.	23.304.050 – Building Height
~~South of Dwight Way~~	~~50 ft. [2]~~	
~~North of Dwight Way~~	~~65 ft. [2]~~	
Telegraph/Channing Parking Garage ~~[3]~~ , APN 55-1879-6-1	85 ft. and 7 stories	
Lot Line Setbacks, Minimum		23.304.030-Setbacks
Abutting/Confronting a Non-residential District	No minimum	

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Abutting/Confronting a Residential District	See 23.304.030(-C)(-2)	
Building Separation, Minimum	No minimum	23.304.040-Building Separation in Residential Districts
Lot Coverage, Maximum	100%	23.304.120-Lot Coverage
~~Notes:~~ ~~[1] One additional resident is allowed for remaining lot area between 200 and 350 square feet.~~ ~~[2] Increased FAR and height allowed with Use Permit. See Table 23.204-33.~~ ~~[3] APN 55-1879-6-1.~~ ~~[4] No dimension may be less than 6 feet.~~		

2. **Lots Abutting or Confronting a Residential District.** See 23.304.130 (Non-Rresidential Districts Abutting a Residential District) for additional building feature requirements for lots that abut or confront a Residential District.

~~3. **Increased Group Living Density.**~~

~~a. Projects with group living accommodations occupying 50 percent or more of the total building floor area are eligible for increased density.~~

~~b. To approve a Use Permit to increase the density of a group living accommodation the ZAB must make the following findings:~~

~~i. The increase in density will not be detrimental to the immediate neighborhood; and~~

~~ii. The project meets the purposes of the district.~~

~~4. **Height and FAR Increases.**~~

~~a. Projects with 50 percent or more of the total building floor area for residential use are eligible for increased building height and FAR as shown in Table 23.204-33.~~

~~TABLE 23.204-33: C-T ALLOWED HEIGHT AND FAR INCREASES~~

~~Project Location~~	~~Allowed Increase~~	
	~~Height~~	~~FAR~~
~~South of Dwight Way~~	~~65 ft. and 5 stories~~	~~No increase allowed~~
~~North of Dwight Way~~	~~75 ft.~~	~~6.0~~

Text highlighted in gray consists of non-substantive technical edits and renumbering.

~~b. The ZAB may allow the increased height and FAR with a Use Permit upon finding that the project will not result in a significant reduction in sunlight on Telegraph Avenue sidewalks.~~

~~5. **Shade Studies.**~~

~~a. A shade study is required for all proposed buildings exceeding three stories or 40 feet.~~

~~b. Based on the findings of the shade study, the ZAB may require the fourth or higher story of a building to be set back to minimize shade impacts on adjacent properties or the public right-of-way.~~

~~6.~~3. **Environmental Impacts.** Projects that may create environmental impacts as described in the Southside Plan Final EIR shall be subject to the adopted Mitigation Monitoring and Reporting Program (MMRP).

Section 17. That Berkeley Municipal Code Section 23.204.120(D) is hereby amended to read:

D. **Development Standards.**

1. **Basic Standards.** See Table 23.204-3~~3~~4: C-SO Development Standards. For residential-only projects, see also Table 23.204-3~~4~~5: C-SO Setback and Building Separation Standards for Residential-Only Uses and Table 23.204-3~~5~~6: C-SO Lot Coverage Standards for Residential-Only Uses.

TABLE 23.204-3433: C-SO DEVELOPMENT STANDARDS

	Project Land Use			Supplemental Standards
	Non-Residential and Mixed Use	Mixed-Use [1]	Residential Only [1]	
Lot Area, Minimum				
New Lots	No minimum		5,000 sq. ft	23.304.020– Lot Requirements
Per Group Living Accommodation Resident	350 sq. ft. [2]			
Usable Open Space, Minimum				23.304.090– Usable Open Space
Per Dwelling Unit	40 sq. ft. [4]		200 sq. ft.	
Per Group Living Accommodation Resident	No minimum		90 sq. ft.	

Text highlighted in gray consists of non-substantive technical edits and renumbering.

	Project Land Use			Supplemental Standards
	Non-Residential and Mixed Use	Mixed-Use [1]	Residential Only [1]	
Floor Area Ratio, Maximum	2.0		No maximum	
Main Building Height, Minimum	No minimum			
Main Building Height, Maximum	28 ft. and 2 stories			23.304.050– Building Height
Lot Line Setbacks, Minimum				23.304.030– Setbacks
Abutting/Confronting a Non-residential District	No minimum		See ~~Table~~ 23.204-35 Table 23.204-34	
Abutting/Confronting a Residential District	See 23.304.030.C.2			
Building Separation, Minimum	No minimum [3]		See ~~Table~~ 23.204-35 Table 23.204-34	23.304.040– Building Separation in Residential Districts
Lot Coverage, Maximum	100%		See ~~Table~~ 23.204-36Table 23.204-35	23.304.120– Lot Coverage

Notes:
[1] For mixed use and residential only projects, development standards included in this table may be modified. See 23.204.120.(D).(3).
[2] One additional resident is allowed for remaining lot area between 200 and 350 square feet.
[3] For mixed-use projects, minimum building separation shall be as required for residential-only projects
[4] No dimension may be less than 6 feet.

TABLE 23.204-3534: C-SO SETBACK AND BUILDING SEPARATION STANDARDS FOR RESIDENTIAL-ONLY USES

	STANDARDS BY BUILDING STORY			SUPPLEMENTAL STANDARDS
	1ST	2ND	3RD	

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Lot Line Setbacks, Minimum [1]				23.304.030– Setbacks
Front	15 ft.	15 ft.	15 ft.	
Rear	15 ft.	15 ft.	15 ft.	
Interior	4 ft.	4 ft.	6 ft.	
Street Side	6 ft.	8 ft.	10 ft.	
Building Separation, Minimum [1]	8 ft.	12 ft.	16 ft.	23.304.040– Building Separation in Residential Districts
[1] For mixed use and residential-only projects, development standards included in this table may be modified. See 23.204.120.(D).(3).				

TABLE 23.204-~~36~~35: C-SO LOT COVERAGE STANDARDS FOR RESIDENTIAL-ONLY USES

	STANDARD BASED ON BUILDING HEIGHT			SUPPLEMENTAL STANDARDS
	1 STORY	2 STORIES	3 STORIES	
Lot Coverage, Maximum [1]				23.304.120– Lot Coverage
Interior and Through Lots	45%	45%	40%	
Corner Lots	50%	50%	45%	
[1] For mixed use and residential-only projects, development standards included in this table may be modified. See 23.204.120.(D).(3).				

Section 18. That Berkeley Municipal Code Section 23.204.120(D)(3) is hereby amended to read:

3. **Modification to Standards –Mixed Use and Residential-Only Projects.** The ZAB may modify development standards in Table 23.204-3~~3~~4, Table 23.204-3~~4~~5, and Table 23.204-3~~5~~6 for a mixed-use or residential-only project with a Use Permit upon making one of the following findings:

   a. The modification will encourage public transit utilization and existing off-street parking facilities in the area of the proposed building.

   b. The modification will facilitate the construction of residential or tourist hotel uses where appropriate.

   c. The modification will permit consistency with the building setbacks existing in the immediate area where a residential building setback would not serve a useful purpose.

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Section 19. That Berkeley Municipal Code Section 23.204.130(E)(1)(a) is hereby amended to read:

1. **Height.**

    a. **Height Limits.** Table 23.204-36~~7~~: C-DMU Height Limits shows height limits in the C-DMU district, except as otherwise allowed by Paragraph 2 below. See Figure 23.204-5: C-DMU Sub-Areas for district sub-area boundaries.

FIGURE 23.204-5: C-DMU SUB-AREAS

Text highlighted in gray consists of non-substantive technical edits and renumbering.

TABLE 23.204-367: C-DMU HEIGHT LIMITS

SUB-AREA	MINIMUM	MAXIMUM	MAXIMUM WITH USE PERMIT
Core Area	50 ft.	60 ft.	75 ft.
Outer Core	40 ft.		
Corridor	40 ft.		
Buffer	No minimum	50 ft.	60 ft.

Section 20. That Berkeley Municipal Code Section 23.204.130(E)(2)(a) Table 23.204-38 is hereby amended to read:

TABLE 23.204-378: C-DMU INCREASED HEIGHT ALLOWANCE

Sub-Area	Number of Buildings	Height	
		Minimum	Maximum
Combined Core and Outer Core	2	75 ft.	120 ft.
Core	3	120 ft.	180 ft.

Section 21. That Berkeley Municipal Code Section 23.204.130(E)(3)(a) is hereby amended to read:

3. **Setbacks.**

a. **Basic Standards.** Table 23.204-389 shows minimum required lot line setbacks in the C-DMU district. Additional standards are listed in 23.204.130.3.d.

TABLE 23.204-389:C-DMU SETBACK STANDARDS

PORTION OF BUILDING AT HEIGHT OF:	FRONT	MINIMUM INTERIOR SIDE		MINIMUM REAR
		65' AND LESS FROM LOT FRONTAGE	OVER 65' FROM LOT FRONTAGE	
Zero to 20 feet	No minimum. 5 ft. max.	No minimum		
21 feet to 75 feet	No minimum.	No minimum	5 ft.	
76 feet to 120 feet	15 ft. min.	5 ft.	15 ft.	

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Over 120 feet	15 ft. min.	15 ft.

Section 22. That Berkeley Municipal Code Section 23.204.130(E)(3)(b) is hereby amended to read:

b. **Modifications to Standards.** The ZAB may modify the setback standards in Table 23.204-389 with a Use Permit upon finding that the modified setbacks will not unreasonably limit solar access or create significant increases in wind experienced on the public sidewalk.

Section 23. That Berkeley Municipal Code Section 23.204.130(E)(3)(c) is hereby amended to read:

c. **Residential Transitions.** The setback standards in Table 23.204-389 shall not apply to commercial lots abutting or confronting residential zoning. Such lots shall comply with Section 23.304.030.(C).(2)—Setbacks (Lots Adjacent to Residential Districts)

Section 24. That Berkeley Municipal Code Section 23.204.130(E)(4) is hereby amended to read:

4. **Usable Open Space.** Table 23.204-3940 shows minimum required usable open space in the C-DMU district.

TABLE 23.204-3940: C-DMU USABLE OPEN SPACE REQUIREMENTS

	MINIMUM USABLE OPEN SPACE	SUPPLEMENTAL STANDARDS
Residential Uses	80 sq. ft./unit [1]	23.304.090– Usable Open Space
Non-Residential Uses	1 sq. ft. of privately-owned public open space per 50 sq. ft. of commercial floor area.	
Note: [1] Each square foot of usable open space provided as privately-owned public open space is counted as two square feet of required on-site open space.		

Section 25. That Berkeley Municipal Code Section 23.204.140(B)(2) is hereby amended to read:

2. **Mixed-Use Residential.**

a. See Table 23.204-401 for mixed-use residential permit requirements in the C-W district.

TABLE 23.204-401: C-W MIXED-USE RESIDENTIAL PERMIT REQUIREMENTS

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Total Project Floor Area	Permit Required
Projects with both residential and retail uses where the retail space comprises 15% to 33% of total gross floor area	
Less than 20,000 square feet	ZC
20,000 square feet or more	UP(PH)
All other mixed-use residential projects	
Less than 5,000 square feet	ZC
5,000 to 9,000 square feet	AUP
More than 9,000 square feet	UP(PH)

b. All new retail uses in an existing mixed-use development are subject to the permit requirements for mixed use development as shown in Table 23.204-401.

Section 26. That Berkeley Municipal Code Section 23.204.140(E)(1) is hereby amended to read:

E. **Development Standards.**

1. **Basic Standards.** See Table 23.204-412 for development standards in the C-W district.

TABLE 23.204-412: C-W DEVELOPMENT STANDARDS

BASIC STANDARDS		SUPPLEMENTAL STANDARDS
Lot Area Minimum		23.304.020– Lot Requirements
New Lots	No minimum	
Per Group Living Accommodation Resident		
Usable Open Space, Minimum		23.304.090– Usable Open Space
Per Dwelling Unit or Live/Work Unit	40 sq. ft.	
Per Group Living Accommodation Resident	No minimum	
Floor Area Ratio, Maximum	3.0	
Main Building Height, Minimum	No minimum	
Main Building Height, Maximum	40 ft. and 3 stories [1,2]	23.304.050– Building Height
Lot Line Setbacks, Minimum		23.304.030–

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Abutting/Confronting a Non-residential District	No minimum	Setbacks
Abutting/Confronting a Residential District	See 23.304.030.C.2	
Building Separation, Minimum	No minimum	
Lot Coverage, Maximum	100%	23.304.120– Lot Coverage
Notes: [1] 50 ft. and 4 stories allowed for mixed-use projects. The fourth floor must be used for residential or live/work purposes. [2] On Assessor Parcel Numbers 054-1763-001-03, 054-1763-010-00 and 054-1763-003-03 the maximum height is 50 feet and 4 stories.		

Section 27. That Berkeley Municipal Code Section 23.204.150(B)(3)(a) is hereby amended to read:

3. **Permitted Ground Floor Uses.**

a. **Commercial and Active Commercial Required.** In addition to other requirements of the C-AC district, the first 30 feet of depth of the ground floor, as measured from the frontage which abuts the portions of Adeline Street, Shattuck Avenue, MLK, Jr. Way or Ashby Avenue identified in Table 23.204-423: C-AC Permitted Ground Floor Uses shall be reserved for either Active Commercial Uses, or for commercial uses. Ground floor tenant spaces with frontages on streets not identified below can be used for any use permitted in the district.

TABLE 23.204-423: C-AC PERMITTED GROUND FLOOR USES

AREA	PERMITTED GROUND FLOOR USE
Shattuck Avenue between Dwight and Derby	Commercial Uses
Shattuck between Ward and Russell	Active Commercial Uses
Adeline between Russell and City boundary	
Ashby, east of Adeline	
North side of Ashby, west of Adeline	

Section 28. That Berkeley Municipal Code Section 23.204.150(E)(1) is hereby amended to read:

Text highlighted in gray consists of non-substantive technical edits and renumbering.

1. **Basic Standards.** See Table 23.204-434: C-AC South Shattuck Subarea Development Standards, and Table 23.204-445: C-AC North and South Adeline Subarea Development Standards.

Section 29. That Berkeley Municipal Code Section 23.204.150(E)(5) Table 23.204-44 is hereby amended to read:

TABLE 23.204-434: C-AC SOUTH SHATTUCK SUBAREA DEVELOPMENT STANDARDS

	PROJECT LAND USE [5]							SUPPLEMENTAL STANDARDS
	Residential and Mixed Use Tier 1 (Less than 14% affordable housing)	Residential & Mixed Use Tier 2 (14% affordable housing)	Residential & Mixed Use Tier 3 (21% affordable housing)	Residential & Mixed Use Tier 4 (25% affordable housing)	Residential & Mixed Use (100% affordable housing)	Group Living Accommodation [6]	Non-Residential	
Lot Area Minimum								23.304.020–Lot Requirements
New Lots	No minimum					350 sq. ft.		
Per Group Living Accommodation Resident	N/A					350 sq. ft. [1]		
Usable Open Space, Minimum [3]	40 sq. ft							
Per Dwelling Unit/GLA Resident [4]	40 sq. ft.							23.304.090–Usable Open Space
Floor Area Ratio, Maximum	2.5	4.0	5.0	5.5	5.5	2.5	2.5	
Main Building Height, Maximum	4 stories 45 feet	6 stories 65 feet	7 stories 75 feet	8 stories 85 feet	8 stories 90 feet	4 stories 45 feet	4 stories 45 feet	23.304.050–Building Height

Text highlighted in gray consists of non-substantive technical edits and renumbering.

	PROJECT LAND USE [5]							SUPPLEMENTAL STANDARDS
	Residential and Mixed Use Tier 1 (Less than 14% affordable housing)	Residential & Mixed Use Tier 2 (14% affordable housing)	Residential & Mixed Use Tier 3 (21% affordable housing)	Residential & Mixed Use Tier 4 (25% affordable housing)	Residential & Mixed Use (100% affordable housing)	Group Living Accommodation [6]	Non-Residential	
Residential Density, Maximum (du/acre) [2]	120	210	250	300	300	1 GLA resident per 350 sf of lot area	N/A	
Lot Line Setbacks, Minimum								23.304.030–Setbacks
Abutting/Confronting a Non-residential District	No minimum							
Abutting/Confronting a Residential District	See 23.204.150 ~~(~~GE~~)~~							
Building Separation, Minimum	No minimum							
Lot Coverage, Maximum								23.304.120–Lot Coverage
Interior Lot	60%	90%	90%	90%	90%	60%	100%	
Corner Lot	70%	90%	90%	95%	95%	70%	100%	

Text highlighted in gray consists of non-substantive technical edits and renumbering.

	PROJECT LAND USE [5]							SUPPLEMENTAL STANDARDS
	Residential and Mixed Use Tier 1 (Less than 14% affordable housing)	Residential & Mixed Use Tier 2 (14% affordable housing)	Residential & Mixed Use Tier 3 (21% affordable housing)	Residential & Mixed Use Tier 4 (25% affordable housing)	Residential & Mixed Use (100% affordable housing)	Group Living Accommodation [6]	Non-Residential	
Notes: [1] One additional resident is allowed for remaining lot area between 200 and 350 square feet. [2] For the purposes of calculating the State Density Bonus the Tier 1 density shall constitute the maximum allowable gross residential density. Tier 2, 3, and 4 density is authorized as a local density bonus under Government Code section 65915(n). [3] An AUP may be granted to reduce useable open space requirements if shown to be necessary to build an all-electric building. [4] Each square-foot of open space that is designated as publicly accessible open space shall be counted as two square-feet of required on-site open space. [5] Affordable units calculated as percentage of total units								

Section 30. That Berkeley Municipal Code Section 23.204.150(E)(5) Table 23.204-45 is hereby amended to read:

TABLE 23.204-445: C-AC NORTH AND SOUTH ADELINE SUBAREA DEVELOPMENT STANDARDS

	Project Land Use [6]	Supplemental

Text highlighted in gray consists of non-substantive technical edits and renumbering.

	Residential and Mixed Use Tier 1 (Less than 14% affordable housing)	Residential & Mixed Use Tier 2 (14% affordable housing)	Residential & Mixed Use Tier 3 (21% affordable housing)	Residential & Mixed Use Tier 4 (25% affordable housing)	Residential & Mixed Use (100% affordable housing)	Group Living Accommodation	Non-Residential	Standards
Lot Area Minimum								23.304.020-Lot Requirements
New Lots	No minimum							
Per Group Living Accommodation Resident	N/A					350 sq. ft. [1]	N/A	
Usable Open Space, Minimum [3]	40 sq. ft.							
Per Dwelling Unit/GLA Resident [4]	N/A					40 sq. ft.		23.304.090-Usable Open Space
Floor Area Ratio, Maximum	2.0	3.5	4.0	5.0	5.0	2.5	2.8	
Residential Density, Maximum (du/acre) [2]	100	150	210	250	250	1 GLA resident per 350 sf of lot area	N/A	

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Main Building Height, Maximum	3 stories 35 feet	5 stories 55 feet	6 stories 65 feet	7 stories 75 feet	7 stories 80 feet	4 stories 45 feet	3 stories 45 feet	
Lot Line Setbacks, Minimum								
Abutting/Confronting a Non-residential District	No minimum							23.304.030-Setbacks
Abutting/Confronting a Residential District	10 ft 20 ft from any shared lot line for any portion exceeding 35 feet 45 ft from front property line for any portion exceeding 45 feet						N/A	23.304.030-Setbacks 23.204.150.E.5
Building Separation, Minimum	No minimum							23.304.040-Building Separation in Residential Districts
Interior Lot	60%	90%	90%	90%	90%	60%	100%	
Corner Lot	70%	90%	90%	95%	95%	70%	100%	
Lot Coverage, Maximum	100%							

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Notes:
[1] One additional resident is allowed for remaining lot area between 200 and 350 square feet.
[2] For the purpose State Density Bonus calculation, the Tier 1 density is the maximum allowable gross residential density. Tier 2, 3, and 4 density is authorized as a local density bonus under Government Code section 65915(n).
[3] An AUP may be granted to reduce useable open space requirements if shown to be necessary to build an all-electric building.
[4] Each square-foot of open space that is designated as publicly accessible open space shall be counted as two square-feet of required on-site open space.
[5] Affordable units calculated as percentage of total units

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Section 31. That Berkeley Municipal Code Section 23.204.150(F)(2)(b) is hereby amended to read:

b. **Active Commercial Areas**. Ground floor frontages in areas identified as Active Commercial in Table 23.204-423 shall meet the requirements of 23.204.150(F)(2)(a) except:

i. Ground floors shall have a minimum floor to floor height of 15 feet and a minimum floor to ceiling height of 12 feet.

ii. Facades shall provide at least 75 percent transparency between 3 and 10 feet above grade (doors and transparent windows) to allow maximum visual interaction between sidewalk areas and the interior. Dark or mirrored glass will not satisfy this requirement.

Section 32. That Berkeley Municipal Code Section 23.204.150(F)(2)(c) is hereby amended to read:

c. **Commercial Use Areas**. Ground floor frontages in areas identified as commercial in Table 23.204-423 shall meet the requirements of 23.204.150(F)(2)(a) except:

i. Ground floors shall have a minimum floor to floor height of 15 feet and a minimum floor to ceiling height of 12 feet.

ii. Facades shall provide at least 65% transparency between 3 and 10 feet above grade (doors and transparent windows) to allow maximum visual interaction between sidewalk areas and the interior of office spaces. Dark or mirrored glass will not satisfy this requirement.

Section 33. That Berkeley Municipal Code Sub-Sections 23.302.070(H) through (K) are hereby amended to read:

H. **Residential Use, Ground-Floor Units**.

1. Southside Plan Area. In the R-3, R-S, R-SMU, and C-T districts within the Southside Plan boundaries, individual unit entries located within six feet of the front property line shall be at least 18 inches above the finished grade of the adjacent public frontage.

~~H.~~I. **Senior Congregate Housing.** Table 23.302-10 shows permits required for senior congregate housing.

TABLE 23.302-10: PERMIT REQUIREMENTS FOR SENIOR CONGREGATE HOUSING

PROJECT	PERMIT REQUIRED

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Change of use from an existing dwelling unit to accommodate six or fewer people	ZC
Change of use from an existing dwelling unit to accommodate seven or more people	AUP
New construction to accommodate any number of people	UP(PH)

~~I.~~J. **Supportive Housing.**

1. *Permits Required.* Supportive housing shall be allowed by right in zones where multifamily and mixed uses are permitted, if the proposed housing development satisfies requirements pursuant to Government Code Section 65651(a).

~~J.~~K. **Smoke Shops.** In all districts, smoke shops are not permitted within 1,400 feet of a school or public park.

~~K.~~L. **Warehouse Storage for Retail Use.**

1. In all districts where retail uses are allowed, on-site storage of goods is allowed as an accessory use to a primary retail use on the lot.
2. The storage of goods for a contiguous and directly accessible retail space is allowed in the MU-LI and MU-R districts subject to the following:
   a. An AUP is required for storage 3,000 square feet or less; a Use Permit is required for storage more than 3,000 square feet.
   b. Except for food product stores in the MU-LI district, the storage is permitted only for uses within the district. Storage for retail uses wholly or partially outside the district is not permitted.

Section 34. That Berkeley Municipal Code Section 23.304.030 Table 23.304-1 is hereby amended to read:

TABLE 23.304-1: ALLOWED SETBACK REDUCTIONS IN RESIDENTIAL DISTRICTS

DISTRICT WHERE ALLOWED	WHEN ALLOWED	MINIMUM SETBACK WITH REDUCTION	REQUIRED PERMIT	REQUIRED ADDITIONAL FINDINGS [1]
Front Setback Reductions				

Text highlighted in gray consists of non-substantive technical edits and renumbering.

District Where Allowed	When Allowed	Minimum Setback with Reduction	Required Permit	Required Additional Findings [1]
ES-R	On any lot	No minimum.	UP(PH) [2]	The reduced setback is: 1) necessary to allow economic use of property due to the size, shape of the lot or the topography of the site; and 2) consistent with the ES-R district purpose.
~~R-S; R-SMU~~	~~On any lot~~	~~No minimum~~	~~AUP~~	~~The reduced setback is appropriate given the setbacks and architectural design of surrounding buildings~~
~~R-SMU~~	~~For either: 1) a main building with dwelling units or group living accommodations; or 2) any building north of Durant Avenue~~	~~No minimum~~	~~AUP~~	~~The reduced setback is appropriate given the setbacks and architectural design of surrounding buildings~~
Rear Setback Reductions				
ES-R [3]	On any lot	No minimum	UP(PH) [2]	The reduced setback is: 1) necessary to allow economic use of property due to the size, shape of the lot or the topography of the site; and 2) consistent with the ES-R district purpose.
R-1, R-1A	On a lot less than 100 ft. deep	20% of lot depth	ZC	None
R-1A	To construct a dwelling unit	12 ft.	AUP	The unit would not cause a detrimental impact on emergency access; or on light, air or privacy for neighboring properties.

Text highlighted in gray consists of non-substantive technical edits and renumbering.

District Where Allowed	When Allowed	Minimum Setback with Reduction	Required Permit	Required Additional Findings [1]
R-2, R-2A, R-3, R-4, R-5 [4], ~~R-S, R-SMU~~	On a lot with two or more main buildings with dwelling units	No minimum	AUP	No additional findings
~~R-SMU~~	~~For either: 1) a main building with dwelling units or group living accommodations; or 2) any building north of Durant Avenue~~	~~No minimum~~	~~AUP~~	~~The reduction is appropriate given the setbacks and architectural design of surrounding buildings~~
Side Setback Reductions				
ES-R [3]	Any lot	No minimum	UP(PH) [2]	The reduced setback is: 1) necessary to allow economic use of property due to the size, shape of the lot or the topography of the site; and 2) consistent with the ES-R district purpose.
R-1, R-1A	Lot width less than 40 ft. [45]	10% of lot width or 3 ft., whichever is greater	ZC	None
R-2, R-2A	Lot width less than 40 ft.	First and second stories: 10% of lot width or 3 ft., whichever is greater; Third story: 5 ft.	ZC	None

District Where Allowed	When Allowed	Minimum Setback with Reduction	Required Permit	Required Additional Findings [1]
~~R-SMU~~	~~For either: 1) a main building with dwelling units or group living accommodations; or 2) any building north of Durant Avenue~~	~~No minimum~~	~~AUP~~	~~The reduced setback is appropriate given the setbacks and architectural design of surrounding buildings~~

Notes:
[1] Findings are in addition to any AUP or Use Permit findings required in 23.406-Specifc Permit Requirements.
[2] Fire Department must review and approve reduced setbacks in respect to fire safety.
[3] For lots less than 5,000 square feet, reductions are not allowed for property lines abutting a property under different ownership.
[4] Parcels located within the R-3 district within the Southside Plan boundaries are exempt from this section.
[45] Not permitted for rear main buildings in the R-1A district.

Section 35. That Berkeley Municipal Code Section 23.304.030 Table 23.304-3 is hereby amended to read:

Table 23.304-3: Setbacks Adjacent to Residential Districts

District	Minimum Lot Line Setback when Lot Line Abuts or Confronts a Lot in a Residential District			
	Front	Rear	Interior Side	Street Side
~~All Commercial Districts~~C-C, C-U, C-N, C-E, C-NS, C-SA, C-SO, C-DMU, C-W, C-AC, MU-LI	Same as required in adjacent Residential District [1]	10 feet or 10% of the lot depth, whichever is less	5 ft.	Same as required in adjacent Residential District [1]
C-T	No minimum		5 ft.	4 ft.
MU-R	10 ft. [1]	10 feet or 10% of the lot width, whichever is less [2]		

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Notes: [1] In the MU-LI and MU-R districts, setback may be reduced to the smaller of front setbacks on abutting lot with an AUP. [2] This applies to lots that abut or confront a lot either in a Residential District or containing one or more dwelling units.

Section 36. That Berkeley Municipal Code Section 23.304.040 Table 23.304-4 is hereby amended to read:

TABLE 23.304-4: PERMITS REQUIRED FOR BUILDING SEPARATION REDUCTIONS IN RESIDENTIAL DISTRICTS

DISTRICT WHERE ALLOWED	WHEN ALLOWED	PERMIT REQUIRED	FINDINGS [1]
R-1A	On a lot with two or more main buildings with a dwelling unit	AUP	The unit would not cause a detrimental impact on emergency access; or on light, air or privacy for neighboring properties.
R-2, R-2A, R-3[2], R-4, R-5~~, R-S, R-SMU~~	On a lot with two or more main buildings with a dwelling unit	AUP	No additional findings
ES-R [3~~2~~]	Any lot	UP(PH)	1) The reduced building separation is necessary to allow economic use of property for residential purposes; 2) the development complies with all other applicable setback, coverage, and floor requirements; and 3) the reduced building separation is consistent with the ES-R district purpose.
Notes: [1] Findings in addition to AUP or Use Permit findings required in ~~in~~ Chapter 23.406. [2] Parcels located within the R-3 district within the Southside Plan boundaries are exempt from this section. [3] Fire Department must review and approve reduced setbacks in respect to fire safety.			

Section 37. That Berkeley Municipal Code Section 23.304.050(C) is hereby added to read:

C. **Parapets Allowed Above Height Limit**. Parapets may exceed the height limit by up to five feet as of right in the following districts:

1. The R-3, R-S, R-SMU, and C-T districts located within the Southside Plan boundaries.
2. The C-DMU district (see Section 23.204.130(E)(1)(b)).
3. The R-BMU district (see Section 23.202.150(F)).
4. The C-AC district (see Section 23.204.150(E)(4)).

Section 38. That Berkeley Municipal Code Section 23.304.090 is hereby amended to read:

A. **Applicability.** The standards in this section apply to areas used to satisfy minimum usable open space requirements.

1. Southside Plan Area Standards.
   a. For parcels located in the R-3, R-S, R-SMU, or C-T districts within the Southside Plan boundaries, the minimum usable open space required is calculated on a per 1,000 square feet of gross residential floor area basis.
   b. Certain development projects located in the R-3, R-S, R-SMU or C-T districts within the Southside Plan boundaries may satisfy a portion of the required usable open space by providing residential amenities that meet the qualifying criteria in Section 23.304.090(D) and (E).

B. **Standards**.

1. **Accessibility and Use.** Usable open space shall be accessible to the occupants of the building for active or passive recreation use.
2. **Assignment to Unit.** An area which is accessible and/or usable only by the occupants of a particular dwelling unit may satisfy the usable open space area requirements only for that particular dwelling unit.
3. **Minimum Dimensions**. Except for balconies, a usable open space area must have a minimum width and length of 10 feet.
4. **Balconies**.
   a. A maximum of 50 percent of the total required usable open space area may be satisfied by balconies.
   b. A balcony must have a minimum width and length of 6 feet.
   c. At least one exterior side must be open and unobstructed except for required railings.
5. **Uncovered**. Except for balconies, usable open space shall be at least 75 percent open to the sky.

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6. **Slope.** Usable open space must have a slope of 8 percent grade or less.
7. **Landscaping**.
   a. At least 40 percent of the total required usable open space area, exclusive of balconies above the ground floor, shall be landscaped.
   b. A landscaped area may not include off-street parking spaces, driveways, paved walkways and paths, patios and other surfaces covered by concrete or asphalt.
   c. For multiple dwelling uses, required landscaped areas shall incorporate automatic irrigation and drainage facilities adequate to assure healthy growing conditions for plants.
8. **Amenities.** Usable open space which is not planted shall be developed to encourage outdoor active or passive recreational use and shall include such elements as decks, sports courts, outdoor seating, decorative paved areas and walkways which do not serve as entrance walkways.
9. **Access Features Not Included.** Usable open space may not contain area designated for off-street parking and loading, service areas, driveways, required walkways or other features used for access to dwelling units.

C. **Other Open Space Areas.** Areas of the lot which do not qualify as usable open space and which are not designated as driveways, off-street parking spaces or required walkways, shall be retained as landscaped areas

D. **Southside Plan Area Shared Indoor Residential Amenities**. A development project located in the R-3, R-S, R-SMU or C-T districts may provide up to 50 percent of the total usable open space required through one or more of the following shared residential amenities. Each shared amenity space shall have a minimum width and length of 10 feet.

1. Gym/Health Club/Fitness Studio;
2. Multipurpose room; or
3. Pet wash room.

E. **Southside Plan Area Pedestrian Amenities**. A development project located in the R-3, R-S, R-SMU or C-T districts within the Southside Plan boundaries may provide pedestrian amenities located on private property in the space immediately adjacent to the building frontage.

1. Each square foot of pedestrian amenity space is counted as 1.5 square feet of usable open space.
2. Pedestrian amenities shall meet all of the following criteria:

a. Has an average minimum depth of six feet, measured from the front property line;

b. Does not contain enclosed structures;

c. Provides pedestrian-scale lighting; and

d. Is open to the sky, except for the following building encroachments:

i. Bay windows.

ii. Balconies.

iii. Galleries.

iv. Awnings/canopies.

v. Covered walkways.

Section 39. That Berkeley Municipal Code Sections 23.502.020(D)(4) through (16) are hereby amended to read:

D. **"D" Terms**.

4. Density. See 23.106.100-Residential Density.

~~4.~~5. **Density Bonus.** See 23.332.020 (Definitions).

~~5.~~6. **Department.** The Planning and Development Department of the City of Berkeley or its successor administrative unit.

~~6.~~7. **Department Store.** A retail store selling several kinds of merchandise, which are usually grouped into separate sections, including but not limited to, apparel, housewares, household hardware, household appliances, household electronics and gifts.

~~7.~~8. **Dormer.** A projection built out from a sloping roof, usually housing a vertical window or ventilating louver. See also 23.304.110 (Dormers).

~~8.~~9. **Dormitory.** A building providing group living accommodations, occupied by individuals not sharing a common household, characterized by separate sleeping rooms without individual kitchen facilities and containing congregate bath and/or dining facilities or rooms.

~~9.~~10. **Drive-in Uses.** A use where a customer is permitted or encouraged, either by the design of physical facilities or by the service and/or packaging procedures offered, to be served while remaining seated within an automobile. This use includes drive-through food service establishments, financial services (banks), and automatic carwashes.

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~~10.~~11. **Driveway.** A paved, vehicular accessway connecting an off-street parking space or parking lot with a public or private street.

~~11.~~12. **Drug Paraphernalia.** As defined in California Health and Safety Code Section 11364.5(d).

~~12.~~13. **Drugstore.** A retail establishment where the profession of pharmacy is practiced and/or where licensed prescription drugs and general merchandise are offered for sale. A food products store with a pharmacy is not a drugstore.

~~13.~~14. **Dry Cleaning and Laundry Plants.** A place where clothes are dry cleaned, dyed and/or laundered as part of a commercial business, whether or not such clothes were deposited by a customer at that location, or transported from another location, as part of a service. This use includes all establishments subject to Section 19233 of the State of California Business and Professions Code, regulating Dry Cleaning Plants, but excludes laundromats and cleaners as defined in this chapter.

~~14.~~15. **Duplex.** A building or use of a lot designed for, or occupied exclusively by, two households.

~~15.~~16. **Dwelling Unit.** A building or portion of a building designed for, or occupied exclusively by, persons living as one household.

Section 40. That Berkeley Municipal Code Sub-Sections 23.502.020(F)(7) though (14) are hereby amended to read:

7. **Floor Area, Gross Residential**. See 23.106.035 – Floor Area, Gross Residential.

~~7.~~8. **Floor Area, Leasable.** See 23.106.040– Floor Area, Leasable.

~~8.~~9. **Floor Area Ratio (FAR).** See 23.106.050– Floor Area Ratio.

~~9.~~10. **Food Product Store.** A retail products store selling foods primarily intended to be taken to another location to be prepared and consumed, and the incidental preparation of food or beverages for immediate consumption off the premises.

~~10.~~11. **Food and Beverage for Immediate Consumption.** The sale of food or non-alcoholic beverages for immediate consumption not on the premises.

~~11.~~12. **Food Service Establishments.** An establishment which in whole or in part prepares food or beverages for immediate consumption on or off the premises.

a. **Carry Out Food Store:** A store which serves food or non-alcoholic beverages for immediate consumption not on the premises, but usually in the vicinity of the store. This use is usually characterized as an establishment

which serves food altered in texture and/or temperature on a customer-demand basis, puts such food in non-sealed packages or edible containers, requires payment for such food before consumption, and provides no seating or other physical accommodations for on- premises dining. Examples of this use include delicatessens and other stores without seating which sell doughnuts, croissants, ice cream, frozen yogurt, cookies, whole pizzas and sandwiches. This use excludes bakeries and food products stores.

b. **Quick Service Restaurant:** An establishment which serves food or beverages for immediate consumption either on the premises, or to be taken out for consumption elsewhere. This use is usually characterized as an establishment in which food is cooked on a customer-demand basis, payment is required before consumption, limited or no able service is provided (no waiters), and seating or other physical accommodations for on- premises customer dining is provided. Examples of this use include establishments selling primarily hamburgers or other hot or cold sandwiches, hot dogs, tacos and burritos, pizza slices, fried chicken, or fish and chips.

c. **Full-Service Restaurant**: An establishment which serves food or beverages for immediate consumption primarily on the premises, with only a minor portion, if any, of the food being taken out of the establishment. This use is characterized as an establishment in which food is cooked or prepared on the premises on a customer-demand basis, which requires payment after consumption, and provides seating and tables for on-premises customer dining with table service (waiters).

~~12.~~13. **Fraternity House.** A building used for group living accommodations by an organization recognized by the University of California at Berkeley or other institution of higher learning.

~~13.~~14. **Front Wall.** The wall of the building nearest the front lot line.

Section 41. That Berkeley Municipal Code Sections 23.502.020(L) (8) through (22) are hereby amended to read:

8. **Lighting, Pedestrian-Scale**. A lighting source that provides lighting for pedestrian space, such as sidewalks, parks, and walking paths. Pedestrian-scale lighting sources are directed toward the sidewalk, positioned lower than roadway lighting, and have a mounting height of between 7 feet and 15 feet above finished grade. Examples include post-top lighting, pendant lighting, bollard light posts, and wall-mounted light fixtures.

~~8.~~9. **Limited Equity Cooperative.** The form of ownership defined in Section 11003.4(a) of the Business and Professions Code or other form of ownership, wherein appreciation of equity of dwelling units is no greater than appreciation

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permitted by California Health and Safety Code Section 33007.5 for a Limited Equity Cooperative.

~~9.~~10. **Live Entertainment.** Any one or more of any of the following, performed live by one or more persons, whether or not done for compensation and whether or not admission is charged: musical act (including karaoke); theatrical act (including stand-up comedy); play; revue; dance; magic act; disc jockey; or similar activity.

~~10.~~11. **Live/Work.** A built space used or designed to be used both as a workplace and as a residence by one or more persons in conformance with Chapter 23.312 (Live/Work).

~~11.~~12. **Loading Space, Off-street.** A covered or uncovered space for trucks or other delivery vehicles for the loading or unloading of freight, cargo, packages, containers or bundles of goods and/or bulky goods.

~~12.~~13. **Loft.** See mezzanine.

~~13.~~14. **Lot.** A separate legal subdivision of land, as recorded with the County of Alameda Recorder. See Figure 23.502-4: Lot Configuration.

a. **Abutting Lot.** A lot having a common property line or separated by a public path or alley, private street or easement to the subject lot.

b. **Confronting Lot.** A lot whose front property line is intersected by a line perpendicular to and intersecting the front property line of the subject lot.

c. **Corner Lot.** A lot bounded on two or more adjacent sides by street lines, providing that the angle of intersection is less than 135 degrees.

d. **Flag Lot.** A lot so shaped that the main portion of the lot area does not have direct street frontage, other than by a connection of a strip of land which is used for access purposes.

e. **Interior Lot.** A lot bounded on one side by a street line and on all other sides by lot lines between adjacent lots or is bounded by more than one street with an intersection greater than or equal to 135 degrees.

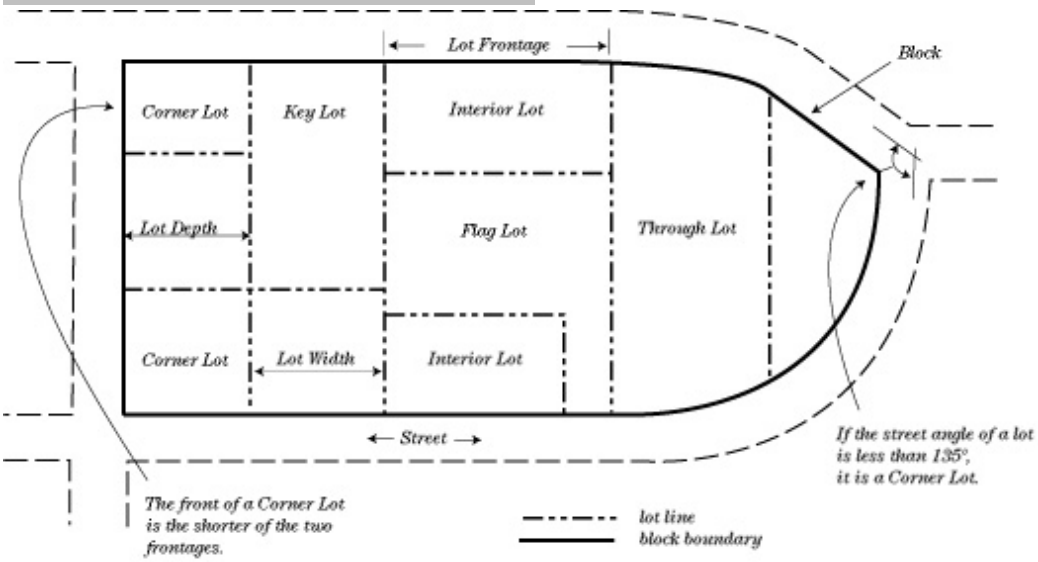
f. **Key Lot.** Any interior lot which abuts the rear lot line of a corner lot.

g. **Receiving Lot.** The lot to which a building is relocated from a different lot.

h. **Source Lot.** The lot from which a building is relocated to a different lot.

i. **Through Lot.** A lot having frontage on two parallel or approximately parallel streets.

FIGURE 23.502-4: LOT CONFIGURATION



~~14.~~15. **Lot Area.** The total horizontal area within a lot's boundary lines.

a. **Lot Area in R-BMU Only**: The total horizontal area within a lot's boundary lines, minus the square footage of the footprints of any buildings, facilities or equipment that are, or shall be, under the control of the San Francisco Bay Area Rapid Transit District (BART).

~~15.~~16. **Lot Coverage.** See 23.106.020 (Lot Coverage).

~~16.~~17. **Lot Depth.** The average distance from the front lot line to the rear lot line measured in the general direction of the side lines.

~~17.~~18. **Lot Frontage.** That dimension of a lot's front lot line abutting on a street.

~~18.~~19. **Lot Lines.** The boundaries between a lot and other property or the public right-of-way.

~~19.~~20. **Lot Line, Front.** The shorter of the two intersecting lot lines along the rights-of-way of a corner lot shall be deemed to be the front of the lot for purposes of determining the lot frontage and for yard requirements. In the case of a lot having equal frontage, or in the case of an irregularly shaped lot, the Zoning Officer shall determine the front in such a manner as to best promote the orderly development of the immediate area.

~~20.~~21. **Lot Width.** The average distance between the side lot lines measured at right angles to the lot depth.

~~21.~~22. **Low Barrier Navigation Center.** A temporary, low-barrier-to-entry shelter focused on moving people into permanent housing that provides temporary living facilities while case managers connect individuals experiencing homelessness to income, public benefits, healthy services, shelter, and housing. Low barrier includes best practices to reduce barriers to entry, such

as allowing partners, pets, storage of personal items, and privacy pursuant to California Government Code Section 65660 and includes services to connect people to permanent housing through a service plan and services staffing and a coordinated entry system pursuant to Section 576.400(d) or Section 578.7(a)(8), as applicable, of Title 24 of the Code of Federal Regulations.

Section 42. That Berkeley Municipal Code Sections 23.502.020(R)(13) through (22) are hereby amended to read:

13. **Residential Density**. See 23.106.100-Residential Density

~~13.~~14. **Residential Districts.** The districts listed under the Residential Districts heading in Table 23.108-1: Zoning Districts.

~~14.~~15. **Residential Hotel Room.** A room which is:

a. Used, designed, or intended to be used for sleeping for a period of 14 consecutive days or more;

b. Not a complete dwelling unit, as defined in this chapter; and

c. Not a Tourist Hotel Room, as defined in this chapter.

~~15.~~16. **Residential Use.** Any legal use of a property as a place of residence, including but not limited to dwelling units, group living accommodations, and residential hotels.

~~16.~~17. **Retail, General.** A retail establishment engaged in the sales of personal, consumer, or household items to the customers who will use such items. This use includes antique stores, art galleries, arts and crafts supply stores, bicycle shops, building materials and garden supplies stores, clothing stores, computer stores, cosmetic/personal care items, department stores, drug paraphernalia stores, drug stores, fabric, textile and sewing supply shops, flower and plant stores, food product stores, furniture stores, garden supply stores, nurseries, gift/novelty shops, household hardware and housewares stores, household electronics/electrical stores, jewelry/watch shops, linen shops includes bedding, musical instruments and materials stores, office supply stores, paint stores, photography equipment supply stores, secondhand stores, sporting goods stores, stationery, cards and paper goods stores toy stores and variety stores. This use excludes video rental stores, service of vehicle parts, and firearm/munition sales.

~~17.~~18. **Retaining Wall.** A wall designed to contain and resist the lateral displacement of soil and of which such soil is at a higher elevation on one side of the wall.

~~18.~~19. **Review Authority.** The City official or body responsible for approving or denying a permit application or other form of requested approval under the Zoning Ordinance.

20. **Room, Multipurpose**. An area designed to accommodate a range of recreation and assembly activities, such as meetings, conferences, social gatherings, and studying.

21. **Room, Pet Wash**. An area designed to accommodate self-service pet washing, including grooming, to support animal and resident health.

~~19.~~22. **Rooming House.** A building used for residential purposes, other than a hotel, where lodging for 5 or more persons, who are not living as a single household, is provided for compensation, whether direct or indirect. In determining the number of persons lodging in a rooming house, all residents shall be counted, including those acting as manager, landlord, landlady or building superintendent. See also Boarding House.

Section 43. Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.

Text highlighted in gray consists of non-substantive technical edits and renumbering.

Exhibit A: Proposed Zoning Map – Southside Plan Area

Text highlighted in gray consists of non-substantive technical edits and renumbering.

ATTACHMENT 2. REFERENCE MATRIX – SOUTHSIDE ZONING ORDINANCE AMENDMENTS

Section (Ordinance Section)	Title	Action	Description/Rationale of Changes
23.106 Rules of Measurement			
23.106.035 (Section 1)	Floor Area – Gross Residential	Add	Add a new definition as part of new usable open space calculation.
23.106.100 (Section 2)	Residential Density	Add	Add a new definition as part of new minimum density regulation.
23.202.020 Allowed Residential Land Uses			
Table 23.202-1 (Section 3)	Allowed Uses in Residential Districts	Amend	Add reference to new entry standard for individual residential units (23.302.070(H)).
23.202.030 Residential Districts – Additional Permit Requirements			
23.202.030(A)(1) (Section 4)	Residential Additions - Permits Required	Amend	Residential additions more than 15 percent of the lot area or 600 square feet, whichever is less require a Zoning Certificate.
23.202.030(B) (Section 5)	Residential Additions - Adding Bedrooms	Amend	Adding the fifth or more bedroom to an existing lot requires a Zoning Certificate.
23.202.100 R-3 Multiple-Family Residential District			
23.202.100(C) (Section 6)	Additional Permit Requirements	Amend	Fix typo.
23.202.100(E) (Section 7)	Development Standards	Amend	Consolidate development standards into one table, update standards consistent with proposal, add new figure showing R-3 parcels within Southside.
23.202.110 R-4 Multi-Family Residential District			
23.202.110(E) (Section 8)	Development Standards	Amend	Revise table numbers.
23.202.120 R-5 High-Density Residential District			
23.202.120(D) (Section 9)	Development Standards	Amend	Revise table numbers.
23.202.130 R-S Residential Southside District			
23.202.130(E) (Section 10)	Development Standards	Amend	Consolidate development standards into one table, update standards consistent with proposal.
23.202.140 R-SMU Residential Southside District			
23.202.140(E) (Section 11)	Development Standards	Amend	Consolidate development standards into one table, update standards consistent with proposal.
23.202.150 R-BMU Residential BART Mixed Use District			
23.202.150(D) (Section 12)	Ground-Floor Uses	Amend	Revise table and figure number.

ATTACHMENT 2. REFERENCE MATRIX – SOUTHSIDE ZONING ORDINANCE AMENDMENTS

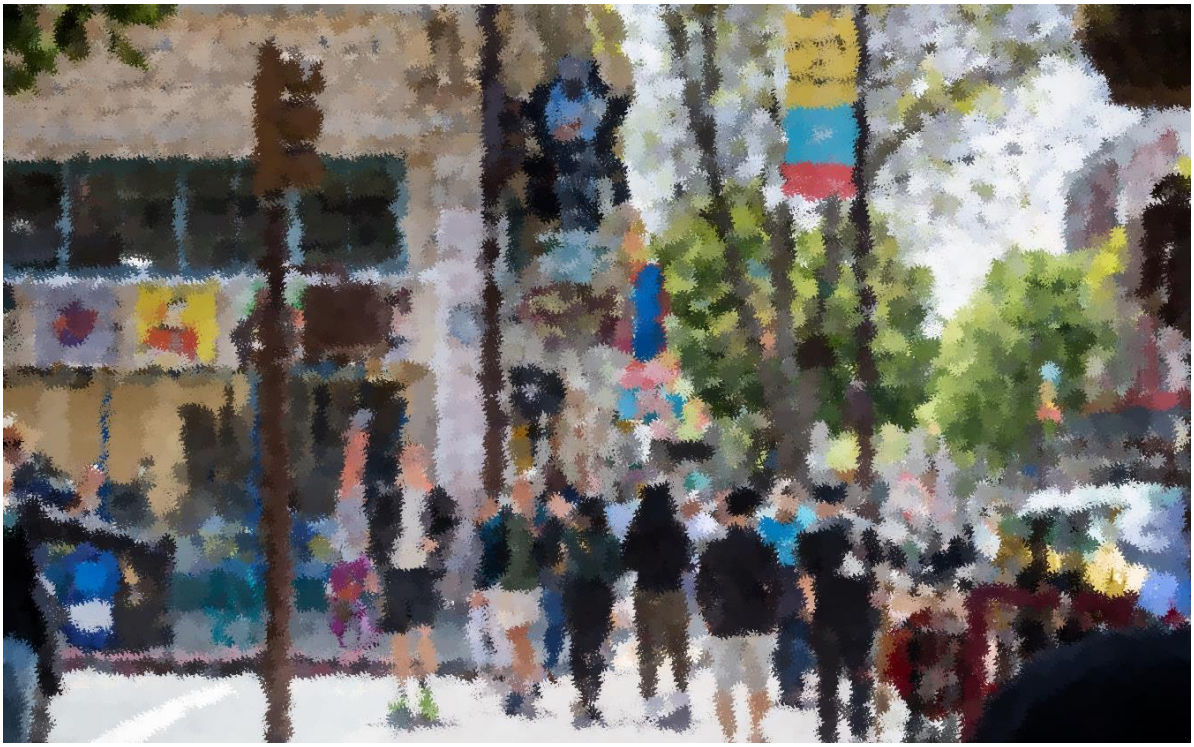
Section (Ordinance Section)	Title	Action	Description/Rationale of Changes
23.202.150(F)(1)-(2) (Section 13)	Development Standards	Amend	Revise table numbers.
23.204.020 Allowed Land Use Commercial Districts			
Table 23.204-1 (Section 14)	Allowed Uses in Commercial Districts	Amend	• Add reference to 23.204.110(B)(5) for mixed-use residential projects in the C-T district • Add reference to new entry standard for individual residential units (23.302.070(K))
23.204.110 C-T Telegraph Avenue Commercial District			
23.204.110(B)(5) (Section 15)	Residential Only Buildings	Amend	Allow residential uses on the ground floor of buildings in the C-T district, subject to certain design standards.
23.204.110(D) (Section 16)	Development Standards	Amend	Consolidate development standards into one table, update standards consistent with proposal.
23.204.120 C-SO Solano Avenue Commercial District			
23.204.120(D) (Section 17)	Development Standards	Amend	Revise table numbers.
23.204.120(D)(3) (Section 18)	Modification to Standards – Mixed Use and Residential-Only Projects	Amend	Revise table number references.
23.204.130 C-DMU Downtown Mixed-Use District			
23.204.130(E)(1)(a) (Section 19)	Height	Amend	Revise table number references.
Table 23.204-38 (Section 20)	C-DMU Increased Height Allowance	Amend	Revise table number reference.
23.204.130(E)(3)(a) (Section 21)	Setbacks	Amend	Revise table number reference.
23.204.130(E)(3)(b) (Section 22)	Modifications to Standards	Amend	Revise table number reference.
23.204.130(E)(3)(c) (Section 23)	Residential Transitions	Amend	Revise table number reference.
23.204.130(E)(4) (Section 24)	Usable Open Space	Amend	Revise table number reference.
23.204.140 C-W West Berkeley Commercial District			
23.204.140(B)(2) (Section 25)	Mixed-Use Residential	Amend	Revise table number reference.
23.204.140(E)(1) (Section 26)	Development Standards	Amend	Revise table number reference.

ATTACHMENT 2. REFERENCE MATRIX – SOUTHSIDE ZONING ORDINANCE AMENDMENTS

Section (Ordinance Section)	Title	Action	Description/Rationale of Changes
23.204.150 C-AC Adeline Corridor Commercial District			
23.204.150(B)(3)(a) (Section 27)	Permitted Ground Floor Uses	Amend	Revise table number reference.
23.204.150(E)(1) (Section 28)	Basic Standards	Amend	Revise table number references.
Table 23.204-44 (Section 29)	C-AC South Shattuck Subarea Dev. Standards	Amend	Revise table number.
Table 23.204-45 (Section 30)	C-AC North and South Adeline Subarea Dev. Standards	Amend	Revise table number.
23.204.150(F)(2)(b) (Section 31)	Active Commercial Areas	Amend	Revise table number reference.
23.204.150(F)(2)(c) (Section 32)	Commercial Use Areas	Amend	Revise table number reference.
23.302.070 Use-Specific Standards			
23.302.070(H-K) (Section 33)	Residential Use, Ground-Floor Units	Add	Add a new requirement that, within the Southside, individual residential unit entries within 6 feet of the front property line to be at least 18 inches above finished grade.
23.304 General Development Standards			
Table 23.304-1 (Section 34)	Setbacks Reductions in Residential Districts	Amend	Remove discretionary permit to reduce minimum setbacks.
Table 23.304-3 (Section 35)	Setbacks Adjacent to Residential Districts	Amend	Add new minimum setbacks in the C-T district for lot lines abutting or confronting lots in a residential district.
23.304.040 (Section 36)	Building Separation in Residential Districts - Table 23.304-4	Amend	Remove discretionary permit to reduce building separation.
23.304.050(C) (Section 37)	Building Height	Add	Add new allowance in Southside for parapets to exceed the maximum height up to 5 feet as of right, clarify other districts that also allow parapets as of right.
23.304.090 (Section 38)	Usable Open Space	Amend	Add requirements specific to the Southside.
23.502.020 - Defined Terms			

ATTACHMENT 2. REFERENCE MATRIX – SOUTHSIDE ZONING ORDINANCE AMENDMENTS

Section (Ordinance Section)	Title	Action	Description/Rationale of Changes
23.502.020(D)(4-16) (Section 39)	"D" Terms - Density	Add	Add new definition of residential density for minimum density regulation.
23.502.020(F)(7-14) (Section 40)	"F" Terms – Floor Area, Gross Residential	Add	Add new definition for gross residential floor area for usable open space regulation.
23.502.020(L)(8-22) (Section 41)	"L" Terms – Lighting, Pedestrian Scale	Add	Add new definition for pedestrian-scale lighting.
23.502.020(R)(13-22) (Section 42)	"R" Terms – Room, Multipurpose and Pet Wash	Add	Add new definition for residential density, multipurpose room, and pet wash room.



Southside Zoning Implementation Program

Addendum to the 2023-2031 Housing Element Update Final Environmental Impact Report

SCH #2022010331

prepared by

City of Berkeley
1947 Center Street, Second Floor
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August 2023

RINCON CONSULTANTS, INC.
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Appendices

1 Introduction

This document is an Addendum to the *2023-2031 Housing Element Update Environmental Impact Report* (EIR) (State Clearinghouse #2022010331) (hereinafter referred to as the "2023 EIR") which was prepared for the City of Berkeley 2023-2031 Housing Element Update ("HEU"). The 2023 EIR was certified, the mitigation measures in the EIR were adopted and incorporated into the HEU, and the HEU was approved by the City of Berkeley ("City") on January 18, 2023. Pursuant to State CEQA Guidelines section 15150, an addendum "may incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public." Accordingly, the environmental analysis and mitigation measures identified in the 2023 EIR are incorporated by reference herein. Where the analysis in this Addendum relies upon the analysis of the 2023 EIR it will be appropriately summarized and referenced. The 2023 EIR is available for public review at:

City of Berkeley
Land Use Planning Division
1947 Center Street, Second Floor
Berkeley, California 94704

The document is also available on the City's website: https://berkeleyca.gov/construction-development/land-use-development/general-plan-and-area-plans/housing-element-update.

The proposed Southside Zoning Implementation Project (hereinafter referred to as "the proposed project" would involve changes to the approved HEU that was analyzed in the 2023 EIR in order to implement zoning text and map amendments, and associated General Plan text and map amendments for the Southside Area (hereinafter referred to as "Southside Area") as called for in HEU Program 27, and to establish minimum density standards as called for in HEU Program 33. Therefore, some modifications and additions are necessary to the 2023 EIR, but as discussed in this Addendum no subsequent or supplemental EIR is required.

Pursuant to Section 15164 of the *CEQA Guidelines*[1], a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15612 calling for preparation of a subsequent EIR have occurred. Under Section 15162 (a), where an EIR has been certified for a project, no subsequent EIR shall be prepared for the project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, that substantial changes are proposed in the project, substantial changes occur with respect to the circumstances under which the project is undertaken, or new information of substantial importance, any of which require major revisions of the previous EIR due to one or more new significant impacts not discussed in the previous EIR, or a substantially increase in the severity of previously identified significant impacts.

Regarding preparation of an addendum to an EIR, Section 15164 of the *CEQA Guidelines* states that:

- The lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred (Section 15164(a)).
- An addendum need not be circulated for public review but can be included in or attached to the final EIR (Section 15164(c)).

[1] The CEQA Guidelines are found at California Code of Regulation, Title 14, Section 15000 *et seq*.

- The decision-making body shall consider the addendum with the final EIR prior to making a decision on the project (Section 15164(d)).
- A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence (Section 15164(e))

This Addendum has been prepared in accordance with CEQA (California Public Resources Code Section 21000, *et seq.*) and the *CEQA Guidelines*. It describes the changes in the HEU that constitute the proposed project, and compares the impacts of those changes to the impacts of the HEU identified in the 2023 EIR. The analysis in this Addendum concludes that the proposed project does not require preparation of a subsequent EIR.

2 Background

This section provides an overview of the 2023-2031 Housing Element and the analysis of the HEU in the 2023 EIR to provide context for this Addendum.

2.1 2023-2031 Housing Element Update Project Description

The 2023-2031 HEU project amended the City's General Plan by replacing the 5th Cycle Housing Element with the 2023-2031 6th Cycle Housing Element, and amended other portions of the City's General Plan as needed for consistency and HEU implementation. The City's Regional Housing Needs Allocation (RHNA) for the 2023-2031 planning period was 8,934 units, distributed among four income categories (very low, low, moderate, and above moderate). In order to meet the RHNA, the City assessed the capacity to provide sites to meet the RHNA in three categories: Likely Sites, Pipeline Sites, and Opportunity Sites. The Likely Sites, Pipeline Sites and Opportunity Sites together constituted the 2023 EIR Sites Inventory, providing for a total of 15,153 units, which includes 800 accessory dwelling units (ADUs).[2]

The City determined, based on the sites inventory, that rezoning was not needed to meet the RHNA. However, based on development activity the City determined that zoning alone would not deliver the level of deed-restricted affordable housing and economic and geographic diversity that the HEU aimed to achieve. Therefore, implementation programs and zoning policies were included in the HEU to encourage additional housing, particularly affordable housing that supports a diversity of income levels and household types. The implementation programs included in the HEU include a program to promote middle- and moderate-incoming housing and a program to facilitate additional housing development in the Southside Area; these are summarized below.

Middle Housing Rezoning

The Middle Housing Rezoning implementation program was designed to increase density in Single-Family Residential (R-1), Limited Two-Family Residential (R-1A), Restricted Two-Family Residential (R-2), Restricted Multiple-Family Residential (R-2A), and Mixed Use-Residential (MU-R) zoning districts based on the State's adoption of Senate Bill (SB) 9, and to promote housing for middle- and moderate-income households. Based on the proposed density changes, the 2023 EIR analyzed 770 additional units distributed throughout the R-1 districts and 975 additional units distributed throughout the R-1A, R-2, R-2A and MU-R districts, for a total of 1,745 middle housing units in the 2023-2031 period.

Southside Zoning Modification Project

The Southside Zoning Modification Project included amendments aimed at facilitating additional housing compared to what would be allowed under the existing zoning within the Southside Plan Area. The zoning modifications and a HEU program for local density bonus were intended to increase housing capacity and production to better meet student housing demand in the Southside

[2] Likely Sites included 4,685 units with an estimated 800 ADUs; Pipeline Sites included 2,415 units; and Opportunity Sites included 8,053 units.

Area through changes in a targeted number of zoning parameters: building heights, building footprints (including setbacks and lot coverage), parking, ground-floor residential use, and adjustments to the existing zoning district boundaries. The 2023 EIR assumed rezoning would allow for 1,000 more units in the portions of the Multiple-Family Residential (R-3), Residential High Density Subarea (R-S), Residential Mixed Use Subarea (R-SMU), and Telegraph Avenue Commercial (C-T) districts within the Southside Area for the 2023-2031 period.

2023 EIR Buildout

Table 1 summarizes the buildout analyzed in the 2023 EIR, which is based on the 2023 EIR Sites Inventory of 15,153 units, an additional 1,200 units at the Ashby and North Berkeley BART stations, and projections for implementation programs - Middle Housing Rezoning and the Southside Zoning Modification Project - totaling 2,745 units. Overall, the 2023 EIR assumed that implementation of the HEU zoning changes and other programs could facilitate up to 19,098 units additional units in Berkeley.

Table 1 2023 EIR Projected Buildout

	Total New Units
EIR Sites Inventory	
Likely Sites	4,685
Pipeline Sites	2,415
Opportunity Sites	8,053
Implementation Programs	
Middle Housing Rezoning	1,745
Southside Zoning Modification Project	1,000
Ashby and North Berkeley BART Stations	1,200
Overall EIR Growth Assumption	**19,098**

Source: City of Berkeley 2023a

2.2 2023-2031 Housing Element Update EIR

The 2023 EIR evaluated potential environmental consequences associated with the HEU for all of the environmental issue areas identified in the *CEQA Guidelines* Appendix G checklist. The 2023 EIR found the following impacts to be less than significant without mitigation: aesthetics, biological resources, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, population and housing, public services and recreation, transportation, and utilities and service systems.

The 2023 EIR found that the following impacts would have less-than-significant impacts with implementation of mitigation measures identified in the EIR:

- Air Quality
- Cultural Resources
- Geology and Soils
- Tribal Cultural Resources
- Wildfire

Mitigation Measure AQ-1 (Construction Emissions Reduction Measures), Mitigation Measure AQ-2 (Construction Health Risk Assessment), and Mitigation Measure AQ-3 (TAC Exposure Reduction Building Measures) would reduce air quality impacts to less than significant levels. Mitigation Measure GEO-1 (Protection of Paleontological Resources) would reduce geology and soils impacts to less than significant levels. Mitigation Measure TCR-1 (Tribal Cultural Monitoring) would reduce tribal cultural resources impacts to less than significant levels.

The 2023 EIR found that the HEU would have significant and unavoidable impacts related to cultural resources. Mitigation Measure CUL-1 (Historic Context Statement, Cultural Resources Survey and Designations) and Mitigation Measure CUL-2 (Historic Resources Discretionary Review) would reduce cultural resources impacts to the maximum extent feasible. However, even with implementation of mitigation measures, existing historical resources and historical resources eligible for listing could still be materially impaired by future development that would be carried out under the HEU. Therefore, cultural resources impacts would remain significant and unavoidable.

The 2023 EIR also found that the HEU would have significant and unavoidable impacts related to noise. Although future development facilitated by the HEU would be required to comply with the City's Standard Conditions of Approval, which would reduce construction noise impacts to the extent feasible, larger developments involving lengthier construction durations with the use of larger, heavy-duty equipment could still exceed the City's standards for stationary equipment in both multi-family residential and commercial zones. Furthermore, construction noise levels could exceed the City's standards at multiple sites where the HEU would facilitate development in Berkeley. Therefore, construction noise impacts would remain significant and unavoidable.

The 2023 EIR also found that the HEU would have significant and unavoidable impacts related to wildfire. Adherence to City regulations and procedures and implementation of Mitigation Measure W-1 (Undergrounding of Power Drops in the VHFHSZs) would reduce the risk of fire during construction, but not to a less-than-significant level. That is because, for some development projects, even with implementation of wildfire prevention measures, impacts may result from the potential for unusual site-specific or road conditions, project characteristics, and the general ongoing fire risk in Berkeley Hills. Therefore, wildfire impacts would remain significant and unavoidable.

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3 Project Description

3.1 Project Location and Existing Conditions

The project location is the "Southside Area" of the City of Berkeley, as defined in the 2011 Southside Plan (City of Berkeley 2011) and shown in Figure 1 (Regional Location) and Figure 2 (Southside Area Location). The Southside Area encompasses approximately 28 full city blocks and several more partial city blocks, all directly south of the main campus of the University of California at Berkeley ("the University"). The Southside Area is generally bounded by Bancroft Way and the University on the north; Dwight Way on the south (including parcels on both sides of Dwight Way); Prospect Street on the east (including parcels on both sides of Prospect Street); and Fulton Street on the west (including some parcels extending west from Fulton towards Shattuck Avenue and Downtown Berkeley). The Southside Area also includes properties extending south along Telegraph Avenue between Dwight Way and Parker Street.

The Southside Area contains a diverse mix of land uses, including housing, offices, retail, religious and cultural institutions, schools, hotels, parking, recreational uses, and public streets. The most common existing use is residential, which currently occupies approximately 60 percent of the developable land in the Southside Area (excluding streets).

In addition to housing, the Southside Area includes the important retail and social corridor of Telegraph Avenue, a major student-oriented street that provides storefront shopping, restaurants, community activity, and street vendors.

Shops and businesses used by students, visitors, and residents are also found elsewhere in the Southside Area. They include longstanding establishments such as Caffe Strada and Free House at College Avenue and Bancroft Way; the retail and commercial block along Dwight Way between Shattuck Avenue and Fulton Street; and the many shops and restaurants along streets perpendicular to Telegraph Avenue – particularly along Bancroft Way and Durant Avenue.

Recreational uses in the Southside Area include the University-owned and managed People's Park. Two city parks are located within walking distance of the Southside: Civic Center Park at Milvia and Center streets, and Willard Park at Derby Street and Hillegass Avenue.

The Southside Area contains a range of institutional land uses which include religious, social and cultural institutions, as well as the University of California, Berkeley (University). University-owned parcels, located mostly west of College Avenue, are shown in Figure 3. University-owned land includes University-operated student housing, University-owned student housing operated by the Berkeley Student Cooperative, and well as and non-residential uses associated with the University, such as the Tang Health Center, the Legends Aquatic Center, the and the UC Berkeley Safe Transportation Research and Education Center.

Figure 1 Regional Location

Imagery provided by Esri and its licensors © 2020.

Project Location

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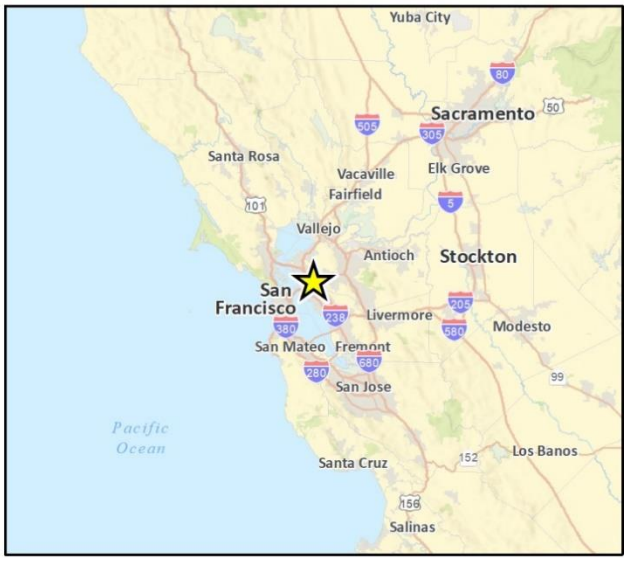
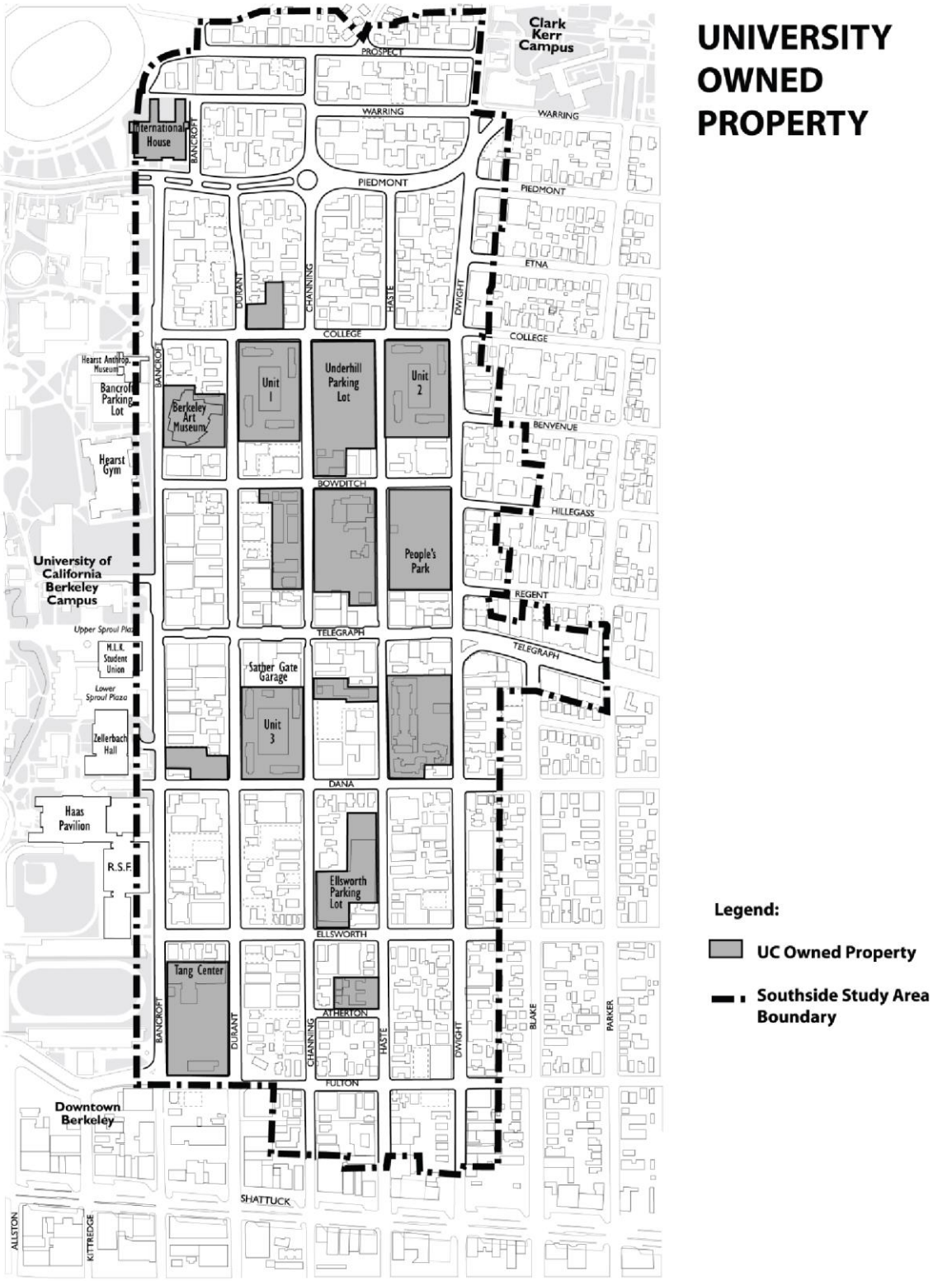


Figure 2 Southside Area Location

Imagery provided by Microsoft Bing and its licensors © 2020.

Figure 3 University-owned Parcels



Source: City of Berkeley 2011.

The UC Berkeley 2021 Long Range Development Plan (2021 LRDP), adopted by the UC Board of Regents in 2021, establishes a framework to guides campus development over a 15-year period.[3] The 2021 LRDP EIR (State Clearinghouse Number 2020040078) evaluated future development that could occur from implementation of the 2021 LRDP, this includes University-owned land located in the Southside Area, specifically People's Park, 2020 Bancroft Way, the former Anna Head School, Unit 3, and the Channing/Ellsworth complex.

Existing Zoning

The City's Zoning Ordinance and associated Zoning Map identify specific zoning districts in Berkeley, and development standards that apply to each district. The zoning districts that currently exist in the Southside Area are as follows:

- C-T (Telegraph Avenue Commercial District)
- R-SMU (Residential Southside Mixed Use District)
- R-S (Residential Southside High Density District)
- R-3 (Multiple-Family Residential District)
- C-SA (South Area Commercial District)

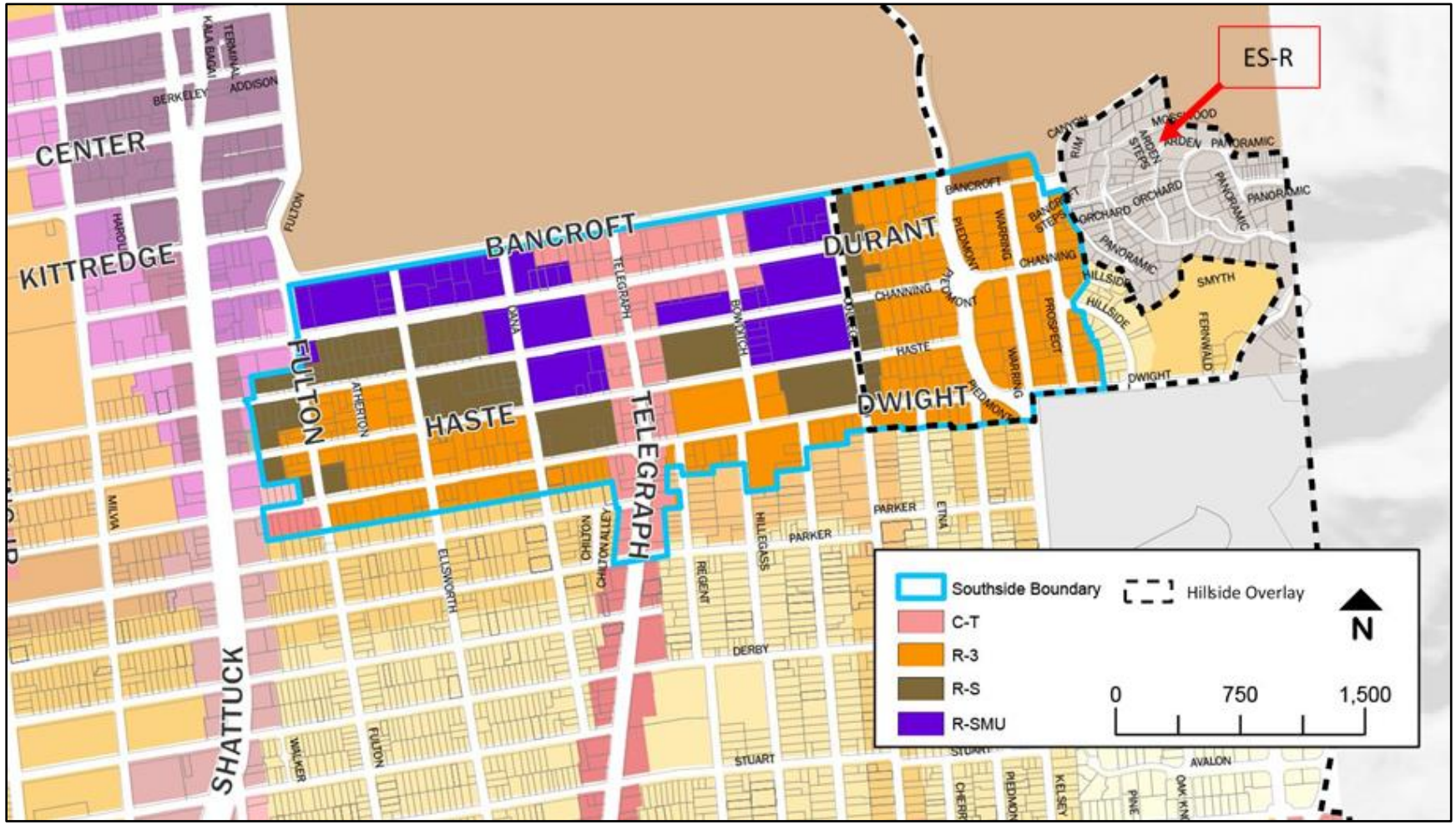
These existing zoning districts are shown in Figure 4, and their associated zoning district standards are summarized in Table 2.

Parcels in the Southside Area located east of College Avenue are subject to the Hillside (H) Overlay, which includes maximum allowed height limits to give reasonable protection to views and allow for flexibility in setbacks and building separation to accommodate steep topography, irregular lot pattern, unusual street conditions, or other special aspects of the hillside areas.

The 2011 Southside Plan also established a "Car-Free Housing" area which currently applies to the C-T district, the R-SMU district, and some portions of the R-S and R-S(H) districts located north of Haste Street. The Car-Free Housing area allows for reduced parking requirements for residential uses and increased allowable lot coverage. The C-T district, R-SMU district, and R-S district – along with the Car-Free Housing area – only occur in the Southside Area. The R-3, C-SA, and Hillside Overlay districts occur in other parts of Berkeley as well as the Southside Area.

[3] UC Berkeley Campus Planning Documents, 2021 Long Range Development Plan. https://capitalstrategies.berkeley.edu/planning-documents.

Figure 4 Existing Southside Area Zoning District Boundaries



Source: City of Berkeley 2023a

Table 2 Summary of Existing Southside Area Zoning District Standards

	C-T (north of Dwight)[1]	C-T (south of Dwight)[1]	R-SMU[2]	C-SA[1]	R-S[2]	R-3[2]
General Plan Designation	Avenue Commercial	Avenue Commercial	Residential Mixed Use	Avenue Commercial	High Density Residential	Medium Density Residential
Max Height (stories)[3]	None (assume 6 based on height)	4	4 (5 with UP)	5 if residential, 3 if non-res	3 (4 with UP)	3
Max Height (feet)[3]	65' (75' with UP)	50' (65' with UP)	60' (65' or 75' with UP)	60' if residential; 36' if non-res	35' (45' with UP)	35'
Front Setback[4]	None	None	10' (0' with AUP)	15' (see R-4)	10' (0' with AUP)	15'
Rear Setback[4]	None	None	10' – 19' (0' with AUP)	15'-21' (see R-4)	10' – 17' (can be reduced w/ AUP)	15' (can be reduced w/ AUP)
Side Setback[4]	None	None	4' – 10' (0' with AUP)	4'-12' (see R-4)	4' – 8'	4' – 6'
Side Setback[4] (street)	None	None	6' – 10' (0' with AUP)	6'-15' (see R-4)	6' – 10'	6' – 10'
Max Lot Coverage	100%	100%	40% - 60% (100% with AUP)	40-50% (see R-4)	55% - 70%	40% - 50%
Min Building Separation[5]	None	None	8'-24'	8'-28'	8'-20'	8'-16'
Residential Parking	None required	None required	None required	1 parking space/unit	None required if in C-FH area; 1 parking space/unit if not in C-FH area	1 parking space/unit
Max Residential Density (GLA residents only)	350 sf. (GLA density can be increased with UP)	350 sf (GLA density can be increased with UP)	175 sf/GLA resident (greater density with UP)	350 sf (GLA density can be increased with UP)	350 sf/GLA resident (no option to exceed)	350 sf/GLA resident (no option to exceed)
Min Lot Area	None	None	5,000 sf	None/5,000 sf for residential only land use	5,000 sf	5,000 sf
Max FAR	5.0 (6.0 with UP)	4.5	N/A	4.0	N/A	N/A
Min Open Space	40 sf/DU	40 sf/DU	40 sf/DU 20 sf/GLA resident	40sf/DU	50 sf/DU 20 sf/GLA resident	200 sf/DU 90 sf/GLA resident

	C-T (north of Dwight) [1]	C-T (south of Dwight) [1]	R-SMU[2]	C-SA[1]	R-S[2]	R-3[2]
Ground-floor residential	Not allowed	Not allowed	Allowed	Allowed	Allowed	Allowed

Notes: AUP: Administrative Use Permit; DU: Dwelling Unit; GLA: Group Living Accommodations; UP: Use Permit, C-FH: Car-Free Housing

[1] Other uses allowed in this district include residential uses; public and quasi-public uses; retail uses; personal and household services; office uses; food and alcohol services, lodging, entertainment, and assembly uses; vehicle service and sales uses; industrial and heavy commercial uses; incidental uses; and other miscellaneous uses with an approved AUP, UP, or ZC as applicable (BMC Table 23-204-1).

[2] Other uses allowed in this district include residential uses; public and quasi-public uses; commercial uses; industrial and heavy commercial uses; and other uses with an approved AUP, UP, or ZC as applicable (BMC Table 23.202-1).

[3] Parcels located east of College Avenue are also subject to the Hillside (H) Overlay height standards, which allow for an average and maximum height of 35 feet and three stories for new buildings, and modified height standards for residential additions. These limits can be exceeded with an Administrative Use Permit upon finding the project is consistent with the purposes of the Hillside Overlay zone.

[4] Parcels located east of College Avenue are also subject to the Hillside (H) Overlay setback standards, which allow for a reduction in the minimum required main building setbacks with an Administrative Use Permit, upon finding the project is consistent with the purposes of the Hillside Overlay zone.

[5] Parcels located east of College Avenue are also subject to the Hillside (H) Overlay building separation standards, which allow for a reduction in the minimum required building separation with an Administrative Use Permit, upon finding the project is consistent with the purposes of the Hillside Overlay zone.

3.2 Proposed Project Description

Consistent with what was envisioned for the Southside Area in the HEU and analyzed in the 2023 EIR, the proposed project would include amendments to the Zoning Ordinance and Zoning Map, and associated General Plan text and map amendments, to increase development potential, particularly student-oriented housing.

Figure 5 shows the proposed zoning district boundary changes. As shown in Figure 5, the proposed project would include expansion of the R-SMU district in the area four blocks west of Telegraph Avenue, which would change from R-S to R-SMU, and three blocks east of Telegraph Avenue, which would change from R-3 and R-S to R-SMU. The proposed project would also include expansion of the R-S district into the areas currently zoned R-3 in between Haste Street, Dwight Way, and Fulton Street. No zoning boundary changes are proposed for the C-T district or within the Hillside Overlay zone.

Table 3 identifies the proposed modifications to the development standards in the Zoning Ordinance. The project would involve the creation or modification of objective standards in the Southside Area, including building height, coverage, and ground-floor residential uses in the R-3, R-3H, R-S, R-SH, R-SMU, and C-T zoning districts. The Southside Area also includes seven parcels zoned C-SA, but no changes are proposed for C-SA within the Southside Area.

Table 3 Proposed Zoning Ordinance Amendments

Building Height

Zoning standards for building height would be changed in the following ways:

- For all Southside Area zoning districts, remove the Use Permit option to exceed height limits. Height limits stated in the zoning ordinance will be the maximum allowed. Parapets would be allowed to exceed the maximum height by up to 5 feet as of right.
- Institute a maximum building height in the Southside Area as follows:
  - Allow up to 85' in C-T (increase from 65' north of Dwight, and 50 feet south of Dwight)
  - Allow up to 85' in R-SMU (increase from 60', 4 stories)
  - Allow up to 55' in R-S (increase from 35', 3 stories)
  - Allow up to 45' in R-3 within the Southside Area (increase from 35', 3 stories), measured as an average, not a maximum

Building Footprint (Setback, Building Separation, and Lot Coverage)

Zoning standards for building setbacks, separation, and lot coverage in the Southside Plan Area would be changed in the following ways:

- For all Southside Area zoning districts, remove the discretionary review option to modify setbacks, building separation, and lot coverage.
- Allow 10' front setback in R-3 and R-3H (currently 15').
- Allow 0' front setback in R-S, R-SH, R-SMU, and C-T (currently allowed with an AUP in R-S and R-SMU, and by right in C-T).
- Allow 0' street side setback in R-S, R-SH and R-SMU (currently varies from 6' to 10', depending on number of stories, may be reduced to 0' with an AUP).
- Allow 4' interior side setback in R-3, R-3H, R-S, and R-SH (currently varies from 4' to 6' in the R-3 and R-3H, and from 4' to 8' in the R-S and R-SH, depending on number of stories).
- Allow 0' interior side setback in R-SMU (currently varies from 4' to 10', depending on number of stories, may be reduced to 0' with an AUP).
- Allow 10' rear setback in R-3 and R-3H (currently 15', may be reduced to 0' with an AUP).
- Allow 4' rear setback in R-S, R-SMU (currently varies from 10' to 19' depending on number of stories, may be reduced to 0' with an AUP).
- Eliminate requirement for shade studies in C-T.
- Eliminate the maximum lot coverage requirement in all districts.
- Eliminate the minimum building separation requirement in all districts.

Parking

Citywide residential parking standards would apply to all districts in the Southside Area:

- No minimum residential parking requirements (exception: 1 space/unit in Hillside Overlay on streets narrower than 26 feet)
- Residential parking maximum of 0.5 spaces/unit (exception: no maximum in Hillside Overlay on streets narrower than 26 feet)

Usable Open Space

Zoning standards for open space would be changed in the following ways:

- For all Southside Area zoning districts, replace dwelling unit and group living accommodation (GLA) room standards with gross residential floor area standard. The minimum requirement would be based on a per 1,000 square foot ratio of gross residential floor area.
- Institute a minimum usable open space requirement in the Southside Area as follows:
  - At least 150 square feet per 1,000 square feet of gross residential floor area in the R-3 and R-3H (currently 200 square feet per dwelling unit/90 square feet per GLA room)
  - At least 50 square feet per 1,000 square feet of gross residential floor area in the R-S and R-SH (currently 50 square feet per dwelling unit/20 square feet per GLA room)

  - At least 40 square feet per 1,000 square feet of gross residential floor area in the R-SMU and C-T (currently 40 square feet per dwelling unit in R-SMU and C-T, 20 square feet per GLA room in R-SMU)

- For all Southside Area zoning districts, allow up to 50 percent of the total required usable open space to be provided from any of the following:
  - Multipurpose rooms
  - Fitness centers
  - Pet washing rooms
- In the zoning districts that do not require a minimum front setback (R-S, R-SMU, C-T), allow usable open space to be provided in the building frontage zone, meeting the following requirements:
  - Each square foot of usable open space provided in the frontage zone is weighted as 1.5 square feet toward meeting the minimum requirement
  - Minimum average depth of 6' from front property line, not required to be continuous for building frontage
  - Pedestrian-scale lighting
  - Enclosed structures are prohibited
  - Must be open to the sky, with the exception of building encroachments

Floor Area Ratio

Zoning standards for floor area ratio (FAR) would be changed in the following ways:

- Institute a maximum FAR in the R-3, R-S, and R-SMU where FAR is not currently regulated
- Allow up to 3.0 FAR in the R-3, R-3H
- Allow up to 4.0 FAR in the R-S, R-SH
- Allow up to 7.0 FAR in the R-SMU
- Allow up to 8.0 FAR in the C-T (increase from 6.0 with a Use Permit north of Dwight, and 4.0 south of Dwight)

Ground-Floor Residential Use

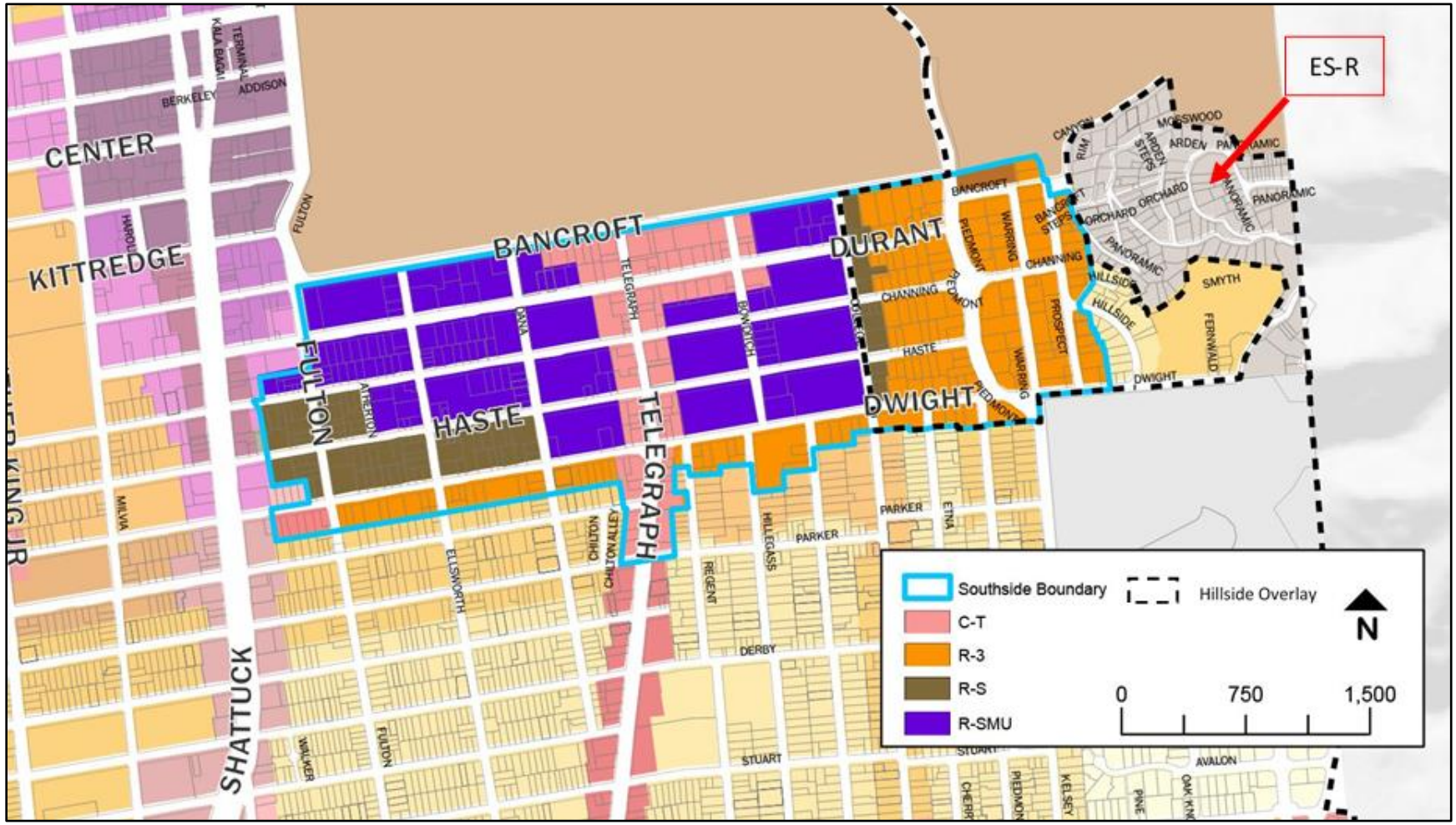
Zoning standards for ground-floor residential use would be changed in the following ways:

- Allow ground-floor residential anywhere in C-T if it is located behind a commercial use, with the commercial use occupying at least the front 30 feet of depth on the ground floor and the entire building frontage.
- Require minimum grade separation of 18 inches above finished grade for residential unit entries located on the ground floor within 6' of the property line in any district in the Southside Area.

Density

- Adopt a minimum density standard for all residential uses in the Southside Area measured on a per dwelling unit basis, as follows:
  - 60 dwelling units per acre in the R-3, R-3H
  - 100 dwelling units per acre in the R-S, R-SH
  - 150 dwelling units per acre in the R-SMU
  - 200 dwelling units per acre in the C-T
- Remove the maximum density standard for GLAs in all districts in the Southside Area
- Remove the minimum lot area standard in all districts in the Southside Area

Figure 5 Proposed Southside Area Zoning District Boundaries



Source: City of Berkeley 2023a

3.3 Proposed Project Buildout Assumptions

The maximum buildout scenario that may occur with the proposed project is shown below in Table 4 and provides the basis for this analysis. As shown in Table 4, the proposed project could result in up to 2,652 new units on 65 sites in the Southside Area. As discussed above under Section 2, the 2023 EIR analyzed a buildout of 1,000 units for the Southside Area. The proposed project would therefore include an additional 1,652 units compared to the HEU.

Table 4 Maximum Buildout Assumptions Under the Proposed Project

	R-3	R-S	R-SMU	C-T	Total
Maximum Height	45 ft	55 ft	85 ft	85 ft	–
Maximum Floor Area Ratio	3	4	7	8	–
Units					
Total Units	48	142	1,661	3,092	4,943
Assumed Housing Element Units (Opportunity Sites)/Existing Capacity	(11)	(64)	(558)	(1,658)	(2,291)
Projected Additional Units	**37**	**78**	**1,103**	**1,434**	**2,652**

Notes: ( ) denotes subtraction

4 Conclusion Regarding Preparation of an Addendum to the 2013 EIR

Pursuant to *CEQA Guidelines* Section 15164, a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in *CEQA Guidelines* Section 15162 calling for preparation of a subsequent EIR have occurred.

The impact analysis that follows in Section 5 of this Addendum, concludes, based on substantial evidence, that the proposed project would not result in new or substantially more severe significant environmental impacts beyond those identified in the 2023 EIR due to substantial changes in the previously approved project, substantial changes in the circumstances under which the project is undertaken, or new information of substantial importance. None of the conditions described in *CEQA Guidelines* Section 15162 that would call for preparation of a subsequent EIR have been met because of the proposed project's changes to the approved HEU. Therefore, this Addendum is the appropriate level of environmental documentation to prepare for the proposed project under CEQA. The City will consider this Addendum, along with the 2023 EIR, prior to making a decision on the proposed project.

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5 Environmental Impacts of the Proposed Changes to the HEU

This Addendum analyzes the changes proposed under the proposed project compared to the analysis of the HEU project in the 2023 EIR to determine if any of the criteria in *CEQA Guidelines* Section 15162 that call for preparing a subsequent EIR would apply to the proposed project. The existing environmental conditions on and around the project site are substantially the same under present conditions as those described in the 2023 EIR. The analysis contained in this section provides updates to existing environmental conditions, where necessary, to characterize potential impacts of the proposed project.

Appendix G of the *CEQA Guidelines* provides a checklist of environmental issues areas suggested for assessment in a CEQA analysis. The 2023 EIR addressed most of these environmental issue areas in detail including the following:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise and Vibration
- Population and Housing
- Public Services and Recreation
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities
- Wildfire

No impacts associated with agriculure and forestry resources or mineral resources were found to occur, and these issues were not analyzed further in the 2023 EIR. The proposed project would be located within the study area analyzed in the 2023 EIR, which includes the entire city of Berkeley, and for the same reasons as stated in the 2023 EIR would not result in impacts related to agriculture and forestry resources or mineral resources because those resources are not present in the Southside Area. Therefore, these issues are not addressed further in this Addendum. The remaining environmental issue areas included in Appendix G of the *CEQA Guidelines* were analyzed in the 2023 EIR.

Potential environmental impacts of the proposed project are analyzed in this Addendum to determine if they are consistent with the impact analysis in the 2023 EIR, and whether additional mitigation measures are required to minimize or avoid further potential impacts. Where the following analysis identifies impacts, mitigation measures identified in the 2023 EIR and adopted and incorporated into the HEU, as well as existing applicable policies and regulations, are discussed, as relevant, with respect to mitigating potentially significant impacts of the proposed project that are different from (new) or substantially more severe than those identified in the 2023 EIR.

5.1 Aesthetics

Impacts Identified in the 2023 EIR

As discussed in Section 4.1, *Aesthetics*, of 2023 EIR, the HEU would not have a substantial adverse effect on a scenic vista since most new buildings would be of a similar height as existing development and views that would be affected are already fully or intermittently impeded by mature trees and buildings. Development under the HEU would also be subject to design review as part of the project approval process and would be subject to the City's general development standards (Berkeley Municipal Code [BMC] Chapter 23.304) as well as objective development standards to ensure that buildings are compatible with neighboring land uses and architectural design and scale. Development under the HEU would replace facilities such as parking lots with buildings that may reduce nighttime sources of light, and new light sources would likely be adjacent and similar to nearby light sources. Development would also be required to comply with BMC Sections 23.304.100 and 23.304.130 which require exterior lighting to be shielded to avoid light spillover onto adjacent residential properties. Furthermore, the closest State Scenic Highway to the city is I-580 in Oakland approximately 1.6 miles from the city limits, and the closest eligible State Scenic Highway is SR 13 located approximately 0.5 miles from the city limits. The proposed project would not have a substantial adverse effect on a scenic vista, conflict with applicable local regulations governing scenic quality, create a new source of substantial light and glare, or substantially damage scenic resources within a scenic highway. Therefore, aesthetics impacts would be less than significant.

Impacts of the Proposed Project

Senate Bill 743 (California Public Resources Code Section 21099) passed in 2013, made changes to CEQA for projects located in transit-oriented development areas. Among these changes are that a project's aesthetics impacts are no longer considered significant impacts on the environment if the project is a residential, mixed-use residential, or employment center project and if the project is located on an infill site within a transit priority area (TPA). Pursuant to Section 21099 of the California Public Resources Code, a "transit priority area" is defined as an area within 0.5 mile of an existing or planned major transit stop. A "major transit stop" is defined in Section 21064.3 of the California Public Resources Code as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

Although the proposed project would increase potential buildout in the Southside Area compared to what was analyzed in the 2023 EIR by up to 1,652 units, the proposed project would only facilitate development in the Southside Area, which is a designated TPA as mapped by the Metropolitan Transportation Commission (MTC 2021). The Southside Area is located within 0.5 mile of the Downtown Berkeley BART station and multiple bus routes such as the Alameda-Contra Costa Transit District (AC Transit) bus routes 6, 36, 51B, 52, 79, 604, 605, 851, and F. Therefore, because the proposed project would facilitate residential uses within a TPA, aesthetics impacts may not be considered significant impacts on the environment.

Pursuant to CEQA Statute Section 21099.d, "aesthetic impacts do not include impacts on historical or cultural resources." Analysis of impacts related to historic or cultural resources is provided below in Section 5.4, *Cultural Resources*.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to aesthetics, and no new mitigation measures are required.

Conclusion

The proposed project would have less than significant impacts with respect to aesthetics. Furthermore, aesthetics impacts within TPAs, such as the Southside Area, are not considered to be significant effects on the environment. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to aesthetics than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.2 Air Quality

Impacts Identified in the 2023 EIR

As discussed in Section 4.2, *Air Quality*, of the 2023 EIR, analysis of the HEU relied on the 2017 Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines. Construction-related air quality impacts were found to be less than significant with implementation of Berkeley's Standard Conditions of Approval (COA) related to diesel particulate matter controls during construction, as well as Mitigation Measure AQ-1, which was adopted and incorporated into the HEU and requires adherence to BAAQMD's Basic Construction Mitigation Measures to reduce fugitive dust impacts. Operational air quality impacts were also found to be less than significant because the VMT associated with HEU buildout would increase by approximately 38 percent, which would not exceed the rate of increase from the forecast population of approximately 43 percent. As discussed in Section 4.2 of the 2023 EIR, because the HEU's VMT increase would not conflict with the BAAQMD's CEQA Guidelines operational plan-level significance thresholds for criteria air pollutants, and the HEU would be consistent with control measures within the BAAQMD 2017 Clean Air Plan, impacts related to conflicting or obstructing implementation of an applicable air quality plan would be less than significant.

According to the California Office of Environmental Health Hazard Assessment (OEHHA), construction of individual projects lasting longer than two months or located within 1,000 feet of sensitive receptors could potentially expose nearby sensitive receptors to substantial pollutant concentrations and therefore could result in potentially significant health risk impacts (OEHHA 2015). Construction conducted in response to the HEU could exceed BAAQMD's thresholds of an increased cancer risk of greater than 10.0 in a million and an increased non-cancer risk of greater than 1.0 Hazard Index (Chronic or Acute), and result in potentially significant impacts related to construction TAC emissions. However, with implementation of Mitigation Measure AQ-2, which was adopted and incorporated into the HEU, construction-related TAC impacts were found to be less than significant. The 2023 EIR determined that operation of land uses facilitated by buildout of the HEU would not include sources of TACs such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities, and also would not include new stationary sources onsite such as emergency diesel generators (BAAQMD 2017). Therefore, the 2023 EIR found less than significant impacts related to operational TACs.

In 2005, CARB issued recommendations to avoid siting new residences within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day or close to known stationary TAC sources (CARB 2005). BAAQMD's average daily traffic (ADT) threshold is lower, at 10,000 vehicles per day (BAAQMD 2012); therefore, this analysis conservatively uses BAAQMD's ADT threshold. Development consistent with the HEU could place sensitive receptors living in housing within approximately 500 to 1,000 feet of Interstate 580 (I-580) and Interstate 80 (I-80). There is also the potential for development to occur within 500 feet of roadways that have existing traffic volumes of 10,000 vehicles per day or more such as University Avenue, Adeline Street, Telegraph Avenue, Claremont Avenue, and Gilman Street (Caltrans 2020). Therefore, development of those housing sites could create a potentially significant impact by exposing future sensitive receptors to substantial pollutant concentrations. However, implementation of Mitigation Measure AQ-3, which was adopted and incorporated into the HEU, would be required and would reduce impacts to a less than significant level.

The 2023 EIR found that the HEU would not generate objectionable odors affecting a substantial number of people during operation since it would not include uses such as wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, or chemical plants. Impacts related to odors would be less than significant.

Impacts of the Proposed Project

Although the proposed project would increase potential buildout in the Southside Area compared to what was analyzed in the 2023 EIR by up to 1,652 units, it would facilitate increased development located within 0.5 mile of the Downtown Berkeley BART station and multiple bus routes such as the Alameda-Contra Costa Transit District (AC Transit) bus routes 6, 36, 51B, 52, 79, 604, 605, 851, and F, as well as the University of California, Berkeley Bear Transit R-Line, which would allow for easier use of alternative modes of transportation and would reduce the use of personal vehicles and subsequent mobile emissions. Similar to the HEU, development facilitated by the proposed project would be required to comply with the latest Title 24 and BMC regulations, including:

- The requirements for residential indoor air quality;
- Part 6 of Title 24, which requires all new low-rise buildings to install photovoltaic (PV) panels that can generate an output greater or equal to the amount of electricity that is annually consumed;
- BMC Section 23.322.090, which contains requirements for residential bicycle parking; BMC Section 19.36.040, which is a "reach code" that exceeds the energy efficiency standards of the California Energy Code;
- BMC Section 19.37.040, which requires 20 percent of parking spaces to be electric vehicle charging spaces capable of supporting future electric vehicle chargers and 80 percent of parking spaces to include raceways to facilitate future electric vehicle supply equipment at all new multi-family developments, and for new one- and two-family dwelling units to accommodate a dedicated 208/240-volt branch circuit for a future EV charger;
- BMC Chapter 19.37 which requires a minimum 65 percent diversion of construction/demolition waste; and BMC Chapter 12.80 (with limited exemptions and exceptions), which requires all-electric new construction to reduce consumption of nonrenewable energy sources.

Therefore, the proposed project would be consistent with the primary goals and control measures of the 2017 Clean Air Plan.

The proposed project would also increase the amount of construction activities compared to the HEU since it would potentially facilitate up to 1,652 more units, thereby further increasing air pollutant emissions that would affect local air quality. However, similar to the HEU, development facilitated by the proposed project would be required to comply with the City's Standard COA regarding diesel particulate matter controls during construction, as well as previously adopted Mitigation Measure AQ-1, which requires implementation of BAAQMD's Basic Construction Mitigation Measures. This would reduce construction-related emissions to a less than significant level, similar to the HEU.

According to the BAAQMD 2022 CEQA Air Quality Guidelines (BAAQMD 2023), determining compliance with the threshold for criteria air pollutants and precursors requires an assessment of the rate of increase of plan VMT and population. As discussed in the 2023 EIR, VMT associated with the HEU would not exceed the rate of increase from the forecast population. Table 5 summarizes the net increase in citywide population compared to the increase in citywide VMT based on modeling performed by Kittelson & Associates (Appendix A). Citywide data is used because VMT is not localized or constrained only to the Southside Area.

Table 5 Increase in Population Compared to VMT Under Project

	2020 Without Project	2031 With Proposed Project	Net Increase	Percent Change
Population	128,004	186,771	58,767	45.9%
Residential Vehicle Miles Traveled	1,436,244	1,982,372	546,128	38.0%

Source: Data provided by Kittelson & Associates, Inc 2023 (Appendix A)

As shown in Table 5, VMT for the proposed project would also increase at a lower percentage when compared to the 2020 Without Project scenario than the increase in population because the proposed project would concentrate growth and residences in proximity to jobs and services to reduce single-occupancy vehicle trips and encourage alternative models of travel. Therefore, impacts concerning criteria pollutants generated from operation of the project would be less than significant, same as the HEU.

Similar to the HEU, development facilitated by the proposed project could exceed BAAQMD's thresholds for increased cancer risk of greater than 10.0 in a million and for increased non-cancer risk of greater than 1.0 Hazard Index (Chronic or Acute), and construction TAC impacts would be potentially significant. Nonetheless, individual development would be required to continue to implement previously adopted Mitigation Measure AQ-2, which would require preparation of a construction Health Risk Assessment (HRE) that would reduce construction TAC impacts to a less than significant level.

Operation of development facilitated by the proposed project would not include sources of TACs such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities, and therefore would not be considered a source of TACs. Residences also do not typically include new stationary sources of TACs onsite, such as emergency diesel generators. However, if residences did include a new stationary source onsite, it would be subject to BAAQMD Regulation 2, Rule 2 (New Source Review) and require permitting. This process would ensure that the stationary source does not exceed applicable BAAQMD health risk thresholds. Therefore, similar to the HEU, operational TAC impacts due to the proposed project would be less than significant.

Unlike the HEU, the proposed project would only facilitate increased development within the Southside Area and would not place sensitive receptors living in housing within approximately 500 to 1,000 feet of Interstate 580 (I-580), Interstate 80 (I-80), or State Route 13 (SR 13). However, there is potential for development to occur within 500 feet of a roadway that has a traffic volume of 10,000 vehicles per day or more such as Telegraph Avenue, which could result in a potentially significant impact. Therefore, continued implementation of previously adopted Mitigation Measure AQ-3 would be required for future development located within 500 feet of Telegraph Avenue, which would require the incorporation of TAC reduction design features into future projects in order to reduce impacts to a less than significant level.

As with the HEU, the proposed project's changes to the HEU would only include residential uses and would not include odor-generating uses such as wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, or chemical plants. Therefore, development facilitated by the proposed project would not generate objectionable odors affecting a substantial number of people during operation, and impacts would be less than significant, similar to the HEU.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to air quality, and no new mitigation measures are required. Berkeley's Standard COA requiring construction BMPs, as referenced in the 2023 EIR, would remain applicable.

Air Quality – Diesel Particulate Matter Controls During Construction. All off-road construction equipment used for projects with construction lasting more than 2 months shall comply with **one** of the following measures:

A. The project applicant shall prepare a health risk assessment that demonstrates the project's on-site emissions of diesel particulate matter during construction will not exceed health risk screening criteria after a screening-level health risk assessment is conducted in accordance with current guidance from BAAQMD and OEHHA. The health risk assessment shall be submitted to the Public Works Department for review and approval prior to the issuance of building permits.

B. All construction equipment shall be equipped with Tier 2 or higher engines and the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by the California Air Resources Board (CARB). The equipment shall be properly maintained and tuned in accordance with manufacturer specifications.

In addition, a Construction Emissions Minimization Plan (Emissions Plan) shall be prepared that includes the following:

- An equipment inventory summarizing the type of off-road equipment required for each phase of construction, including the equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, and engine serial number. For all VDECS, the equipment inventory shall also include the technology type, serial number, make, model, manufacturer, CARB verification number level, and installation date.
- A Certification Statement that the Contractor agrees to comply fully with the Emissions Plan and acknowledges that a significant violation of the Emissions Plan shall constitute a

material breach of contract. The Emissions Plan shall be submitted to the Public Works Department for review and approval prior to the issuance of building permits.

Previously adopted 2023 EIR Mitigation Measures AQ-1 through AQ-3 would remain applicable and would continue to be implemented and monitored.

AQ-1 Construction Emissions Reduction Measures

As part of the City's development approval process, the City shall require applicants for future development projects within the project sites to comply with the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of PM_{10} (Table 8-2, Basic Construction Mitigation Measures Recommended for All Proposed Projects, of the May 2017 BAAQMD CEQA Guidelines), outlined below.

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times a day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacture's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper conditions prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's number shall also be visible to ensure compliance with applicable regulations.

AQ-2 Construction Health Risk Assessment

For individual projects (excluding ADUs, single-family residences, and duplexes) where construction activities would occur within 1,000 feet of sensitive receptors, would last longer than two months, and would not utilize Tier 4 and/or alternative fuel construction equipment, the project applicant shall prepare a construction health risk assessment (HRA). The HRA shall determine potential risk and compare the risk to the following BAAQMD thresholds:

- Non-compliance with Qualified Community Risk Reduction Plan;
- Increased cancer risk of > 10.0 in a million;
- Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute); or
- Ambient $PM_{2.5}$ increase of > 0.3 $\mu g/m^3$ annual average

If risk exceeds the thresholds, measures such as requiring the use of Tier 4 and/or alternative fuel construction equipment shall be incorporated to reduce the risk to appropriate levels.

AQ-3 TAC Exposure Reduction Building Measures

The following design features shall be incorporated for residential development located within 1,000 feet of I-580/80 or on a lot that fronts on a section of roadway with 10,000 vehicles per day or more in order to reduce exposure of proposed residences to TACs from vehicles and stationary combustion engines (i.e., generators):

1. If the proposed buildings would use operable windows or other sources of infiltration of ambient air, the development shall install a central HVAC system that includes high efficiency particulate filters (HEPA). These types of filters are capable of removing approximately 99.97 percent of the DPM emissions from air introduced into the HVAC system (U.S. EPA 2022). The system may also include a carbon filter to remove other chemical matter. Filtration systems must operate to maintain positive pressure within the building interior to prevent entrainment of outdoor air indoors.
2. If the development limits infiltration through non-operable windows, a suitable ventilation system shall include a ventilation system with filtration specifications equivalent to or better than the following: (1) American Society of Heating, Refrigerating and Air- Conditioning Engineers MERV-13 supply air filters, (2) greater than or equal to one air exchanges per hour of fresh outside filtered air, (3) greater than or equal to four air exchanges per hour recirculation, and (4) less than or equal to 0.25 air exchanges per hour in unfiltered infiltration. These types of filtration methods are capable of removing approximately 90 percent of the DPM emissions from air introduced into the HVAC system.
3. Windows and doors shall be fully weatherproofed with caulking and weather-stripping that is rated to last at least 20 years. Weatherproof should be maintained and replaced by the property owner, as necessary, to ensure functionality for the lifetime of the project.
4. Where appropriate, install passive (drop-in) electrostatic filtering systems, especially those with low air velocities (*i.e.*, 1 mph).
5. Prepare an ongoing maintenance plan for the HVAC and filtration systems, consistent with manufacturers' recommendations.
6. The applicant shall inform occupants regarding the proper use of any installed air filtration system.

Conclusion

The proposed project would have less than significant impacts after mitigation with respect to air quality. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to air quality than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.3 Biological Resources

Impacts Identified in the 2023 EIR

As discussed in Section 4.3, *Biological Resources*, of the 2023 EIR, the HEU does not include development sites on the western boundary of Berkeley, where marine, estuarine, and lacustrine habitats may provide habitats for special-status species and native fish and wildlife, and include mainly sites in the urbanized core of the City. Therefore, the HEU would have less than significant impacts related to riparian habitats and sensitive natural communities, state or federally protected wetlands, and movement of native resident or migratory fish or wildlife species. Nonetheless, trees, shrubs, man-made structures, and the ground surface throughout Berkeley provide suitable nesting substrates for birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC), and construction activities under the HEU could potentially affect nesting birds if carried out during breeding season. However, with compliance with the City's Standard COA related to avoiding disturbance of nesting birds, impacts would be less than significant. As discussed in the 2023 EIR, development facilitated by the HEU would be required to comply with the City's Tree Ordinance (BMC No. 6,509-N.S.), and because there are no adopted habitat conservation plans or natural community conservation plans within the city of Berkeley, the HEU would not conflict with provisions of an adopted Habitat Conservation Plan or Natural Community Conservation Plan.

Impacts of the Proposed Project

Although the proposed project's changes to the HEU would facilitate the development of up to 1,652 more units in the Southside Area compared to the adopted HEU, the proposed project would only increase residential density on non-vacant and underutilized sites in a highly-urbanized area of the city away from open space preserves and non-channelized creeks and would not directly or indirectly impact the habitat of special-status species. New development facilitated under the proposed project would not differ substantially from the urban development already allowed in the Southside Area with respect to implications for biological resources. Although trees and other vegetation in the Southside Area may support species of nesting migratory birds protected under the CFGC, development facilitated by the proposed project would be required to comply with the City's Standard COA regarding avoidance of disturbance of nesting birds, which would reduce impacts to a less than significant level, similar to the proposed project.

The Southside Area does not contain natural communities considered sensitive by the California Department of Fish and Wildlife. Two occurrences of Northern Coastal Salt Marsh are located approximately 3.3 miles to the southwest and 3.8 miles to the northwest, and two occurrences of Northern Maritime Chaparral are located approximately four miles to the southeast and five miles to the northeast of the Southside Area. These sensitive natural communities would not be affected by the proposed project due to their respective distances from the Southside Area. There are also no mapped or designated federally protected wetlands in the Southside Area (USFWS 2023). Some underground drainage culverts may intersect the Southside Area; however, these are not federally protected and therefore are not subject to United States Army Corps of Engineers (USACE) jurisdiction. Additionally, pursuant to BMC Chapter 17.08, obstructing or interfering with watercourses is prohibited and construction within 30 feet of a culverted creek must receive a permit from the City Engineer and comply with the provisions in the chapter to ensure the watercourse is protected. Due to the developed nature of the Southside Area, there would not be potential for impacts to protected wetlands. Additionally, the Southside Area is not within, and does not function as, a significant regional or local wildlife movement corridor, since there are no

waterways that could be utilized for movement of native residents or migratory fish. Furthermore, there are no habitat conservation plans or natural community conservation plans adopted in the Southside Area, and the proposed project would not conflict with such plans. Therefore, impacts would be less than significant, similar to the HEU.

Similar to the HEU, the proposed project could result in the removal of mature trees during construction. General Plan Policy EM-29 requires the City to maintain and enhance street and park trees to improve the environment and provide habitat. On-going implementation of that policy through site-specific design review and use permits would reduce potential impacts to locally significant trees to a less than significant level. Development facilitated by the proposed project would also be required to adhere to the City of Berkeley's Tree Ordinance (BMC No. 6,509-N.S.), which prohibits the removal of coast live oak trees unless determined to be necessary for public safety by the City Manager. Therefore, with adherence to the City's Tree Ordinance and other policies and ordinances for protecting biological resources, impacts would be less than significant, similar to the HEU.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to biological resources, and no new mitigation measures are required. Berkeley's Standard COA requiring avoiding disturbance of nesting birds, as referenced in the 2023 EIR, would remain applicable.

> **Avoid Disturbance of Nesting Birds.** Initial site disturbance activities, including vegetation and concrete removal, shall be prohibited during the general avian nesting season (February 1 to August 30), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC), nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation and concrete removal. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines and a minimum buffer of 250 feet for raptors) shall be established around such active nests and no construction shall be allowed inside the buffer areas until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). No ground-disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and January 31.

Conclusion

The proposed project would have less than significant impacts with respect to biological resources. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to biological resources than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.4 Cultural Resources

Impacts Identified in the 2023 EIR

As discussed in Section 4.4, *Cultural Resources*, of the 2023 EIR, the City has adopted regulations related to cultural resources that would apply to development facilitated by the HEU. Pursuant to Chapter 3.24 of the BMC, the City's Landmarks Preservation Commission (LPC) ordinance provides procedures for the local designation of historical resources and includes a provision for a permit review which allows the LPC to review and approve construction, alteration, or demolition of a designated landmark, buildings in designated historic districts, and structures of merit. In addition, pursuant to BMC Section 23.326.070(C), the City requires any application for a use permit or administrative use permit to demolish a non-residential building or structure which is 40 or more years old to be forwarded to the LPC for review before consideration of the permit by the Zoning Adjustments Board. Further, the City's zoning project application has submittal requirements for zoning projects that include the proposed demolition or substantial change to any building 40 or more years old subject to environmental review requiring a historical resource evaluation. For projects subject to discretionary review, potential impacts to historical resources would be addressed by following the existing procedures of the City's permit review process, and by adherence to the City's conditions of approval. The BMC requirements and zoning project application submittal requirements listed above are intended to reduce impacts to historical resources by ensuring that proposed changes to buildings do not negatively impact the resource by encouraging the preservation and maintenance of historical materials and ensuring work performed is consistent with the resource's historical character. Nonetheless, the 2023 EIR determined that there is potential for historic resources that have not yet been subject to evaluation or would not be subject to the City's permit review or zoning application requirements to be adversely impacted, and Mitigation Measure CUL-1 and Mitigation Measure CUL-2, which were adopted and incorporated into the HEU, would be required to reduce impacts to the maximum extent feasible. However, even with implementation of previously-adopted Mitigation Measure CUL-1 and Mitigation Measure CUL-2, existing and eligible historical resources could still be materially impaired by future development that would be facilitated by the HEU because specific actions intended for the reduction of impacts to historical resources could be deemed infeasible. In addition, future projects that are not subject to discretionary review and have not been previously evaluated for the presence of historical resources could result in the demolition of potential historic resources. Therefore, impacts to historical resources were found to be significant and unavoidable.

The 2023 EIR found that ground-disturbance of native soils on properties for the purposes of development facilitated by the HEU could contain previously unknown prehistoric or historic-period resources, and individual development projects facilitated by the HEU that would involve ground disturbance activities would have the potential to damage or destroy archaeological resources, especially if they occur below previously disturbed sediments. However, with adherence to the City's Standard COA related to archaeological resources, impacts would be less than significant.

The 2023 EIR also determined that ground-disturbing activities associated with development under the HEU could result in damage to or destruction of human burials. However, compliance with the California Health and Safety Code (Section 7050.5, 7051, and 7054), which has specific provisions for the protection of human burial remains; PRC Section 5097.98, which addresses the disposition of Native American burials, protects such remains, and establishes the Native American Heritage Commission (NAHC) to resolve related disputes; and the City's Standard COA related to human remains; would result in impacts that would be less than significant.

Impacts of the Proposed Project

Historical Resources

The Southside Area is home to approximately 168 known qualifying historical resources under CEQA (i.e., designated and/or eligible at the federal, State, or local level), as well as three potential historic districts (Piedmont Avenue Parkway Historic District, Telegraph Avenue Commercial Corridor Historic District, and College Homestead Tract Historic District) and additional resources that may not have been identified or evaluated yet. Since the certification of the 2023 EIR and approval of the HEU, 14 properties located on Bancroft Way were added to the City of Berkeley Landmarks list, the State Register, and/or the National Register:

CITY OF BERKELEY LANDMARKS LIST

- Fred Turner Building
- Harmon Gym (Hass Pavilion)

STATE REGISTER

- St Mark's Episcopal Church
- Gray Gables, Canterbury Foundation
- Trinity United Methodist Church
- University Art Museum
- Richard A Clark House, Davis House
- International House

CITY OF BERKELEY LANDMARKS LIST AND STATE REGISTER

- Westminster Hall

CITY OF BERKELEY LANDMARKS LIST, STATE REGISTER, AND NATIONAL REGISTER

- First Unitarian Church/UC Dance Studio
- College Women's Club
- George C Edwards Field and Stadium
- Hearst Gymnasium for Women

The HEU analyzed in the 2023 EIR did not include specific physical development projects, but the 2023 EIR assumed that development was a reasonably foreseeable outcome that would be facilitied by adoption of the HEU. The proposed project also does not call for specific physical development projects but, similarly, this analysis assumes that implementation of the proposed project's zoning changes in the Southside Area would facilitate development projects. Therefore, as was assumed in the 2023 EIR, reasonably foreseeable development facilitated by the proposed project could impact historical resources through demolition and construction activities.

The City currently has procedures in place for projects that would involve the demolition of non-residential buildings 40 or more years old that require use permits or administrative use permits to be forwarded to the LPC for review. The City's zoning project application also has submittal requirements for zoning projects that include the proposed demolition or substantial change to a building more than 40 years old subject to environmental review requiring a historical resource

evaluation. For projects subject to discretionary review, potential impacts to historical resources would be addressed by following the existing procedures of the permit review process, and by adherence to the City's conditions of approval. These regulations are intended to reduce impacts to historical resources by ensuring that proposed changes to buildings do not adversely impact the resource through encouraging the preservation and maintenance of historical materials and ensuring work performed is consistent with the resource's historical character.

Nonetheless, future development in the Southside Area may be allowed "by-right" and would not undergo discretionary review. For these projects, the City would not have the authority to implement review procedures for evaluating buildings 40 or more years old. Further, there are designated, known, and potential historic resources and districts in the Southside Area. Although the continued implementation of previously adopted Mitigation Measure CUL-1 and Mitigation Measure CUL-2 would be required in order to reduce impacts to historical resources to the maximum extent feasible, even with implementation of these mitigation measures, existing and eligible historical resources could still be materially impaired by future development that would be facilitated by the proposed project. Material impairment could occur because specific actions intended for the reduction of impacts to historical resources could be determined to be infeasible. Material impairment could also occur because future projects that are not subject to discretionary review on sites with structures that have not been previously evaluated to initiate a landmark or structure-of-merit designation could result in the demolition of potential but unknown historic resources. Although future development would be required to comply with mitigation measures CUL-1 and CUL-2 as adopted in the HEU, similar to the HEU, impacts due to the proposed project's changes to the HEU would remain significant and unavoidable. Nonetheless, impacts related to historical resources would not be substantially more severe than what was analyzed in the HEU.

Archaeological Resources and Human Remains

Similar to what was analyzed in the 2023 EIR, although development under the proposed project would occur on non-vacant and underutilized sites in previously disturbed areas, ground-disturbing activities such as earthmoving and excavation could still potentially damage and/or destroy unrecorded archaeological resources in subsurface soils within the Southside Area. However, future development facilitated by the proposed project would be required to comply with the City's Standard COA related to archaeological resources during demolition, grading, and construction, which would reduce impacts to a less than significant level, similar to the HEU. Additionally, construction activities could also potentially disturb human remains. However, implementation of the proposed project would involve disturbance in the same Southside Area as analyzed in the 2023 EIR, and conditions in the Southside Area have not substantially changed since certification of the 2023 EIR and adoption of the HEU. Future development would be subject to federal and State regulations, such as the California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the California Code of Regulations Section 15064.5(e) (CEQA), which state the mandated procedures of conduct following the discovery of human remains. Future development would also be required to comply with the City's Standard COA related to human remains resources during demolition, grading, and construction, which would reduce impacts to a less than significant level, similar to the adopted HEU.

Effects and Mitigation Measures

Historical Resources

No new or substantially more severe significant effects would occur to cultural resources, and no new mitigation measures are required. Previously adopted Mitigation Measure CUL-1 and Mitigation Measure CUL-2 would remain applicable and would continue to be implemented and monitored.

CUL-1 Historic Context Statement, Cultural Resources Survey and Designations

During the period of this Housing Element, the City should conduct a citywide historic context statement and a cultural resource survey to identify historic resources, with priority given to sites in the EIR Site Inventory, to determine if there are designed built environment features which are over 40 years of age proposed to be altered or demolished. Designation of historic or cultural resources should be conducted by the Landmarks Preservation Commission pursuant to 3.24.260 of the Berkeley Municipal Code.

CUL-2 Historical Resources Discretionary Review

For projects that are subject to discretionary review that occur during the Housing Element period where a historical-age building or structure that has not been previously evaluated is present, a historical resources assessment shall be performed by an architectural historian or historian who meets the Secretary of the Interior Professional Qualification Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an intensive-level survey in accordance with the California Office of Historic Preservation guidelines to determine if the property qualifies for federal, state, or local historical resources designation. All age eligible properties shall be evaluated within their historic context and documented in a technical memorandum with Department of Parks and Recreation Series 523 Forms.

Should a property be found to be a qualifying historical resource, the project shall be subject to the City's regulations for permit review, including by the Preservation Landmarks Commission pursuant to Chapter 3.24.260, and/or by the Zoning Adjustments Board pursuant to Chapter 23.326 of the City of Berkeley Municipal Code. Efforts shall be made to the extent feasible to ensure that impacts are mitigated. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place). In conjunction with a development application that may affect the historical resource, the historical resources built environment assessment shall also identify and specify the treatment of character-defining features and construction activities.

Efforts shall be made to the greatest extent feasible to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). In accordance with CEQA, a project that has been determined to conform with the Standards generally would not cause a significant adverse direct or indirect impact to historical resources (14 CCR § 15126.4(b)(1)). Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the PQS. In conjunction with any development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence. As applicable, the report shall demonstrate how the project complies with the Standards and be submitted to the City for review and approval prior to the issuance of permits.

If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These may include documentation of the resource in a manner consistent with the standards of the Historic American Building Survey (HABS). Documentation should include full descriptive and historical narrative, measured drawings, and medium format photographs, all in archivally stable format.

Archaeological Resources and Human Remains

No new or substantially significant effects to archaeological resources or human remains were identified and no new mitigation measures are required. Berkeley's Standard COAs, as referenced in the 2023 EIR, would remain applicable and would reduce impacts to archaeological resources and human remains.

Archaeological Resources *(Ongoing throughout demolition, grading, and/or construction).*
Pursuant to *CEQA Guidelines* Section 15064.5(f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore:

A. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist, historian or paleontologist to assess the significance of the find.
B. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified professional would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Berkeley. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by the qualified professional according to current professional standards.
C. In considering any suggested measure proposed by the qualified professional, the project applicant shall determine whether avoidance is necessary or feasible in light of factors such as the uniqueness of the find, project design, costs, and other considerations.
D. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation measures for cultural resources is carried out.
E. If significant materials are recovered, the qualified professional shall prepare a report on the findings for submittal to the Northwest Information Center.

Human Remains (*Ongoing throughout demolition, grading, and/or construction*). In the event that human skeletal remains are uncovered during ground-disturbing activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.

Conclusion

Historical Resources

Previously adopted Mitigation Measure CUL-1 and Mitigation Measure CUL-2 would remain applicable to the proposed project. However, even with implementation of these mitigation measures, impacts to cultural resources would remain significant and unavoidable, similar to the adopted HEU. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to historical resources than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

Archaeological Resources and Human Remains

The proposed project would have less than significant impacts with respect to archaeological resources and human remains. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to archaeological resources or human remains than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.5 Energy

Impacts Identified in the 2023 EIR

As discussed in Section 4.5, *Energy*, of the 2023 EIR, construction facilitated by the HEU would involve temporary energy use. During construction, contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than 5 minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the United States Environmental Protection Agency's (USEPA) Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. The HEU would also be required to comply with standards and regulations such as 2019 CALGreen (as codified in CCR Title 24, Part 11) and BMC Chapter 19.37, which would ensure energy is used efficiently during construction.

Development under the HEU would be required to comply with standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California's CALGreen standards (California Code of Regulations, Title 24, Part 11) and BMC Chapters 12.80, 19.36, and 19.36 would require implementation of energy-efficient light fixtures and building materials into the design of new construction projects, limit the use of natural gas infrastructure in new development, and provide for electric-ready infrastructure for natural gas appliances in new buildings. The HEU would facilitate development along transit corridors, near BART stations, and in Priority Development Areas (PDA), which would place residents in proximity to public transit and encourage walking and bicycling. BMC Chapter 19.37 would require at least 20 percent of parking spaces at new multi-family residential developments to be capable of supporting electric vehicle chargers and raceway at the remaining 80 percent of parking spaces to facilitate future electric vehicle supply equipment, which would support the use of electric vehicles by future residents.

In addition, the HEU would be consistent with state renewable energy and energy efficiency plans as well as the City's General Plan policies related to energy. Impacts of the HEU would be less than significant.

Impacts of the Proposed Project

Although the proposed project would increase potential buildout in the Southside Area compared to what was analyzed in the 2023 EIR by up to 1,652 units, which would increase the amount of construction activities, energy use during demolition and construction would be temporary, and construction equipment used would be typical of construction projects in the region. Construction contractors would also be required to comply with the same regulations outlined in the 2023 EIR such as CARB regulations, provisions of California Code of Regulations, Title 13, Sections 2449 and 2485, USEPA Construction Equipment Fuel Efficiency, and 40 Code of Federal Regulations Parts 1039, 1065, and 1068. Future development would also be expected to utilize fuel-efficient equipment consistent with State and federal regulations, as well as divert a minimum of 65 percent of construction and demolition debris and recycle and salvage 100 percent of excavated soil and land-clearing debris, concrete, and of asphalt during construction and demolition activities pursuant to the latest iteration of CALGreen and BMC Chapter 19.37. Therefore, construction-related energy impacts would be less than significant, similar to the adopted HEU.

Long-term operation of future development under the proposed project would require permanent grid connections for electricity to power internal and exterior building lighting, and heating and cooling systems. Electricity in Berkeley is supplied by East Bay Community Energy (EBCE). Although the proposed project would facilitate the development of up to 1,652 more units in the Southside Area, future development would be required to comply with all standards set in the latest iteration of the California Building Standards Code (California Code of Regulations, Title 24) and locally adopted amendments codified in Titles 12 and 19 of the BMC (such as the City's Reach Code), which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by the built environment during operation. California's CALGreen standards (California Code of Regulations, Title 24, Part 11) and BMC Chapters 12.80, 19.36, and 19.36 require implementation of energy-efficient light fixtures and building materials into the design of new construction projects, limit the use of natural gas infrastructure in new development, and provide for electric-ready infrastructure for natural gas appliances in new buildings. Additionally, all future residential customers would be placed in EBCE's Renewable 100 Plan which utilizes 100 percent renewable and carbon free energy. The proposed project would also facilitate increased development within a PDA which would encourage the use of alternative modes of transportation such as bicycling and walking, thereby reducing fuel consumption and minimizing the potential of the proposed project to result in the wasteful or unnecessary consumption of vehicle fuels. Therefore, given the above-mentioned reasons, the proposed project would also be consistent with State renewable energy and energy efficiency plans, the City's General Plan, and the City's CAP. Operational-related energy impacts would be less than significant, similar to the HEU.

Effects and Mitigation Measures

No new or substantially more severe significant effects related to energy would occur, and no new mitigation measures are required.

Conclusion

The proposed project would have less than significant impacts with respect to energy. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to energy than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.6 Geology and Soils

Impacts Identified in the 2023 EIR

As discussed in Section 4.6, *Geology and Soils*, of the 2023 EIR, the HEU would facilitate development in areas near the Hayward fault, which would increase the population and infrastructure that would be exposed to earthquake-related hazards. However, with compliance with applicable State and local laws such as the Alquist-Priolo Earthquake Fault Zone Act and Title 19, Chapter 28 of the BMC, impacts would be less than significant. The 2023 EIR determined that the HEU would be located in areas with "low" to "moderate" liquefaction potential and low landslide risk, and impacts were found to be less than significant. The 2023 EIR also determined that although unstable soils within Berkeley have the potential to damage infrastructure or introduce hazards to human health and safety, the City requires site-specific geotechnical evaluations for individual development on steep slopes and unstable soils in accordance with the California Building Code (CBC), and development under the HEU would be required to comply with the Policies S-13A and S-14B of the City's General Plan Disaster Preparedness and Safety Element. Impacts related to unstable soils were found to be less than significant.

The 2023 EIR found that Berkeley's soils are characterized by having "moderate" or a "high" potential for erosion-related hazards, and construction activities could result in erosion and the loss of topsoil. However, new development under the HEU would be required to comply with the SWRCB's General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). Construction activities that disturb one or more acres of land surface are subject to the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the SWRCB. Development would also be required to comply with BMC Chapter 21, Section 40, which requires compliance with the Construction General Permit, as well as BMC Section 21.40.270 requires subdivision projects to comply with grading, erosion and sediment control regulations on file with the Public Works Department. Therefore, impacts related to soil erosion or the loss of topsoil were found to be less than significant.

As discussed in Section 4.6 of the 2023 EIR, many of the soil types within Berkeley have "moderate" to "high" potential for shrink-swell behavior, or expansiveness Building on unsuitable soils would have the potential to create future subsidence or collapse issues that could result in the settlement of proposed project infrastructure, and/or the disruption of utility lines and other services. Development facilitated by the HEU would be required to comply with existing State and local regulations, such as the CBC and General Plan Action S-14B, which would require submittal to and review by the City of detailed soils and/or geologic reports prior to construction. Impacts were found to be less than significant.

The 2023 EIR found that construction activities related to the HEU would potentially result in significant impacts to paleontological resources. However, implementation of Mitigation Measure GEO-1, which was adopted and incorporated into the HEU, would reduce impacts to a less than significant level.

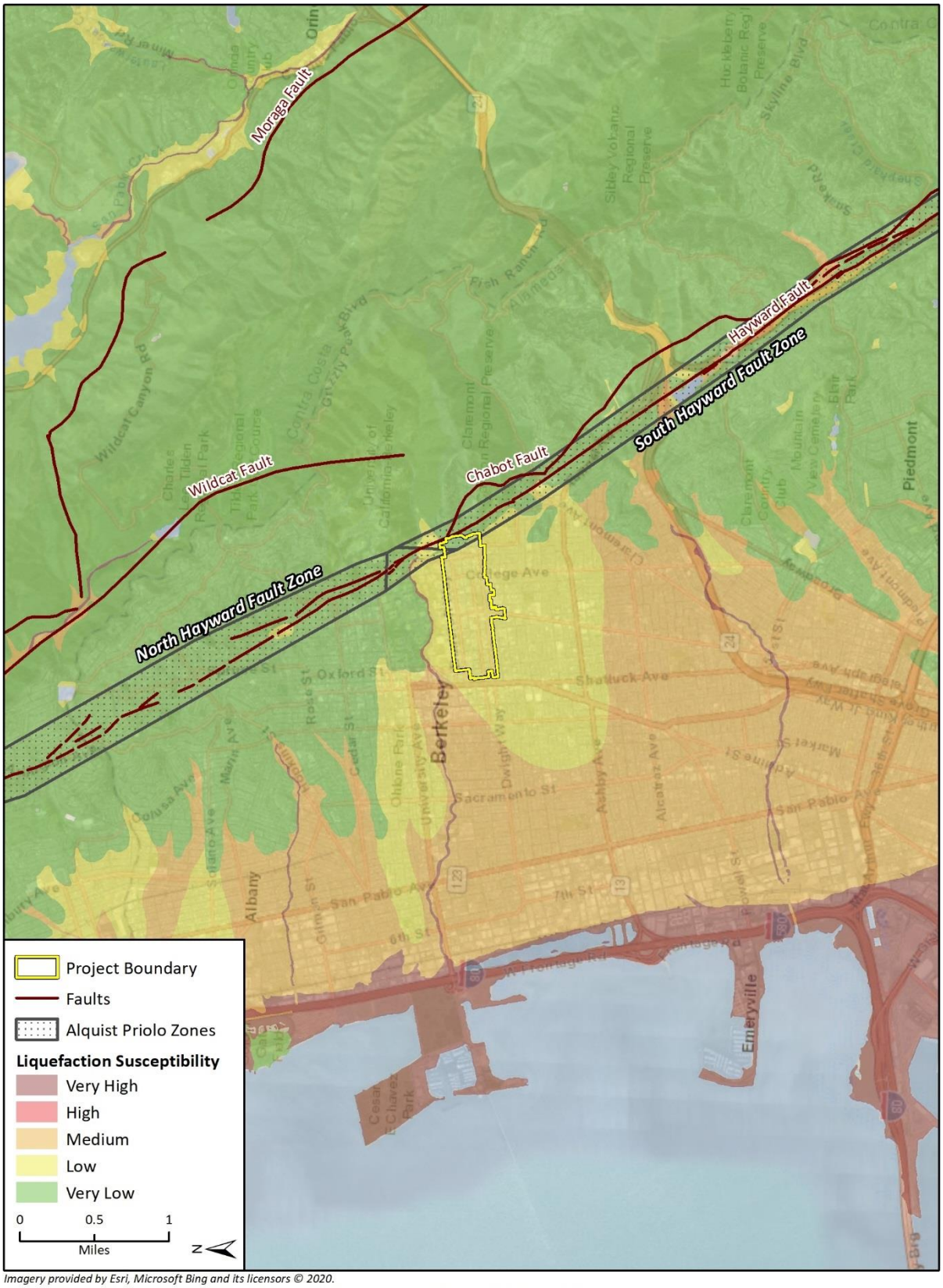
The 2023 EIR found no impacts related to requiring septic tanks or alternative wastewater disposal systems.

Impacts of the Proposed Project

As with any site in the Bay Area region, development facilitated by the proposed project would be susceptible to strong seismic ground shaking in the event of a major earthquake. The Southside Area is located in a seismically active region and is located within or near several faults such as the San Andreas fault, the Hayward fault, the Wildcat fault, and the Miller Creek fault. Specifically, the Hayward Fault runs along the eastern edge of the Southside Area. Although the proposed project would facilitate the development of up to 1,652 more units compared to what was analyzed in the 2023 EIR, the proposed project would not facilitate development on the eastern edge of the Southside Area; therefore, fault rupture risks would not be increased by the proposed project. In addition, in the affected areas the proposed project would promote infill development which would replace older buildings subject to seismic damage with newer structures built to current seismic standards that could better withstand the adverse effects of strong ground shaking. Future development would be required to conform to the CBC adopted pursuant to Title 19, Chapter 28 of the BMC, which includes requirements for foundation and structural design to resist seismic hazards and requirements for geotechnical investigation based on soil conditions and proposed construction methods in specific instances. New projects in the Southside Area would be reviewed by the Building and Safety Division during the normal plan review process to confirm that the necessary geotechnical investigations are completed and that the structural design of the project is consistent with design measures recommended in the Geological Report prior to issuance of required building permits. The City would therefore ensure that development occurring in the Southside Area would be designed and constructed consistent with the current City of Berkeley Building Codes and with the findings and recommendations of the site-specific geotechnical reports to effectively minimize or avoid potential hazards associated with redevelopment and/or new building construction. Therefore, similar to the adopted HEU, earthquake-related impacts would be less than significant with adherence to State and local regulations.

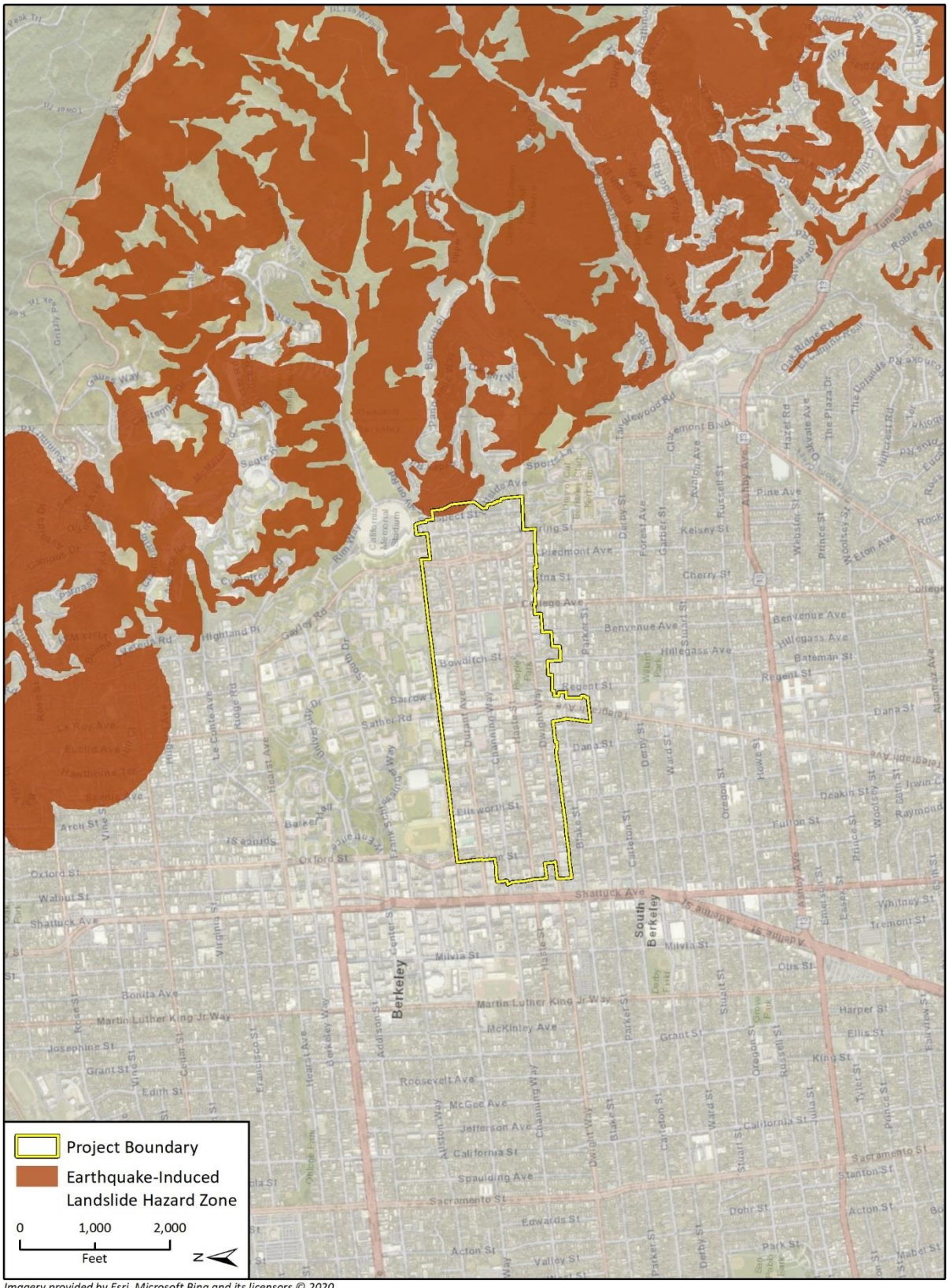
As shown in Figure 6 and Figure 7, the Southside Area is located in areas of low to very low liquefaction hazards, and is not located within an identified landslide hazard zone. However, the portion east of Prospect Street is at the western edge of the landslide hazard zone, and the soils in the Southside Area have been identified as potentially unstable and having high potential for shrink-swell (USDA 2017, USDA 1981). Although the proposed project would increase potential buildout in the Southside Area compared to what was analyzed in the 2023 EIR by up to 1,652 units, as required by the Public Resources Code (PRC) Section 2690-2699.6, *Seismic Hazards Mapping Act* and CBC requirements as adopted in the BMC, site-specific geotechnical investigations would be required for individual development projects within the portions of the Southside Area susceptible to seismic-related ground failure to identify the degree of potential hazards, design parameters for the project based on the hazard, and describe appropriate design measures to address hazards. These geotechnical studies customarily include recommendations for foundation design, as well as soil improvement techniques, both of which help mitigate these unstable soils.

Figure 6 Southside Area Fault Lines and Liquefaction Susceptibility



Imagery provided by Esri, Microsoft Bing and its licensors © 2020.
Additional data provided by USGS, 2010; California Department of Conservation, California Geological Survey, 2015.

Figure 7 Southside Area Landslide Susceptibility



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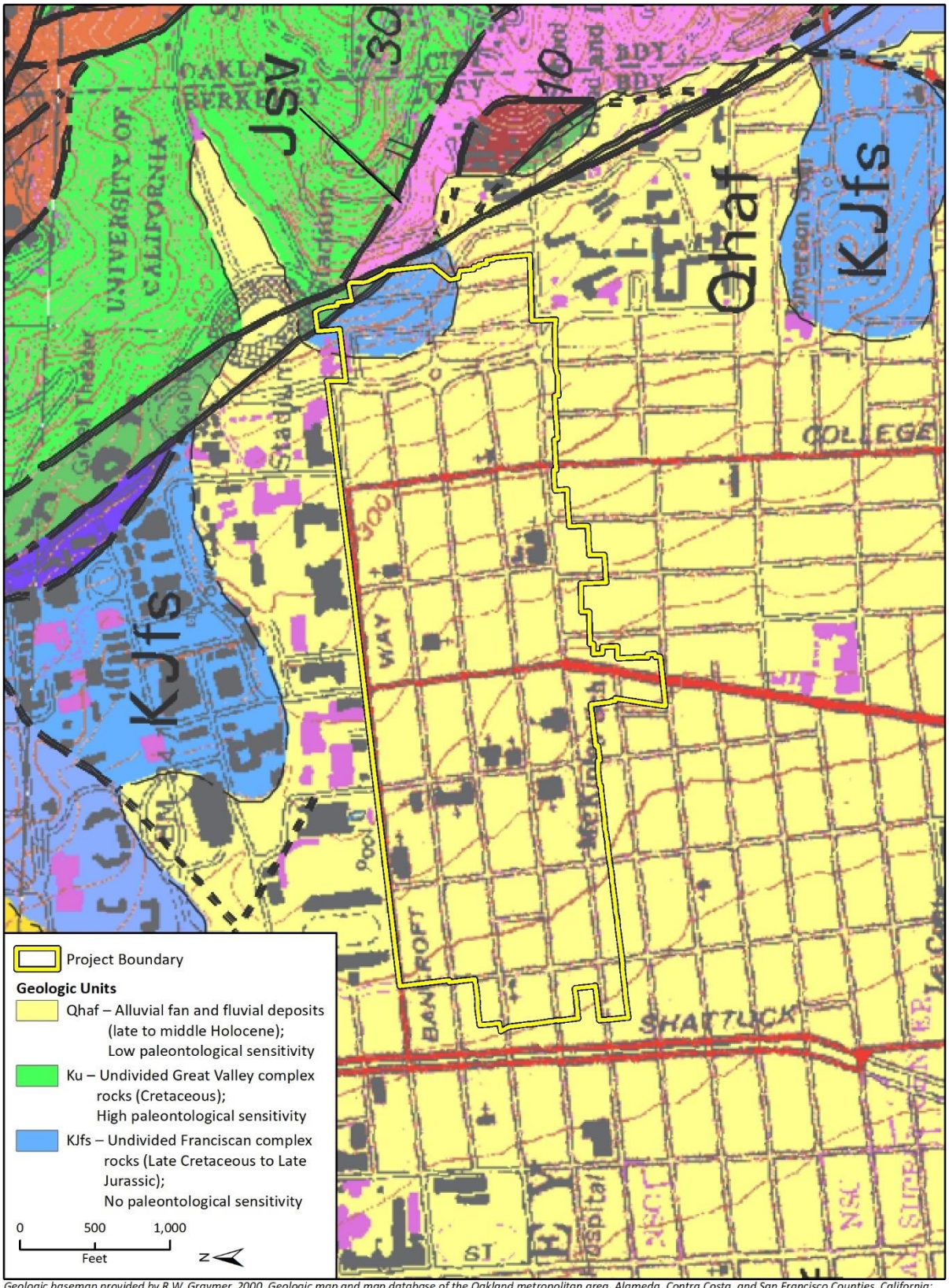
Additional data provided by CGS, 2016.

Additionally, as discussed in the 2023 EIR, future projects requiring discretionary approval would be reviewed for their compliance with General Plan policies, including *Policy S-13A: Hazards Identification and Policy S-14B: Land Use Regulation* of the City's General Plan Disaster Preparedness and Safety Element. Future development in the Southside Area and located in areas with identified hazards would be required to appropriately address and be designed to withstand associated hazards to the maximum extent feasible. Therefore, impacts related to liquefaction, landslides, and expansive and/or unstable soils would be less than significant with adherence to State and local regulations, similar to the adopted HEU.

As mapped by the NRCS, the Southside Area is composed primarily of Tierra complex two to five percent slopes and Tierra complex five to fifteen percent slopes (USDA 2017). The Southside Area lies in a generally flat region, approximately 100 feet above mean sea level, and the Southside Area soils are characterized by having "none" or a "slight" potential for erosion-related hazards, which limits the potential for substantial soil erosion. Construction activities of future development that disturb one or more acres of land surface are subject to the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the SWRCB. Compliance with the NPDES permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require the development of a stormwater pollution prevention plan, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the Construction General Permit is reinforced through the BMC Chapter 21, Section 40, which requires applicants to comply with grading, erosion and sedimentation control plan regulations on file with the Public Works Department. Therefore, impacts related to soil erosion would be less than significant with compliance with State and local regulations, similar to the HEU.

According to fossil collections records from the Paleobiology Database and University of California Museum of Paleontology (UCMP) online database, fossil localities were identified in Alameda County (Paleobiology 2022; UCMP 2022). Following the geologic map review, literature review, and UCMP database search, a paleontological sensitivity was assigned to the geologic units mapped within the Southside Area based on Society of Vertebrate Paleontology (SVP) guidelines (SVP 2010). Figure 8 depicts the geologic units underlying the Southside Area and the immediate vicinity. As shown in Figure 8, the Southside Area includes three geologic units mapped at the surface: late to middle Holocene alluvial fan and fluvial deposits (Qhaf), Cretaceous rocks from the Great Valley Complex (Ku), and Late Cretaceous to Late Jurassic metasedimentary rocks from the Franciscan Complex (KJfs) (Graymer 2000).

Figure 8 Geologic Units Underlying the Southside Area



Geologic basemap provided by R.W. Graymer, 2000, Geologic map and map database of the Oakland metropolitan area, Alameda, Contra Costa, and San Francisco Counties, California: U.S. Geological Survey Miscellaneous Field Studies MF–2342

Late to middle Holocene deposits (Qhaf) mapped through the majority of the Southside Area are too young (i.e., less than 5,000 years old) to preserve paleontological resources at or near the surface, and are considered to have a low paleontological sensitivity at the surface as defined by SVP (2010) standards; however, late to middle Holocene deposits may grade downward into more fine-grained deposits of early Holocene to late Pleistocene age that could preserve fossil remains at shallow or unknown depths. The depths at which these units become old enough to contain fossils is highly variable, but generally does not occur at depths of less than five feet. Therefore, areas mapped as Late to middle Holocene deposits (Qhaf) alluvial deposits are assigned a high paleontological sensitivity at depths greater than five feet (SVP 2010). Cretaceous rocks from the Great Valley Complex (Ku), which include the Panoche Formation (Kp), have yielded several paleontological resources throughout California. Cretaceous rocks from the Great Valley Complex (Ku, Kp) are assigned a high paleontological sensitivity. Late Cretaceous to Late Jurassic metasedimentary rocks from the Franciscan Complex (KJfs) formed from the cooling of molten rock that was subsequently metamorphosed. The high-heat and high-pressure conditions in which these rocks formed are not suitable for life or fossilization. Therefore, metasedimentary rocks from the Franciscan Complex (KJfs) have no paleontological sensitivity (SVP 2010). Because the Southside Area is underlain by geologic units assigned a high paleontological sensitivity, paleontological resources may be encountered during ground-disturbing activities associated with project construction (e.g., grading, excavation, or other ground disturbing construction activity), and damage to or destruction of fossils could occur. Therefore, previously adopted Mitigation Measure GEO-1 would be required for future development facilitated by the proposed project and would ensure the protection of paleontological resources and reduce impacts to a less than significant level.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to geology and soils, and no new mitigation measures are required. Previously adopted 2023 EIR Mitigation Measure GEO-1 would remain applicable and would continue to be implemented and monitored.

GEO-1 Protection of Paleontological Resources

If ground disturbance below the level of prior disturbance and into native soils is proposed to occur in areas mapped as Pleistocene alluvial fan and fluvial deposits (Qpaf), Orinda Formation (Tor), or Knoxville Formation (Kjk), then the City shall require the following to be implemented:

- **Retention of Qualified Professional Paleontologist**. Prior to initial ground disturbance, the project applicant shall retain a Qualified Professional Paleontologist, as defined by Society of Vertebrate Paleontology (SVP) (2010), to determine the project's potential to significantly impact paleontological resources according to SVP (2010) standards.

  If underlying formations are found to have a high potential for paleontological resources, the Qualified Professional Paleontologist shall create a Paleontological Mitigation and Monitoring Program, which will be approved by the City and contain the following elements:
- **Paleontological Worker Environmental Awareness Program (WEAP).** Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a paleontological Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the appearance of fossils and procedures for notifying paleontological staff should fossils be discovered by construction staff.

- **Paleontological Monitoring.** Full-time paleontological monitoring shall be conducted during ground disturbing construction activities (i.e., grading, trenching, foundation work) in sediments assigned a high paleontological sensitivity. Paleontological monitoring shall be conducted by a qualified Paleontological Resources Monitor, as defined by the SVP (2010). The duration and timing of the monitoring will be determined by the Qualified Professional Paleontologist based on the observation of the geologic setting from initial ground disturbance, and subject to the review and approval by the City. If the Qualified Professional Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions once the full depth of excavations has been reached, they may recommend that monitoring be reduced to periodic spot-checking or ceased entirely. Monitoring shall be reinstated if any new ground disturbances are required, and reduction or suspension shall be reconsidered by the Qualified Professional Paleontologist at that time. In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified Professional Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Professional Paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources.

  Upon completion of ground disturbing activity (and curation of fossils if necessary) the Qualified Professional Paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to the City. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.

Conclusion

The proposed project would have less than significant impacts with respect to geology and soils. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to geology and soils than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.7 Greenhouse Gas Emissions

Impacts Identified in the 2023 EIR

As discussed in Section 4.7, *Greenhouse Gas Emissions*, of the 2023 EIR, full buildout of the HEU would generate 81,985 MT of CO_2e per year, equating to an increase of 1.7 MT of CO_2e per service population per year. As analyzed in the 2023 EIR, the HEU's greenhouse gas (GHG) emissions of 1.7 MT of CO_2e per service population per year would not exceed the BAAQMD's interpolated 2031 target of 3.7 MT CO_2e per service population at the plan-level[4] (refer below to the "Impacts of the Proposed Project" section for interpolation methodology). Therefore, impacts related to GHG emissions were found to be less than significant.

The 2023 EIR found that the HEU would be consistent with GHG reduction goals and policies in the 2017 Scoping Plan, Plan Bay Area 2050, the City's General Plan, and the City's Climate Action Plan (CAP). Therefore, 2013 EIR determined that the HEU would have less than significant impacts related to conflicting with an applicable GHG reduction plan.

Impacts of the Proposed Project

The City of Berkeley adopted a CAP in 2009 with the goal of reducing communitywide GHG emissions by 80 percent below 2000 levels by 2050. While the CAP is not considered a "qualified greenhouse gas reduction plan" for the purposes of streamlining GHG emissions analysis under CEQA, it is actively used by the City for guiding GHG emission reduction efforts. Since publication of the CAP, the City has revised the CAP to add the following climate commitments/goals in support of achieving the goals of the 2009 Plan:

- 100 percent renewable electricity by 2035
- Net-Zero Carbon Emissions by 2045, in alignment with Governor Brown's Executive Order B-55-18
- Declared a Climate Emergency and resolved to become a Fossil Fuel Free City

Since the certification of the 2023 EIR and approval of the HEU, BAAQMD has updated its GHG emissions thresholds of significance. The 2022 BAAQMD thresholds allow two options for plan-level projects to meet the significance thresholds (BAAQMD 2023):

1. Meet State's goals to reduce emissions to 40% below 1990 levels by 2030 and carbon neutrality by 2045; or
2. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

According to the *CEQA Guidelines*, projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. The City of

[4] BAAQMD developed plan-level thresholds of significance to assist lead agencies with determining significance for long-range local and regional plans. Local long-range plans are discretionary, program-level planning activities, such as general plans and general plan elements, specific plans, area plans, community plans, congestion management plans, and annexations of lands and service areas. The proposed project involves Zoning Ordinance and General Plan amendments to facilitate housing in the Southside Area. Plan-level thresholds are used instead of project-level thresholds because the proposed project constitutes as a programmatic document and applies to the Southside Area.

Berkeley does not currently have a qualified GHG reduction plan, however, and this approach is not currently available.

To evaluate whether a project may generate a quantity of GHG emissions that may have a significant impact on the environment, State agencies have developed operational bright-line significance thresholds. Significance thresholds are numeric mass emissions thresholds that identify the level at which additional analysis of project GHG emissions is necessary. Projects that meet or are below the significance target, with or without mitigation, would result in less than significant GHG emissions.

Although the BAAQMD has adopted updated GHG thresholds as of April 2022, since the proposed project would tier from the 2023 EIR, the City as the lead agency has chosen to apply the significance threshold applied in the 2023 EIR. Therefore, the BAAQMD GHG 2031 efficiency target applied in the 2023 EIR is used to inform the threshold for this analysis. As discussed in the 2023 EIR, BAAQMD's plan-level efficiency threshold of 6.6 MT CO_2e per service population per year was first reduced to the SB 32's 2030 target of 40 percent below 1990 emissions, which would result in a threshold of 4.0 MT CO_2e per service population per year. However, since that time, the State has set additional emissions reductions targets of net-zero carbon emissions by 2045. To set a significance threshold that would achieve this 2045 target, the 4.0 MT CO_2e per service population per year threshold was reduced by 0.27 MT CO_2e per year to reach 2045's goal of 0 MT CO_2e per population per year. Based on the trajectory to achieve this 2045 target, in the year 2031 this would equate to an interpolated threshold of 3.7 MT CO_2e per service population per year threshold.

Proposed construction activities, energy use, daily operational activities, and mobile sources (traffic) associated with the proposed project would generate GHG emissions. CalEEMod was used to calculate emissions resulting from construction and long-term operation (see Appendix B for model output).

Construction Emissions

Emissions generated from construction of full buildout of development facilitated by the HEU are estimated to be 2,021 MT of CO_2e per year.[5] However, because the BAAQMD does not have a recommended threshold for construction-related GHG emissions, the estimated emissions associated with construction are not included in Table 6 and compared to BAAQMD significance thresholds.

Operational Indirect and Stationary Direct Emissions

Long-term emissions relate to area sources, energy use, solid waste, water use, transportation, and refrigerants. Each of the operational sources of emissions is discussed further below.

MOBILE EMISSIONS

As shown in Table 6 below, the additional 1,652 units facilitated by the proposed project would generate approximately 4,932 MTCO_2e per year.

[5] Construction emissions were determined assuming the 1,652 units were built as one continuous project using CalEEMod defaults. Construction emissions for future projects would be based on the timing and size of individual projects.

AREA SOURCE EMISSIONS

CalEEMod was used to calculate direct sources of air emissions associated with the proposed project. These include consumer product use and landscape maintenance equipment. Area emissions are estimated at 105 $MTCO_2e$ per year.

ENERGY USE EMISSIONS

Operation of the proposed project would consume both electricity and natural gas. The generation of electricity through combustion of fossil fuels emits CO_2, and to a smaller extent, N_2O and CH_4. Pursuant to the City's All-Electric Ordinance, natural gas was converted to electricity to account for increased electricity usage. GHG emissions from energy use are estimated at 925 $MTCO_2e$ per year.

WATER USE EMISSIONS

Based on the amount of electricity generated to supply and convey water for the project, the proposed project would generate an estimated 72 $MTCO_2e$ per year.

SOLID WASTE EMISSIONS

Based on the estimate of GHG emissions from solid waste generated by the proposed project, as it decomposes solid waste associated with the proposed project would generate approximately 338 $MTCO_2e$ per year.

REFRIGERANT EMISSIONS

Based on the estimate of GHG emissions from refrigerants used for the project, the proposed project would generate an estimated 2 $MTCO_2e$ per year.

COMBINED EMISSIONS

According to the 2023 EIR, full buildout under the HEU was estimated to generate 81,985 MT of CO_2e per year, equating to an increase of 1.7 MT of CO_2e per service population per year which would not exceed the BAAQMD's interpolated 2031 target of 3.7 MT CO_2e per service population at the plan-level.

As shown in Table 6, the annual emissions associated with the additional development under the proposed project would total approximately 6,373 $MTCO_2e$ per year. As discussed in Section 14, *Population and Housing*, of this Addendum, the proposed project would result in 4,130 new residents and therefore the service population for the purposes of the analysis is 4,130 residents. As shown in Table 6, the $MTCO_2e$ per service population for the proposed project would be 1.5 MT CO_2e per service population. Therefore, these emissions would not exceed the 2023 EIR's BAAQMD 2031 efficiency target of 3.7 MT CO_2e per service population used in the 2023 EIR's analysis.

In addition, as shown in Table 6, when combined with the GHG emissions from the HEU as analyzed in the 2023 EIR, the $MTCO_2e$ per service population of 1.7 would not exceed the 2023 EIR's BAAQMD 2031 efficiency target of 3.7. The MT CO_2e per service population of 1.5 for the proposed project is lower than the MT CO_2e per service population of 1.9 for the HEU plus proposed project because the proposed project would place residents within 0.5 mile of the Downtown Berkeley BART station and multiple bus routes which would reduce usage of single-occupancy vehicles and VMT. Therefore, this impact would be less than significant, similar to what was analyzed for the HEU in the 2023 EIR.

Table 6 Operational GHG Emissions

Emissions Source	Annual Emissions (MT of CO2e/year)
Proposed Project Emissions	
Mobile	4,932
Area	105
Energy	925
Water	72
Waste	338
Refrigerants	2
Total Emissions	**6,373**
Proposed Project Service Population	4,130
Proposed Project Emissions Per Service Population ($MTCO_2e$/Service Population)	**1.5**
2023 EIR BAAQMD Interpolated Plan-level 2031 Target (MTCO2e/Service Population)	3.7
Proposed Project Exceeds Threshold?	**No**
Total Emissions (HEU plus Proposed Project)[1]	**88,358**
Total Service Population (HEU plus Proposed Project)[2]	51,573
Total Emissions Per Service Population (HEU plus Proposed Project) ($MTCO_2e$/Service Population)	**1.7**
2023 EIR BAAQMD Interpolated Plan-level 2031 Target (MTCO2e/Service Population)	3.7
Exceeds Threshold?	**No**

[1] 81,985 MT CO_2e for HEU in 2023 EIR + 6,373 MT CO_2e for proposed project = 88,358 MT CO_2e

[2] 47,443 population in 2023 EIR + 4,130 new residents under proposed project = 51,573 people

See Table 2.5 "Operations Emissions by Sector, Unmitigated" emissions. CalEEMod worksheets in Appendix B.

Also similar to the HEU, development facilitated by the proposed project would comply with the latest Title 24 Green Building Code and Building Efficiency Energy Standards. As discussed in above under Section 3, *Air Quality*, of this Addendum, the net percentage VMT increase associated with the proposed project (approximately 38.0 percent when compared to 2020 Without Project) would be less than the net percentage population increase (approximately 45.9 percent when compared to 2020 Without Project). Therefore, on a per population basis, the proposed project would have the effect of reducing VMT and therefore GHG emissions associated with fossil fuel use.

Although the proposed project would facilitate the development of up to 1,652 more units compared to the HEU, all the units would be concentrated in the Southside Area within 0.5 mile of the Downtown Berkeley BART station and multiple bus routes such as the Alameda-Contra Costa Transit District (AC Transit) bus routes 6, 36, 51B, 52, 79, 604, 605, 851, and F, as well as the University of California, Berkeley Bear Transit R-Line, which would further reduce reliance on personal vehicles and encourage usage of alternative modes of transport. Development facilitated by the proposed project would also be required to comply with EV requirements pursuant to BMC Section 19.37.040, which currently requires 20 percent of parking spaces to be electric vehicle charging spaces capable of supporting future electric vehicle chargers and 80 percent of parking

spaces to include raceways to facilitate future electric vehicle supply equipment at all new multi-family developments; and for new one- and two-family dwelling units to accommodate a dedicated 208/240-volt branch circuit for a future EV charger. Additionally, new construction would be required to be all electric per the requirements of BMC Chapter 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources. Future development would also be subject to BMC Chapter 19.37, which requires diversion of 65 percent diversion of construction/demolition waste, and recycling and salvage of 100 percent of excavated soil and land-clearing debris, 100 percent of concrete, and 100 percent of asphalt during construction and demolition activities. EBCE would be the electricity supplier for the proposed project, and would enroll residential customers in their Renewable 100 service plan, which provides 100 percent of electricity from renewable energy sources. Therefore, similar to the HEU, the proposed project would be consistent with goals and policies of the 2017 Scoping Plan, Plan Bay Area 2050, the City's General Plan, and the City's CAP, and impacts would be less than significant.

Effects and Mitigation Measures

No new or substantially more severe significant effects related to GHG emissions would occur and no new mitigation measures are required.

Conclusion

The proposed project would have less than significant impacts with respect to GHG emissions. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to GHG emissions than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.8 Hazards and Hazardous Materials

Impacts Identified in the 2023 EIR

As discussed in Section 4.8, *Hazards and Hazardous Materials*, of the 2023 EIR, construction of development facilitated by the HEU could result in an increase in the overall routine, transport, use, and disposal of hazardous materials in Berkeley. However, hazardous materials would be required to be transported under U.S. Department of Transportation (DOT) regulations (U.S. DOT Hazardous Materials Transport Act, 49 Code of Federal Regulations). The California Department of Toxic Substances Control (DTSC) also regulates hazardous wastes under the authority of Resource Conservation and Recovery Act (RCRA) and in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Divisions 4 and 4.5). The 2023 EIR found that portions of Berkeley are located in Environmental Management Areas (EMA) as identified by the City's Toxics Management Division (TMD).[6] As a Certified Unified Program Agency (CUPA) for the City of Berkeley, the TMD is responsible for identifying areas known or suspected to have groundwater contamination that could result in potential health and environmental impacts, and development in the EMA would require project review by the TMD prior to issuance of permits.

[6] EMAs can be located using the City's Environment GIS portal: https://berkeley.maps.arcgis.com/apps/webappviewer/index.html?id=2c7dfafbb1f64e159f4fdf28a52f51c6&showLayers=Berkeley%20Parcels;Environment.

Future development projects facilitated by the HEU would be subject to the City's Standard COA related to Environmental Site Assessments, Soil and Groundwater Management Plans, Building Materials Surveys, and Hazardous Materials Business Plans, which would reduce impacts to a less than significant level.

The 2023 EIR determined that operation of the HEU would not risk exposing the public to hazardous materials because residential uses do not typically use hazardous materials other than small amounts for cleaning and landscaping. Although the HEU would increase the number of residents near transportation corridors where hazardous materials may be routinely transported, as discussed above the transportation of hazardous materials is regulated by the DOT. Additionally, since the HEU would facilitate residential development within areas of Berkeley where hazardous materials could be stored or used, such as near mixed-use or industrial areas, the potential of residents being exposed to hazardous materials may be increased. However, future development would be required to adhere to the California Accidental Release Prevention (CAL ARP) program as required by the California Environmental Protection Agency (Cal EPA) (Cal EPA 2023), develop a Hazardous Materials Business Plan enforced by Berkeley's TMD (City of Berkeley 2023b), and adhere to the Local Hazard Mitigation Plan (LHMP) established by Alameda County and the City of Berkeley (City of Berkeley 2019), which aim to minimize community exposure to hazardous and potentially hazardous materials by avoiding toxic cleaning and building materials and products in civic facilities and services; providing information, opportunities, and incentives to the community for proper disposal of toxic materials; encouraging non-toxic materials and products in homes and businesses as an alternative to products containing potentially hazardous materials; and providing procedures to follow in the event of a spill. Compliance with these policies would further prepare the City, reduce the risk of spills, and protect the public in the event of an accidental spill or exposure. Future development would also be required to comply with policies and programs in the Disaster Preparedness and Safety Element, Environmental Management Element, and the Housing Element of the City's General Plan such as Policies S-15, EM-12, EM-13, and EM-15, as well as Housing Element Programs 16, 21, 22, and 25, impacts would be less than significant.

The 2023 EIR determined that although 122 housing inventory sites listed in the HEU would be located within a 0.25-mile radius of Berkeley's existing schools and childcare facilities, impacts related to the accidental release of hazardous materials and exposure to these materials would be less than significant with adherence to the above-referenced State and local laws, regulations and plans. The 2023 EIR stated that Berkeley has 361 documented sites containing or potentially containing hazardous materials contamination in underlying soil and/or groundwater that have not received regulatory closure. Development facilitated by the HEU could involve ground disturbance on sites where soil, soil vapor, or groundwater contamination is present such that hazardous materials are released, exposing construction workforce and nearby occupants to hazardous materials. However, development near hazardous locations would be preceded by investigation, remediation (cleanup), and monitoring, as necessary, under the supervision of the City's TMD, RWQCB, or DTSC before construction activities begin. Furthermore, if an unidentified underground storage tank (UST) is uncovered or disturbed during construction, it would be removed under permit, and potential risks due to residual contamination would be minimized by managing the site according to existing standards contained in Division 20, Chapters 6.7 and 6.75 (Underground Storage Tank Program) of the California Health and Safety Code as enforced and monitored by the City's TMD. Similarly, if groundwater contamination is identified, characterization of the vertical and lateral extent of the contamination and remediation activities would be required by the RWQCB prior to the commencement of new construction activities that would disturb the subsurface. If contamination exceeds regulatory action levels, the developer would be required to undertake

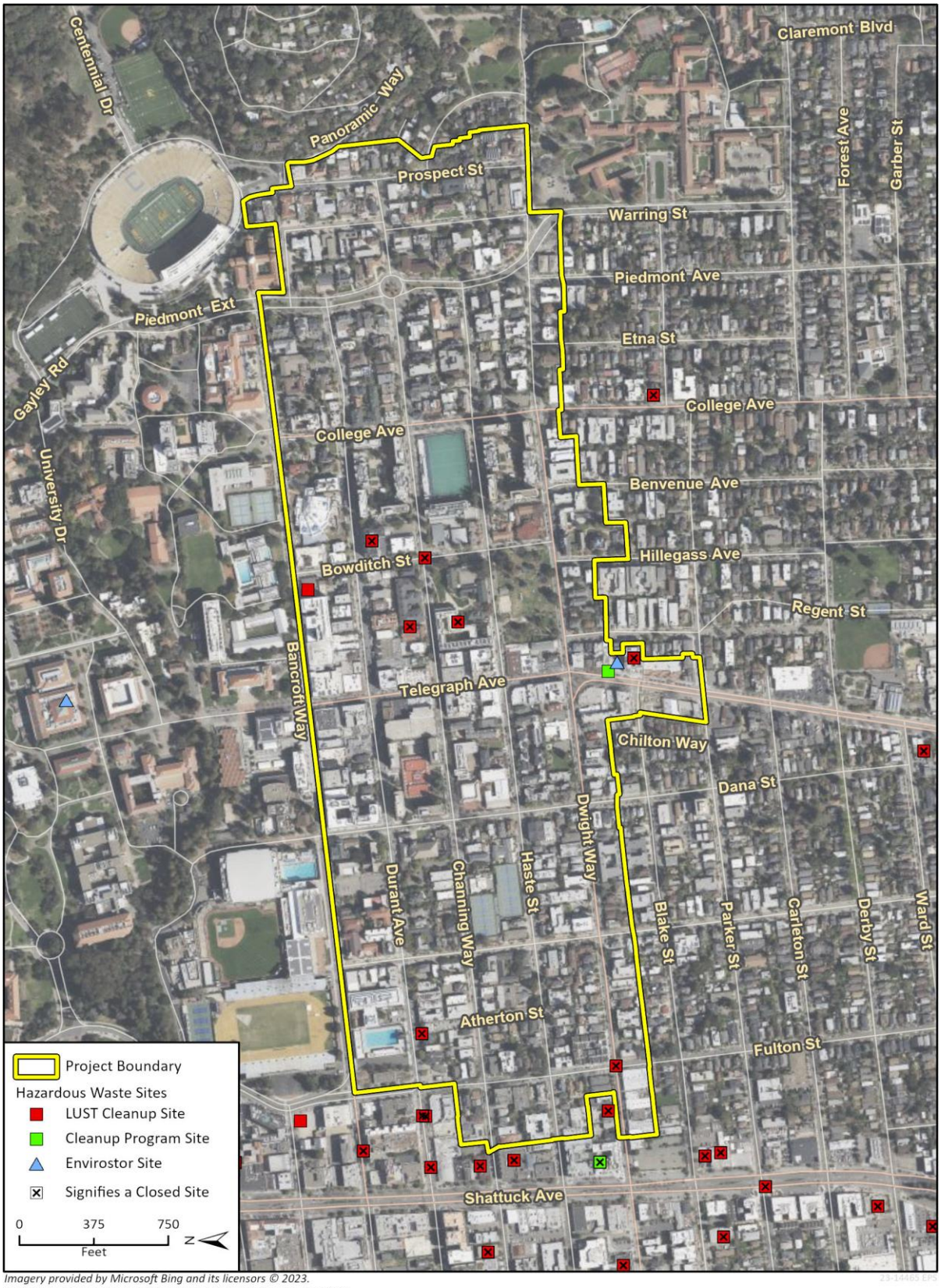
remediation prior to grading and development under the supervision of the RWQCB, depending upon the nature of identified contamination to levels that do not pose an unacceptable risk for the intended land use. Therefore, impacts related to hazardous materials sites would be less than significant.

Development facilitated by the HEU also would be required to comply with Policy T-28 of the City's General Plan which identifies actions for emergency access. Development would also be required to conform to the latest Fire Code requirements, including provisions for emergency access. Because there are no public or private airports within Berkeley, the 2023 EIR determined that the HEU would not result in impacts related to a safety hazard or excessive noise hazards within airport land use plan areas or in proximity to airports.

Impacts of the Proposed Project

Much of the Southside Area is within the City's identified Environmental Management Area (EMA), which includes areas known or suspected to have groundwater contamination issues. Within the Southside Area, the EMA includes all parcels with frontages along Telegraph Avenue, much of the northwest corner of the area along Fulton Street, and portions of parcels along and near College Avenue (City of Berkeley 2010). As shown in Figure 9, a search of the California Department of Toxic Substance Control's (DTSC) EnviroStor database and the State Water Resources Control Board's (SWRCB) GeoTracker database (conducted on June 21, 2023), which contain information on properties in California where hazardous substances have been released or where the potential for a release exists, identified eight Leaking Underground Storage Tank (LUST) sites, seven of which are closed and one of which is open; one DTSC Cleanup Program Site; and one EnviroStor site. The former Cal Cleaners site located at 2531 Telegraph Avenue was identified as a DTSC Cleanup Program Site in need of evaluation. A Phase I Environmental Site Assessment and soil remedial action for this site were completed in 2011, which indicated that new development on the site may be exposed to onsite contaminants from operation of the former dry cleaning establishment (SWRCB 2023). However, future development of that site would be subject to DTSC oversight and regulation, City review, and other existing environmental laws related to cleanup of hazardous materials. Cleanup of the site would have to be certified as suitable for the intended land use by DTSC before new development could occur. Because development, including grading and excavation, would be contingent on cleanup of existing hazards on this site, no significant impacts related to hazardous materials would occur with implementation of the proposed project. Similar to the HEU, development facilitated by the proposed project would be subject to the City's Standard COA. With adherence to the City's Standard COA, the City's TMD would evaluate projects to determine if Phase I/Phase II Environmental Site Assessments are required to characterize potential contamination. If contamination is present, applicants would be required to develop a soil and groundwater management plan, a type of construction management plan that would identify procedures for soil and groundwater management and disposal to address hazards during construction.

Figure 9 Cleanup Sites in the Southside Area



Imagery provided by Microsoft Bing and its licensors © 2023.
Additional data provided by GeoTracker, 2023; DTSC Envirostor, 2023.

The proposed project would allow for development of up to 1,652 more units in the Southside Area compared to the buildout analyzed in the 2023 EIR, and therefore would potentially involve transport, use, or dispose of more hazardous materials than what was analyzed in the 2023 EIR during construction, and would facilitate increased development on sites that are possibly contaminated and inactive, undergoing evaluation, and/or undergoing corrective action, where grading or excavation may result in the transport, disposal, and release of hazardous materials if they are discovered and removed from the site. However, future development would be required to comply with the same federal, State, and local laws and regulations as discussed in the 2023 EIR, such as U.S. Department of Transportation (DOT) regulations (U.S. DOT Hazardous Materials Transport Act, 49 Code of Federal Regulations), California Hazardous Waste Control Law (California H&SC Division 20, Chapter 6.5), and Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Divisions 4 and 4.5). Although most of the Southside Area is within the City's EMA, development within the EMA would be subject to project review by the TMD prior to issuance of permits. Future projects also would be subject to the City's Standard COA regarding Environmental Sites Assessments, Soil and Groundwater Management Plans, Building Materials Surveys, and Hazardous Materials Business Plans, which would reduce impacts to a less than significant level.

Similar to the HEU, the proposed project's changes to the adopted HEU would facilitate the development of residential uses, which may involve use and storage of some materials considered hazardous, though these materials would be primarily limited to solvents, paints, chemicals used for cleaning and building maintenance, and landscaping supplies.

These materials would not be different from chemicals and solvents already in wide use throughout the Southside Area, and the use of such products would be required to comply with all applicable laws and regulations regarding the disposal of household waste. New housing units would be located in areas near major transportation corridors and existing residential and commercial development. Hazardous materials may be transported into and throughout the Southside Area on Shattuck Avenue, Telegraph Avenue, and collector and local streets. The proposed project would increase the number of residents near transportation corridors where hazardous may be routinely transported compared to the HEU. However, as discussed in the 2023 EIR, compliance with existing federal, State, and local laws and regulations would reduce risks related to the handling and storage of hazardous materials would minimize the risk of the public's potential exposure to these materials. Therefore, impacts from a hazard to the public or the environment due to routine transport, use or disposal of hazardous materials, or from accidental release or exposure to hazardous materials would be less than significant, similar to the HEU.

One school, the East Bay School for Boys at 2340 Durant Avenue, is within the Southside Area. In addition, several schools are within 0.25 miles of the Southside Area, including the UC Berkeley main campus which is adjacent to the Southside Area across Bancroft Way, Berkeley High School, approximately 0.25 miles east of the area, Berkeley Rose Waldorf School, approximately 0.1 miles south of the area, Hearts Leap Preschool, approximately 0.1 mile south, and Willard Middle School, Monteverde School, Maybeck High School, and Emerson Elementary School, all approximately 0.25 miles south of the area. Although the proposed project would increase potential buildout in the Southside Area compared to what was analyzed in the 2023 EIR by up to 1,652 units, as described above, adherence to applicable requirements, including DOT and DTSC regulations as well as the City's Standard COA regarding emissions and transport of hazardous materials would ensure that impacts would be reduced to a less than significant level, similar to the HEU.

Several streets in the Southside Area, including Telegraph Avenue, Durant Avenue, Channing Way, Haste Street, and Dwight Way are designated as emergency access routes to move people and emergency response equipment in a disaster. General Plan Policy T-28 identifies actions for emergency access. These include not installing diverters or speed humps on streets identified as Emergency Access and Evacuation Routes. While the proposed project would increase the number of units in the Southside Area by up to 1,652 units, and therefore would result in increased traffic compared to the HEU, the designated access routes would continue to serve as evacuation routes in the case of emergency because the proposed project does not propose street configuration changes. Moreover, because the Southside Area can be accessed by several designated access routes, and new development in the Southside Area is anticipated to be distributed throughout the area, the traffic increase that would result from new development in the Southside Area would not substantially impact one route and would be distributed among existing routes. Future development would be required to conform to the latest Fire Code requirements, including provisions for emergency access, and would not obstruct existing roadways or require the construction of new roadways or access points. Therefore, impacts would be less than significant, similar to the proposed project.

The Southside Area is not located within two miles of an airport. The nearest airport to the Southside Area is the Oakland International Airport approximately 10 miles to the south. The Southside Area is not in the land use plan for the airport (Alameda County 2012). There would be no impacts related to airport safety hazards for people residing or working in the Southside Area.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to hazards and hazardous materials, and no new mitigation measures are required. Berkeley's Standard COA requiring contacting the TMD and determining if Environmental Site Assessments, Soil and Groundwater Management Plans, Building Materials Surveys, and Hazardous Materials Business Plans, as referenced in the 2023 EIR, would remain applicable.

Toxics. The applicant shall contact the Toxics Management Division (TMD) to determine which of the following documents are required and timing for their submittal:

A. Environmental Site Assessments

1. Phase I & Phase II Environmental Site Assessments (latest ASTM 1527-13). A recent Phase I ESA (less than 6 months old*) shall be submitted to TMD for developments for:
   - All new commercial, industrial and mixed-use developments and all large improvement projects.
   - All new residential buildings with 5 or more dwelling units located in the Environmental Management Area (or EMA).
   - EMA is available online at:

     http://www.cityofberkeley.info/uploadedFiles/IT/Level_3_-_General/ema.pdf

2. Phase II ESA is required to evaluate Recognized Environmental Conditions (REC) identified in the Phase I or other RECs identified by TMD staff. The TMD may require a third party toxicologist to review human or ecological health risks that may be identified. The applicant may apply to the appropriate state, regional or county cleanup agency to evaluate the risks.

3. If the Phase I is over 6 months old, it will require a new site reconnaissance and interviews. If the facility was subject to regulation under Title 15 of the Berkeley Municipal Code since the last Phase I was conducted, a new records review must be performed.

B. Soil and Groundwater Management Plan

1. A Soil and Groundwater Management Plan (SGMP) shall be submitted to TMD for all non-residential projects, and residential or mixed-use projects with five or more dwelling units, that: (1) are in the Environmental Management Area (EMA) and (2) propose any excavations deeper than 5 feet below grade. The SGMP shall be site specific and identify procedures for soil and groundwater management including identification of pollutants and disposal methods. The SGMP will identify permits required and comply with all applicable local, state and regional requirements.
2. The SGMP shall require notification to TMD of any hazardous materials found in soils and groundwater during development. The SGMP will provide guidance on managing odors during excavation. The SGMP will provide the name and phone number of the individual responsible for implementing the SGMP and post the name and phone number for the person responding to community questions and complaints.
3. TMD may impose additional conditions as deemed necessary. All requirements of the approved SGMP shall be deemed conditions of approval of this Use Permit.

C. Building Materials Survey

1. Prior to approving any permit for partial or complete demolition and renovation activities involving the removal of 20 square or lineal feet of interior or exterior walls, a building 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, polychlorinated biphenyl (PBC) containing equipment, hydraulic fluids in elevators or lifts, refrigeration systems, treated wood and mercury containing devices (including fluorescent light bulbs and mercury switches). The Survey shall include plans on hazardous waste or hazardous materials removal, reuse or disposal procedures to be implemented that fully comply with state hazardous waste generator requirements (22 California Code of Regulations 66260 et seq). The Survey becomes a condition 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. If asbestos is identified, Bay Area Air Quality Management District Regulation 11-2-401.3 a notification must be made and the J number must be made available to the City of Berkeley Permit Service Center.

D. Hazardous Materials Business Plan

1. A Hazardous Materials Business Plan (HMBP) in compliance with BMC Section 15.12.040 shall be submitted electronically at http://cers.calepa.ca.gov/ within 30 days if on-site hazardous materials exceed BMC 15.20.040. HMBP requirement can be found at http://ci.berkeley.ca.us/hmr/

Conclusion

The proposed project would have less than significant impacts with respect to hazards and hazardous materials. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant

impacts or substantially more severe significant impacts with respect to hazards and hazardous materials than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.9 Hydrology and Water Quality

Impacts Identified in the 2023 EIR

As discussed in Section 4.9, *Hydrology and Water Quality*, of the 2023 EIR, construction activities could cause soil erosion from exposed soil, and accidental release of hazardous materials used for equipment such as vehicle fuels and lubricant, or temporary siltation from storm water runoff. However, future development facilitated by the HEU would be required to comply with State and local water quality regulations designed to control erosion and protect water quality during construction, such as requirements of the SWRCB Construction General Permit (CGP), which requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and BMPs for projects that disturb one acre or more of land. Should dewatering be necessary during construction, development projects would be subject to the San Francisco Bay Regional Water Quality Control Board Order No. R2-2012-0060, General Waste Discharge Requirements for Discharge or Reuse of Extracted Brackish Groundwater, Reverse Osmosis Concentrate Resulting from Treated Brackish Groundwater, and Extracted Groundwater from Structural Dewatering Requiring Treatment (Groundwater General Permit). Development would also be required to comply with BMC Chapters 17.20 and 21.40, which would reduce construction-related water quality impacts to a less than significant level.

Development under the HEU would also be required to comply with the BMC and the Municipal Regional Stormwater NPDES Permit (No. CAS612008). Development design would include BMPs to avoid adverse effects associated with stormwater runoff quality. The 2023 EIR stated that development would also be required to implement LID Measures and on-site infiltration, as required under the C.3 provisions of the Municipal Regional Stormwater Permit (MRP). In addition to Provision C.3, development would also be required to comply with Provisions C.6, C.10, and C.15 of the MRP, which would reduce operational water quality impacts to a less than significant level.

Similarly, with adherence to the NPDES Construction General Permit, NPDES MS4 General Permit, MRP, the Alameda County Clean Water Program, and the BMC, the 2023 EIR found that the HEU would not substantially alter the existing drainage pattern of the site or area or alter the course of a stream or river, not result in erosion or siltation, and not substantially increase the rate of surface runoff in a manner which would result in flooding on- or off-site or exceed capacity of a stormwater system. Impacts were found to be less than significant.

The 2023 EIR determined that the HEU would not 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. Compliance with the above-mentioned regulations would increase the potential for groundwater recharge, resulting in less than significant impacts to groundwater.

As discussed in Section 4.9 of the 2023 EIR, there are a few FEMA-designated 100-year Flood Hazard Areas throughout the city, particularly in the western portion of the city. However, development in Flood Hazard Areas would be required to comply with Chapter 17.12 of the BMC, which contains standards for construction in flood zones, as well as Policies S-26, S-27, and S-28 of the Berkeley General Plan, which would reduce impacts to a less than significant level.

Impacts of the Proposed Project

Similar to what was assumed in the 2023 EIR, although development facilitated by the proposed project would occur on non-vacant and underutilized sites in previously disturbed areas, ground-disturbing activities would still have the potential to cause soil erosion from exposed soil, an accidental release of hazardous materials used for equipment such as vehicle fuels and lubricant, or temporary siltation from storm water runoff. If uncontrolled during construction, soil erosion and water pollutants could have adverse offsite effects on water quality. Although most future development projects in the Southside Area would likely be on sites under one acre in size, future development projects that disturb more than one acre of land would be required to comply with the requirements of the SWRCB CGP, which requires preparation and implementation of a SWPPP. The SWPPP must include erosion and sediment control BMPs that would meet or exceed measures required by the CGP, as well as those that control hydrocarbons, trash, debris, and other potential construction-related pollutants. Post-construction stormwater performance standards are also required to specifically address water quality and channel protection events.

In addition, future development in the Southside Area would be required to comply with BMC Chapter 21.40, which contains regulations that govern the grading, erosion, and sediment control, as well as BMC Chapter 17.20, which requires BMPs to be implemented to minimize non-stormwater discharges during construction. Therefore, as with the HEU, construction-related water quality impacts would be less than significant.

The Southside Area is urbanized, largely consisting of impervious surfaces, including structures, parking lots, and roadways, with the exception of designated landscaped areas. Therefore, future development in the Southside Area would likely replace existing impervious surfaces and would not substantially increase the existing amount of impervious surfaces. Nonetheless, the proposed project would increase development potential in the Southside Area by up to 1,652 units, which could result in more water quality impacts during operation compared to the proposed project. However, as discussed in the 2023 EIR with regard to the HEU, the proposed project would be required to comply with the same State and local regulations, such as the NPDES Permit; MRP, specifically Provision C.3, C.6, and C.15; and BMC regulations, which would reduce impacts to a less than significant level, similar to the HEU.

The Southside Area is urbanized, largely consisting of impervious surfaces, including structures, parking lots, and roadways. Stormwater runoff generated by new development or redevelopment under the proposed project would be collected by drainage inlets and conduits and conveyed to the San Francisco Bay, as under current conditions. There are no surface waters within the Southside Area, and the area is not located within a FEMA designated Flood Hazard Area. Site-specific drainage pattern alterations could be required for development facilitated by the proposed project, but such alterations would not result in substantial adverse effects. Because the Southside Area is already largely covered with impervious surfaces, development under the proposed project would not introduce substantial new impervious areas to the extent that the rate or amount of surface runoff would substantially increase, would not introduce substantial new surface water discharges, and would not result in flooding on- or off-site. Regulated projects[7] within the Southside Area must treat 80 percent or more of the volume of annual runoff for volume-based treatment measures or 0.2-inch per hour for flow-based treatment measures. Furthermore, projects that create or replace

[7] Pursuant to the Alameda County Clean Water Program, new development or redevelopment projects that create or replace 10,000 square feet of impervious surfaces or 5,000 square feet or more of impervious surface for special land use categories (i.e., uncovered parking lots, restaurants, auto service facilities, and gasoline stations) are "regulated projects" and are required to implement site design measures, source control measures, and stormwater treatment measures to reduce stormwater pollution during operation of the project.

2,500 square feet or more of impervious surface must implement site design measures to reduce stormwater runoff. All regulated projects within the Southside Area would also be required to prepare a Stormwater Management Plan (SWMP) that includes the post-construction BMPs that control pollutant levels pursuant to BMC Chapter 17.20. SWMPs would be reviewed by the City of Berkeley prior to the issuance of building permits. In areas of the city that have soils with low permeability and/or area with high water tables, which may include portions of the Southside Area, BMPs that do not rely on infiltration are most appropriate. Therefore, similar to the HEU, this impact would be less than significant.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to hydrology and water quality, and no new mitigation measures are required.

Conclusion

The proposed project would have less than significant impacts with respect to hydrology and water quality. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to hydrology and water quality than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.10 Land Use and Planning

Impacts Identified in the 2023 EIR

As discussed in Section 4.10, *Land Use and Planning*, of the 2023 EIR, the HEU would have no impact regarding division of an established community because the HEU includes policies and programs to encourage housing development on underutilized and vacant sites and along established commercial corridors and neighborhoods. The HEU was determined to be consistent with the goals and strategies of Plan Bay Area 2050, as well as policies in the City's General Plan and the BMC. As stated in Government Code Section 65589.5(a), the Legislature has concluded that "the lack of housing, including emergency shelters, is a critical problem that threatens the economic, environmental, and social quality of life in California." The HEU establishes policies and programs to further the goal of meeting the existing and projected housing needs of all household income levels of the community. In addition, the sites inventory provides evidence of the City's ability to accommodate the RHNA through the year 2031, as established by the Association of Bay Area Governments (ABAG),as well as efficiently utilize vacant, underutilized, and underdeveloped lots within the City to increase the supply of housing. Impacts were found to be less than significant.

Impacts of the Proposed Project

Although the proposed project would allow for up to an additional 1,652 units in the Southside Area, no new roads, linear infrastructure, or other development features are proposed that would divide an established community or limit movement, travel, or social interaction between established land uses. Therefore, similar to the HEU, this impact would be less than significant.

The proposed project would include Zoning Ordinance amendments and zoning map changes and associated General Plan text and map amendments to create or modify objective design standards

in the Southside Area, including building height, coverage, ground-floor residential uses, and zoning district boundaries, to increase residential development potential, particularly student-oriented housing, in the R-3, R-3H, R-S, R-SH, R-SMU, and C-T zoning districts. As shown in Figure 5, the proposed project would include expansion of the R-SMU district in the area four blocks west of Telegraph Avenue, which would change from R-S to R-SMU, and three blocks east of Telegraph Avenue, which would change from R-3 and R-S to R-SMU. The proposed project would also include expansion of the R-S district into the areas currently zoned R-3 in between Haste Street, Dwight Way, and Fulton Street. Future development facilitated by the proposed project would be required to comply with zoning requirements for residential uses as described in Title 23, *Zoning*, of the BMC. Therefore, similar to the HEU, the proposed project would be consistent with the BMC.

As shown below under Table 7 and Table 8, the proposed project would be consistent with the applicable goals and policies from Plan Bay Area 2050 and the City's General Plan as analyzed in the 2023 EIR, and impacts would be less than significant.

Table 7 Project Consistency with Plan Bay Area 2050

Measure	Proposed HEU Project Consistency
Housing. Spur Housing Production for Residents of all Income Levels	
H3. Allow a greater mix of housing densities and types in Growth Geographies. Allow a variety of housing types at a range of densities to be built in Priority Development Areas, select Transit-Rich Areas and Select High-Resource Areas.	**Consistent.** The proposed project would facilitate up to 1,652 more units compared to the HEU in the Southside Area, which is a TPA within 0.5 mile of the Downtown Berkeley BART station and multiple bus routes such as the Alameda-Contra Costa Transit District (AC Transit) bus routes 6, 36, 51B, 52, 79, 604, 605, 851, and F, as well as the University of California, Berkeley Bear Transit R-Line. This would further reduce reliance on personal vehicles and encourage usage of alternative modes of transport.
H5. Integrate affordable housing into all major housing projects. Require a baseline of 10-20% of new market-rate housing developments of five units or more to be affordable to low-income households.	**Consistent**. Pursuant to Ordinance Number 936, *Inclusionary Housing*, and Chapter 23C.12 of the BMC, the City requires that new rental housing with five or more units must provide 20 percent of the units as below market rate units or pay the Affordable Housing Mitigation Fee or provide some below market rate units and pay a prorated fee. Of the 20 percent below market rate units, half must be provided to low-income households, and half must be provided to very-low income households.
EN4. Maintain urban growth boundaries. Using urban growth boundaries and other existing environmental protections, focus new development within the existing urban footprint or areas otherwise suitable for growth, as established by local jurisdictions.	**Consistent.** The project would facilitate increased development of housing on vacant and/or underutilized sites in the Southside Area, which would reduce pressure to develop open space areas. By placing residents close to jobs and alternative methods of transportation, the project would reduce greenhouse gas emissions and other criteria pollutants associated with vehicle use to help communities stay healthy and safe.

Source: ABAG 2021

Table 8 Project Consistency with Relevant General Plan Goals and Policies

General Plan Policy	Proposed HEU Project Consistency
Land Use Element	
Maintain and Preserve the Character of Berkeley	
Policy LU-3 Infill Development. Encourage infill development that is architecturally and environmentally sensitive, embodies principles of sustainable planning and construction, and is compatible with neighboring land uses and architectural design and scale.	**Consistent.** The proposed project would facilitate increased infill development on underutilized sites in order to increase density to accommodate a higher number of residents. Individual future projects would be subject to the City's existing general development standards (BMC Chapter 23.304) to ensure that buildings are compatible with neighboring land uses and architectural design and scale.
Policy LU-7 Neighborhood Quality of Life. Preserve and protect the quality of life in Berkeley's residential areas through careful land use decisions.	
Policy LU-4 Discretionary Review. Preserve and enhance the aesthetic, environmental, economic, and social character of Berkeley through careful land use and design review decisions.	**Consistent**. Future development would be required to comply with General Plan land use and design review policies and processes, and discretionary review would be required for applicable projects.
Maintain and Enhance Berkeley's Residential Areas	
Policy LU-9 Non-Residential Traffic. Minimize or eliminate traffic impacts on residential areas from institutional and commercial uses through careful land use decisions.	**Consistent**. The proposed project would facilitate the development of up to 1,652 more units in the Southside Area which is a TPA within 0.5 mile of the Downtown Berkeley BART station and multiple bus routes such as the Alameda-Contra Costa Transit District (AC Transit) bus routes 6, 36, 51B, 52, 79, 604, 605, 851, and F, as well as the University of California, Berkeley Bear Transit R-Line. This would encourage the use of alternative modes of vehicles and reduce VMT.
Policy LU-11 Pedestrian- and Bicycle-Friendly Neighborhoods. Ensure that neighborhoods are pedestrian- and bicycle-friendly with well-maintained streets, street trees, sidewalks, and pathways.	**Consistent**. Future development would be required to comply with residential bicycle parking standards pursuant to BMC Section 23.322.090. Implementation of the proposed project would not interfere or conflict with the City's pedestrian or bicycle network.
Maintain and Enhance Berkeley's Commercial Areas and the Downtown	
Policy LU-23 Transit-Oriented Development. Encourage and maintain zoning that allows greater commercial and residential density and reduced residential parking requirements in areas with above-average transit service such as Downtown Berkeley.	**Consistent**. The proposed project would facilitate the development of up to 1,652 more units in the Southside Area which is a TPA within 0.5 mile of the Downtown Berkeley BART station and multiple bus routes such as the Alameda-Contra Costa Transit District (AC Transit) bus routes 6, 36, 51B, 52, 79, 604, 605, 851, and F, as well as the University of California, Berkeley Bear Transit R-Line. Pursuant to Chapter 23.334 of the BMC, developments that provide more affordable housing than required and/or a robust Transportation Demand Management Plan would be able to reduce their parking supply.
Policy LU-27 Avenue Commercial Areas. Maintain and improve Avenue Commercial areas, such as University, San Pablo, Telegraph, and South Shattuck, as pedestrian-friendly, visually attractive areas of pedestrian scale and ensure that Avenue areas fully serve neighborhood needs as well as a broader spectrum of needs.	**Consistent**. The proposed project would facilitate the development of up to 1,652 more units in the Southside Area compared to the HEU, which includes the northern portion of Telegraph Avenue. The proposed project would streamline housing development by providing an objective set of development standards, such as building height, setbacks, and minimum density. This would ensure that future development is compatible with the character and scale of Berkeley according to the City's standards.

General Plan Policy	Proposed HEU Project Consistency
Transportation Element	
Automobile Use Reduction	
Policy T-10 Trip Reduction. To reduce automobile traffic and congestion and increase transit use and alternative modes in Berkeley, support, and when appropriate require, programs to encourage Berkeley citizens and commuters to reduce automobile trips, such as: 1. Participation in a citywide Eco-Pass Program (also see Transportation Policy T-3). 2. Participation in the Commuter Check Program. 3. Carpooling and provision of carpool parking and other necessary facilities. 4. Telecommuting programs. 5. "Free bicycle" programs and electric bicycle programs. 6. "Car-sharing" programs. 7. Use of pedal-cab, bicycle delivery services, and other delivery services. 8. Programs to encourage neighborhood-level initiatives to reduce traffic by encouraging residents to combine trips, carpool, telecommute, reduce the number of cars owned, shop locally, and use alternative modes. 9. Programs to reward Berkeley citizens and neighborhoods that can document reduced car use. 10. Limitations on the supply of long-term commuter parking and elimination of subsidies for commuter parking. 11. No-fare shopper shuttles connecting all shopping districts throughout the city.	**Consistent**. The proposed project would facilitate the development of up to 1,652 more units in the Southside Area which is a TPA within 0.5 mile of the Downtown Berkeley BART station and multiple bus routes such as the Alameda-Contra Costa Transit District (AC Transit) bus routes 6, 36, 51B, 52, 79, 604, 605, 851, and F, as well as the University of California, Berkeley Bear Transit R-Line. This would encourage future residents to reduce reliance on single-occupancy vehicles and utilize alternative modes of transportation. As shown in Table 10, under Section 5.14, *Transportation,* the proposed project would result in a VMT per capita of 10.61, which is lower than the VMT per capita for the HEU of 10.86. In addition, future development would be required to comply with Chapter 23.334 of the BMC, which requires development and implementation of a Transportation Demand Management program.
Urban Design & Preservation	
Protection of Existing Resources	
Policy UD-3 Regulation of Neighborhood Character. Use regulations to protect the character of neighborhoods and districts, and respect the particular conditions of each area.	**Consistent**. Individual future development projects would be subject to the development standards proposed under the proposed project which are designed to facilitate residential development while protecting neighborhood character by objectively regulating development standards, such as height, setbacks, and minimum density. The impacts associated with adoption of these development standards are analyzed throughout this Addendum.
New Construction and Alterations	
Policy UD-24 Area Character. Regulate new construction and alterations to ensure that they are truly compatible with and, where feasible, reinforce the desirable design characteristics of the particular area they are in.	**Consistent**. Individual future development projects would be subject to the development standards proposed under the proposed project which are designed to facilitate residential development while protecting neighborhood character by objectively regulating development standards, such as height, setbacks, and minimum density. The impacts associated with adoption of these development standards are analyzed throughout this Addendum.

General Plan Policy	Proposed HEU Project Consistency
Policy UD-33 Sustainable Design. Promote environmentally sensitive and sustainable design in new buildings.	**Consistent.** As discussed in Section 5.5, *Energy*, and Section 5.7, *Greenhouse Gas Emissions,* future development projects would be required to be constructed in accordance with the latest iteration of CALGreen and the California Energy Code, which include requirements for environmentally sensitive and sustainable design practices. In addition, new construction would be required to be all-electric per the requirements of BMC Chapter 12.80 (with limited exemptions and exceptions), which would reduce consumption of nonrenewable energy resources.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to land use and planning, and no new mitigation measures are required.

Conclusion

The proposed project would have less than significant impacts with respect to land use and planning. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to land use and planning than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.11 Noise

Impacts Identified in the 2023 EIR

According to the Berkeley General Plan Environmental Management Element, noise-sensitive uses include but are not limited to residences, child-care centers, hospitals, and nursing homes (City of Berkeley 2001). As discussed in Section 4.11, *Noise*, of the 2023 EIR, the HEU could expose noise-sensitive receptors to combined noise levels from construction equipment of 84 dBA Leq at 50 feet without a pile driver, and 95 dBA Leq at 50 feet with a pile driver. Development facilitated by the HEU would be required to comply with the City's Standard COAs related to construction hours, construction noise reduction, construction noise management, and noise reduction plans. Nonetheless, construction noise levels could still exceed the City's standards for stationary equipment in both multi-family residential and commercial zones and could still exceed the City's standards at multiple sites. Therefore, construction noise impacts were found to be significant and unavoidable.

Operation of projects facilitated by the HEU would include mechanical equipment such as heating, ventilation, and air conditioning (HVAC) equipment, delivery and trash trucks, and other noise-generating activities. However, such activities would be similar to the existing noise environment, and development would be required to comply with Section 13.40.070 of the BMC, which states that stationary machines and other devices located on the exterior of structures which generate sounds perceptible outside the perimeters of the lot on which the machine or other device is located must be installed with such sound transmission control measures to adequately minimize or eliminate the transmission of the sound to a level not to exceed 60 dBA on weekdays and 50 dBA on weekends for single family residential beyond property perimeters; Section 23130 of the California

Motor Vehicle Code which establishes maximum sound levels of 86 dBA L_{eq} at 50 feet for trucks operating at speeds less than 35 miles per hour; Section 13.40.070 of the BMC which prohibits operating or permitting the operation of a mechanically powered saw, sander, drill, grinder, lawn or garden tool, or similar tool before 7:00 a.m. on a weekday (or before 9:00 a.m. on a weekend or holiday) or after 7:00 p.m. on a weekday (or after 8:00 p.m. on a weekend or holiday) such that the sound therefrom across a residential or commercial real property line violates BMC Section 13.40.050 or 13.40.060; and Section 19.29 of the BMC which includes the 2019 California Residential Code, as adopted in Title 24 Part 2.5 of the California Code of Regulations, which would reduce operational noise impacts to a less than significant level. As discussed in the 2023 EIR, daily VMT from the HEU would increase by approximately 6 percent over existing 2020 conditions by the year 2031. A 6 percent increase in traffic on a roadway would equate to an increase in noise of 0.2 dBA, which would not double the existing mobile noise source and would not increase noise levels by even the most conservative threshold of 3 dBA, which is considered a barely perceptible noise increase. Off-site traffic noise impacts were therefore found to be less than significant.

The 2023 EIR found that construction activities related to development facilitated by the HEU would not result in significant vibration impacts with adherence to the City's Standard COA related to construction vibration. The 2023 EIR also found that groundborne vibration in the vicinity of development facilitated by the HEU would be primarily generated by vehicular travel on the local roadways. However, the HEU would not increase traffic trips such that it would be perceptible to nearby noise-sensitive receptors, and impacts would be less than significant.

As discussed in 2023 EIR Section 4.11, development facilitated by the HEU would not be exposed to intermittent noise levels from overhead flight patterns from airports in the city, because there are none located within Berkeley. In addition, residential development would be required to incorporate noise insulation features consistent with achieving State and local standards to reduce interior noise levels to below 45 dBA. Therefore, impacts would be less than significant.

Impacts of the Proposed Project

Construction Noise

The proposed project would increase the potential number of units in the Southside Area by up to 1,652 units compared to the adopted HEU, resulting in additional demolition and construction activity that would generate temporary increases in ambient noise levels. It is also possible that concurrent construction activity on nearby development sites could result in a higher combined temporary increase in ambient noise at sensitive receptors in the vicinity, and result in an adverse impact on nearby noise-sensitive receptors. As discussed in the 2023 EIR, construction noise levels would vary depending on the type of equipment, the duration of use, the distance to receivers, and the potential for pile driving. Noise associated with construction of most development facilitated by the proposed project would be typical of residential construction in urban areas, but could exceed the eight-hour 80 dBA L_{eq} daytime significance threshold at residences. Similar to the HEU, the proposed project could facilitate larger projects that may include relatively lengthy construction durations (i.e., longer than 18 months), two or more subterranean levels, use of multiple pieces of heavier equipment (i.e., cranes, excavators, dozers), simultaneous use of multiple pieces of equipment, and generally noisier activities, such as the potential for pile driving. This could potentially result in significant noise impacts, in particular to adjacent residential zones or other nearby noise-sensitive receivers, and would temporarily increase ambient noise levels above FTA noise limits. Development facilitated by the proposed project would be required to comply with the City's Standard COA related to construction hours, construction noise reduction programs,

construction noise management, and noise reduction plans, which would reduce construction noise to the extent feasible. However, as discussed in the 2023 EIR, the Standard COAs would include the installation of temporary sound barriers where warranted, which are the most effective advanced measure to reduce noise from construction sites adjacent to noise-sensitive receptors, and no further measures are available to provide additional reductions in construction noise. Therefore, construction noise levels could still exceed the City's standards for stationary equipment in both multi-family residential and commercial zones. Furthermore, construction noise levels could exceed the City's standards at multiple sites where the proposed project would facilitate development in the Southside Area. Similar to the HEU, this impact would be significant and unavoidable.

Operational Noise

The additional 1,652 units facilitated under the proposed project would generate noise associated with the operation of residences. Typical noise sources associated with residential uses include stationary HVAC equipment, vehicle movement (e.g., delivery and trash hauling), outdoor activities, and traffic on area roadways. These impacts are discussed below.

HVAC EQUIPMENT

Because of the proposed increased density of development in the Southside Area, this analysis includes the conservative assumption that new HVAC equipment could be installed as close as 20 feet from noise-sensitive receptors on adjacent properties. Typical residential HVAC units are anticipated to generate noise levels ranging from 50 to 60 dBA L_{eq} at a distance of 50 feet from the source, if unshielded by equipment enclosures (Illingworth & Rodkin 2019). Based on a standard attenuation rate of 6 dBA per doubling of distance from stationary noise sources, it is estimated that new HVAC equipment in the Southside Area would generate noise levels reaching 68 dBA at 20 feet from the source. This estimate does not account for the shielding effect of equipment enclosures or rooftop parapets, which could block line of sight between the source and noise-sensitive receptors, reducing noise levels by at least 10 dBA. However, as discussed in the 2023 EIR, the design and placement of new HVAC equipment would be required to comply with Section 13.40.070 of the BMC, which states that stationary machines and other devices located on the exterior of structures which generate sounds perceptible outside the perimeters of the lot on which the machine or other device is located must be installed with such sound transmission control measures to adequately minimize or eliminate the transmission of the sound to a level not to exceed 60 dBA on weekdays and 50 dBA on weekends for single family residential beyond property perimeters. Stationary equipment shall not exceed 65 dBA on weekdays and 55 dBA on weekends for multi-family residential areas.[8] Furthermore, a motor, machinery, pump, such as swimming pool equipment, etc., must be sufficiently enclosed or muffled and maintained so as not to create a Noise Disturbance in accordance with Section 13.40.050 or 13.40.060. Therefore, impacts related to HVAC equipment would be less than significant, similar to the HEU.

VEHICLE ACTIVITY (DELIVERY AND TRASH HAULING)

Maximum noise levels generated by movement of medium duty delivery trucks generally range from 61 to 70 dBA Leq at a distance of 25 feet, depending on the speed at which the truck is driving (Olson 1972). The average noise level for a single idling truck generally ranges from 72 to 77 dBA Leq at a distance of 25 feet. It is assumed that delivery and trash hauling trucks serving additional

[8] Maximum sound levels for repetitively scheduled and relatively long term operation (period of 10 days or more) of stationary equipment.

development in the Southside Area could stop as close as 25 feet to adjacent residences on narrow two-lane streets such as Channing Way. An increase of up to 1,652 units in the Southside Area could result in a slightly higher volume of truck trips for delivery and trash hauling. However, truck activity would not substantially exceed existing activity in the already urbanized Southside. For example, trash and recycling trucks already visit most existing properties that could be redeveloped under the proposed project. Additionally, as discussed in the 2023 EIR, Section 23130 of the California Motor Vehicle Code establishes maximum sound levels of 86 dBA L_{eq} at 50 feet for trucks operating at speeds less than 35 miles per hour, and solid waste pick-up operations are typically scheduled during daytime hours when people tend to be less sensitive to noise. Furthermore, these noise events from trucks are typically transient and intermittent, and do not occur for a sustained period of time. Therefore, similar to the HEU, impacts related to delivery and trash hauling would be less than significant.

Outdoor Activity Areas

Addition of up to 1,652 units in the Southside Area would increase the number of residents and thereby increase noise generated by conversations, music, television, or other outdoor sound-generating equipment (e.g., leaf blowers), particularly in the event future residents open their windows or such activities take place on balconies or in common outdoor amenity areas. However, these noise-generating activities would be similar to those of the existing urban environment. Further, violations of the noise ordinance would be subject to BMC Chapter 13.40. This chapter prohibits noise disturbances such as loud equipment, amplified sound not associated with a permitted event, or yelling and sets forth procedures if violations occur. Section 13.40.070 of the BMC prohibits operating or permitting the operation of a mechanically powered saw, sander, drill, grinder, lawn or garden tool, or similar tool before 7:00 a.m. on a weekday (or before 9:00 a.m. on a weekend or holiday) or after 7:00 p.m. on a weekday (or after 8:00 p.m. on a weekend or holiday) such that the sound therefrom across a residential or commercial real property line violates Section 13.40.050 or 13.40.060. Furthermore, Chapter 19.29 of the BMC includes the 2019 California Residential Code, as adopted in Title 24 Part 2.5 of the California Code of Regulations. Therefore, similar to the HEU, impacts related to outdoor activities would be less than significant.

Roadway Vehicle Noise

The proposed project would allow for up to 1,652 more units in the Southside Area compared to what was anticipated under the HEU. The proposed project could affect ambient traffic noise if the proposed project facilitated development in a way that would increase vehicle trips to and from the Southside Area. However, as shown in Table 9, based on information provided by Kittelson & Associates, the proposed project would decrease vehicle trips compared to buildout under the HEU without the proposed project by placing housing in an area served by transit and within walking and bicycling distance to jobs and services. Therefore, the project would not double the existing mobile noise source and would not increase noise levels by even the most conservative threshold of 3 dBA, which is considered a barely perceptible noise increase. Similar to the HEU, impacts related to off-site operational noise would be less than significant.

Table 9 Daily Vehicle Trip Summary

	Total Daily Vehicle Trips
2031 With HEU	3,391,463
2031 With Proposed Project	3,370,416
Change in Vehicle Trips (2031 With HEU and 2031 With Proposed Project)[1]	**(21,047) (0.6% decrease)**

[1] The change in vehicle trips is decreased since the proposed project would concentrate a higher number of development in proximity to jobs, services, and transit which would reduce daily vehicle trips.

( ) denotes subtraction

Source: Kittelson & Associates 2023 (Appendix A)

Operational Vibration

Similar to the HEU, it is not anticipated that operation of residential development would involve activities that would result in substantial vibration levels, such as use of heavy equipment or machinery. Based on the FTA *Transit Noise and Vibration Impact Assessment* (2018) guidance document, rubber tires and suspension systems dampen vibration levels from vehicles on local roadways to a level that is rarely perceptible. Therefore, similar to the HEU, the proposed project would have a less than significant impact related to operational vibration.

Construction Vibration

The proposed project would allow for additional development in the Southside Area, the construction of which could intermittently generate strong vibration. As discussed in the 2023 EIR, general construction equipment such as a vibratory roller would generate vibration levels up to 0.21 in./sec. PPV at 25 feet, while more intensive equipment such as pile driving could generate a vibration level of approximately 0.64 in./sec. PPV at 25 feet. According to Caltrans impact criteria, the damage threshold for historic sites (which are most sensitive to impacts from groundborne vibration) is 0.12 in./sec. PPV. Groundborne vibration from hoe rams, bulldozers, caisson drilling, loaded trucks, and jackhammers would not exceed the 0.1 in./sec. PPV threshold for sensitive historic sites. While groundborne vibration from vibratory rollers would only exceed the threshold for building damage for historic sites at 25 feet from the source, vibration levels from pile driving would exceed one or more of building damage thresholds for historic sites, general old buildings, and older and newer residential structures. Furthermore, vibration levels associated with pile driving would also exceed the threshold of 0.25 in./sec. PPV for human annoyance at various distances up to 75 feet. Future development facilitated by the proposed project would be required to comply with the City's Standard COA related to construction vibration, which would ensure groundborne vibration from vibratory rollers and vibration levels from pile driving would not occur in a manner that would damage buildings. Therefore, similar to the HEU, construction vibration impacts would be less than significant.

Airport Noise

As discussed in the 2023 EIR, the closest airport to Berkeley is the Oakland (OAK) Airport which is located 11 miles south of the Southside Area. According to the Oakland International Airport Land Use Compatibility Plan, Berkeley is located outside of the airport's noise contours and the airport influence area illustrated in Figure 3-1 of the Airport Land Use Compatibility Plan (Alameda County 2012). Therefore, similar to the HEU, the proposed project would not expose people residing or working in the plan area to excessive noise levels, and impacts would be less than significant.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to noise and vibration, and no new mitigation measures are required. Berkeley's Standard COAs related to construction hours, construction noise reduction, construction noise management, noise reduction plans, and construction vibration, as referenced in the 2023 EIR, would remain applicable.

Construction Hours (Residential Zoning Districts). Construction activity shall be limited to between the hours of 8:00 AM and 6:00 PM on Monday through Friday, and between 9:00 AM and Noon on Saturday. No construction-related activity shall occur on Sunday or any Federal Holiday.

Construction Hours (Non-Residential Zoning Districts). Construction activity shall be limited to between the hours of 7:00 AM and 6:00 PM on Monday through Friday, and between 9:00 AM and 4:00 PM on Saturday. No construction-related activity shall occur on Sunday or any Federal Holiday.

Construction Noise Reduction Program. 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 the time limits for construction listed above, as measures needed to ensure that construction complies with BMC Section 13.40.070. 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:

A. Construction equipment should be well maintained and used judiciously to be as quiet as practical.
B. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.
C. 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.
D. 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.
E. Prohibit unnecessary idling of internal combustion engines.
F. If impact pile driving is required, pre-drill foundation pile holes to minimize the number of impacts required to seat the pile.
G. 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.
H. 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.
I. Route construction related traffic along major roadways and away from sensitive receptors where feasible.

Construction Noise Management – Public Notice Required. At least two weeks prior to initiating any construction activities at the site, the applicant shall provide notice to businesses and residents within **500 feet** of the project site. This notice shall at a minimum provide the following: (1) project description, (2) description of construction activities, (3) daily construction schedule (i.e., time of day) and expected duration (number of months), (4) the name and phone number of the Project Liaison for the project that is responsible for responding to any local complaints, (5) commitment to notify neighbors at least four days in advance of authorized extended work hours and the reason for extended hours, and (6) that construction work is about to commence. The liaison would determine the cause of all construction-related complaints (e.g., starting too early, bad muffler, worker parking, etc.) and institute reasonable measures to correct the problem. A copy of such notice and methodology for distributing the notice shall be provided in advance to the City for review and approval.

Noise Reduction Plan. Applicants are required to develop a site-specific noise reduction program prepared by a qualified acoustical consultant to reduce construction noise impacts to the maximum extent feasible. The noise reduction program would include several elements that would reduce the exposure of sensitive receptors to construction noise, such as the following:

- Equipping all internal combustion engine-driven equipment with mufflers in good condition
- Pre-drilling foundation pile holes to minimize the use of pile drivers
- Installing solid plywood fences around construction sites adjacent to sensitive receptors
- Erecting temporary noise control blanket barriers along building façades facing construction sites.

Damage Due to Construction Vibration. The project applicant shall submit screening level analysis prior to, or concurrent with demolition building permit. If a screening level analysis shows that the project has the potential to result in damage to structures, a structural engineer or other appropriate professional shall be retained to prepare a vibration impact assessment (assessment). The assessment shall take into account project specific information such as the composition of the structures, location of the various types of equipment used during each phase of the project, as well as the soil characteristics in the project area, in order to determine whether project construction may cause damage to any of the structures identified as potentially impacted in the screening level analysis. If the assessment finds that the project may cause damage to nearby structures, the structural engineer or other appropriate professional shall recommend design means and methods of construction that to avoid the potential damage, if feasible. The assessment and its recommendations shall be reviewed and approved by the Building and Safety Division and the Zoning Officer. If there are no feasible design means or methods to eliminate the potential for damage, the structural engineer or other appropriate professional shall undertake an existing conditions study (study) of any structures (or, in case of large buildings, of the portions of the structures) that may experience damage. This study shall establish the baseline condition of these structures, including, but not limited to, the location and extent of any visible cracks or spalls; and include written descriptions and photographs.

Conclusion

The City's Standard Conditions of Approval for construction noise reduction and management and BMC requirements would still be applicable to development under the proposed project. However, even with implementation of these conditions, impacts related to construction noise would remain significant and unavoidable, similar to the HEU. Nonetheless, no substantial changes have occurred

that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to noise than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.12 Population and Housing

Impacts Identified in the 2023 EIR

As discussed in Section 4.12, *Population and Housing*, of the 2023 EIR, the HEU would add housing sites with a potential for up to 19,098 additional residential units and 47,443 additional residents by the year 2031. The 2023 EIR found that the HEU would be consistent with State requirements for the RHNA and would be within the growth forecasts for Northwest Alameda County in Plan Bay Area 2050, which projected a 57 percent increase in population for Northwest Alameda County. The 2023 EIR found that the HEU would not directly or indirectly result in substantial unplanned population growth, and would not result in the displacement of substantial numbers of people or housing. Therefore, impacts were found to be less than significant.

Impacts of the Proposed Project

The proposed project would facilitate the development of up to 1,652 additional units in the Southside Area compared to the adopted HEU. Using the 2023 EIR estimate of 2.5 persons per household, the proposed project would increase the number of residents in the Southside Area and in Berkeley by 4,130 people. In the unlikely event that all buildout under the 2023 EIR (47,443 residents) and the proposed project occurs, the total population of the city in 2031 (buildout year of the 2023 HEU) would be 176,136, or a population increase of approximately 41 percent[9]. Similar to the HEU, the proposed project would facilitate sufficient housing development to meet the City's RHNA and would be within the growth forecasts for Northwest Alameda County in Plan Bay Area 2050, which projects a 57% increase in population for Northwest Alameda County. Given that the State is currently in an ongoing housing crisis due to an insufficient housing supply, the additional units under the proposed project would also assist in addressing the existing crisis and meeting the housing needs of the City's communities.

Although the proposed project would facilitate the development of up to 1,652 more units, the units would be concentrated in the Southside Area which is a TPA, which would help reduce reliance on automotive travel, vehicle miles traveled, and associated GHGs. Future residents would have ample opportunities to utilize alternative modes of transportation and would be able to walk or bicycle to many jobs and services.

Similar to what was analyzed in the 2023 EIR, this analysis is conservative because it assumes a maximum buildout scenario. The proposed project's actual contribution to population growth may be less than estimated. In addition, the proposed project would not involve the extension of roads or other infrastructure that could indirectly lead to population growth. As discussed in Sections 5.13, *Public Services and Recreation*, and Section 5.16, *Utilities and Service Systems*, of the 2023 EIR, the city is mostly developed and is supported by existing public services and infrastructure which are sufficient to serve the additional housing units. Therefore, the proposed project would not result in

[9] (47,443 (buildout of HEU) + 4,130 (buildout of proposed project)) / 124,563 (current population in the 2023 EIR) x 100 = 41 percent

substantial unplanned population growth, either directly or indirectly, and impacts would be less than significant, same as the impact analyzed in the 2023 EIR.

While the adoption of the proposed Southside Zoning Implementation Program would have no direct physical effects, subsequent development allowed by the proposed project could involve the demolition of existing housing units in the Southside Area. Because the addition of up to 1,652 more housing units than analyzed in the 2023 EIR would more than offset the potential loss of housing units, the proposed project would not require the construction of additional housing elsewhere. Future applicants would be required to comply with the City's Inclusionary Housing Ordinance, which would require developers of market-rate ownership housing to include affordable ownership units or pay a fee, as well as the Affordable Housing Mitigation Fee Ordinance, which would require developers of market-rate rental housing to pay a fee to the Housing Trust Fund (which is used as funding for affordable housing production) or include affordable units in developments. In addition, SB 330 would require that replacement housing be either rent-controlled or below market rate. Moreover, deed restrictions may run with individual properties to maintain long-term affordability. The BMC also places conditions on the loss of housing units and includes tenant protections for displaced residents. Projects that involve demolition or elimination of dwelling units would be subject to BMC Chapter 23.326, which requires that demolition of dwelling units may only be approved if it is found that the elimination of the dwelling units would not be materially detrimental to the housing needs and public interest of the affected neighborhood and the city. Further, BMC Chapter 23.326 includes tenant protections for displaced residences. When demolition of an occupied unit is approved, the project applicant is required to provide assistance with moving expenses and subsidize the rent differential for a comparable replacement unit. If a tenant is displaced due to the owner withdrawing the building from rent or lease or for repairs to bring the unit into compliance, BMC Section 13.77.055 and Chapter 13.84 entitle the tenant to relocation compensation and certain protections. In addition, BMC Section 13.76.130 requires landlords to have good cause for evictions and provide relocation assistance to households as specified in Section 13.76.130A(9). Therefore, similar to the HEU, the proposed project would not result in the net loss or displacement of housing, necessitating the construction of replacement housing elsewhere, and impacts would be less than significant.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to population and housing, and no new mitigation measures are required.

Conclusion

The proposed project would have less than significant impacts with respect to population and housing. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to population and housing than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.13 Public Services and Recreation

Impacts Identified in the 2023 EIR

As discussed in Section 4.13, *Public Services and Recreation*, of the 2023 EIR, the HEU would increase demand for fire and police protection services, school facilities, and parks and recreational facilities. However, compliance with Government Code 65995 (b) as well as policies in the City's General Plan and BMC would reduce impacts to a less than significant level.

Impacts of the Proposed Project

Fire Protection

Fire protection in the city is provided by the Berkeley Fire Department (BFD). The proposed project would facilitate development that would increase population in the Southside Area and in Berkeley by adding the potential for up to 1,652 new units. Using the 2023 EIR estimate of 2.5 persons per household, the proposed project's changes to the HEU would result in 4,130 new residents in addition to the 47,443 new residents estimated to be added in the HEU as anlayzed in the 2023 EIR. The additional increase in residents associated with the proposed project could increase demand for fire protection and emergency medical services such that additional staff, equipment or facilities would be needed to meet response time goals. However, future development would be facilitated on non-vacant and underutilized sites in urbanized areas in the Southside Area which are already served by existing fire stations. The BFD Fire Station 5 is located approximately 0.2 miles southwest of the Southside Area, and BFD Fire Station 3 is located approximately 0.4 miles south of the Southside Area. The continued implementation of policies and actions in the Berkeley General Plan would improve the ability of fire protection facilities to serve this additional future development and allow fire protection services to maintain response time goals. As discussed in the 2023 EIR, the BFD has an average response time of five minutes and fifteen seconds (5:15) from when the station receives the call to the first unit arriving on the scene. The median response time is 4:46. Policy S-22 in the City's Disaster Preparedness and Safety Element of the General Plan calls for the City to provide adequately staffed and equipped Fire Stations and to pursue a response time goal of four minutes from the nearest station to all parts of Berkeley. Although the City's response time goal of four minutes has not been met, new residential projects would be reviewed for compliance with these requirements and compliance with other building and safety regulations several times during different phases of project development, such as the entitlement and pre-application phase, during the building permit process, and during the construction process. Future development would be required to comply with basic building designs and standards for residential buildings as mandated by the Berkeley Fire Code under BMC Chapter 19.48. In some cases, older buildings not constructed to today's more stringent levels of fire-safety regulation would be replaced by new buildings compliant with existing regulations, improving fire safety on those sites. Compliance with designs and standards and other fire safety requirements would reduce the demand for fire protection services and thereby reduce the need for new fire stations. Future development would also be required to comply with abatement of fire-related hazards and pre-fire management prescriptions as contained in the California Health and Safety Code and the California Fire PlanThe City's Measure FF, passed in November 2020, is estimated to generate $8.5 million annually, and would be used to implement a state-of-the-art 911 dispatch system to ensure rapid assistance to emergency medical calls, increase ambulance and paramedic capacity, to better meet the needs of all residents, and strengthen wildfire, earthquake and other disaster prevention and preparedness with new,

expanded emergency warning systems, fire fuel reduction and evacuation planning. These funds will allow the Fire Department to address increased call volumes and emergency medical service needs that result from city-wide increases in residential density, including the anticipated increase allowed under the proposed project. Future remodeling or expansion of BFD facilities to accommodate new equipment would not be needed to specifically to serve the additional residential units, which would be added incrementally in various locations in the city and served by more than one fire station. Should a new fire station be required, the environmental impacts of constructing a fire station would be consistent with the construction-related impacts discussed in other sections of this Addendum and the 2023 EIR. Should the Fire Department and the City determine that additional facilities are needed to provide fire protection services to the Southside Area, it is not known whether such facilities would be located within the Southside Area or elsewhere in the city. If and when the BFD proposes a new station and identifies an appropriate site and funding, the City will conduct a complete a site-specific evaluation of the station's environmental impacts under CEQA. Therefore, impacts to fire services would be less than significant, similar to the HEU.

Police Protection

Police protection in the city is provided by the Berkeley Police Department (BPD). Although the proposed project would increase potential buildout in the Southside Area compared to what was analyzed in the 2023 EIR by up to 1,652 units, future development would be facilitated on non-vacant and underutilized sites in urbanized areas which are already served by existing police stations. Nonetheless, the additional population growth facilitated by the proposed project could result in an increase in reported incidents, leading to longer response times unless the BPD increases staffing. The Disaster Preparedness and Safety Element, the Transportation Element and the Economic Development & Employment Element of the City's General Plan include policies that would ensure police services are adequate to accommodate an increase in population. Specifically, Policy S-1 and Action G would ensure that the City's emergency response plans are current and incorporate the latest information on hazards, vulnerability and resources; Policy T-28 and Action A would ensure emergency access be provided to all parts of the city which would not significantly increase emergency response times or hinder effective evacuation; and Policy ED-4 and Action A would ensure there are adequate levels of police presence in neighborhood and avenue commercial zones. Should the Police Department and the City determine that additional facilities are needed to provide police protection services to the Southside Area, it is not known whether such facilities would be located within the Southside Area or elsewhere in the city. If and when the BPD proposes a new station and identifies an appropriate site and funding, the City will conduct a complete a site-specific evaluation of the station's environmental impacts under CEQA. Therefore, similar to the HEU, impacts to police services would be less than significant.

Schools

As discussed in the 2023 EIR, in a study prepared for Berkeley Unified School District's (BUSD) adopted School Facilities Fee on new residential and commercial/industrial development, the District used a blended student generation rate of 0.191 for all housing types (BUSD 2016). Based on this generation rate, development under the proposed project would add an estimated total of 316 new students over time. However, this number is highly conservative, and it is assumed that many of the new housing units would be occupied by University students and would not house school-aged children, since one of the primary goals of the proposed project is to create additional housing at appropriate locations to help meet the housing demand for students, thus taking advantage of proximity to the University. Nonetheless, the proposed project could encourage housing that would

add more school-aged children to BUSD schools. These students would be distributed throughout the schools that serve Berkeley depending on their grade level, their location, and their school preferences. The addition of 316 students under the proposed project in addition to the 3,648 new students under the HEU would result in an increase of 42 percent compared to the BUSD enrollment of 9,409 students in the 2020-21 school year (Ed-Data.org 2022). However, as discussed in the 2023 EIR, future development facilitated by proposed project would be required to pay school impact fees pursuant to Section 65995(3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), which BUSD would use to maintain the desired school capacity and the maintenance and/or development of new school facilities. Therefore, impacts related to school capacity would be less than significant, similar to the HEU.

Parks and Recreation

Similar to the HEU, the proposed project would not include the provision of new parks or the physical alteration of existing parks or recreation centers. Full buildout of the proposed project would further increase the number of residents in the Southside Area compared to the HEU by 4,130 people, which would increase the use of parks and recreational facilities. As discussed in the 2023 EIR, the ratio of parkland per resident is approximately 25.5 acres per 1,000 residents. Although the proposed project would decrease the ratio of parkland per resident from 25.5 acres per 1,000 residents to 24.9 acres per 1,000 residents[10], in accordance with General Plan policies, the City continually evaluates and plans for expansion or renovations of parks and recreation facilities as need to accommodate demand. Compliance with General Plan policies, particularly Policies OS-1, OS-2, OS-6, would ensure park facilities are kept up to date and park acreage to population ratio is maintained within Berkeley. Compliance with General Plan policies and actions would potentially result in development of new recreational opportunities including parks. Should future park or recreational facilities be identified for construction, it is not known where such facilities would be located. If and when the Parks Department proposes new facilities and identifies an appropriate site and funding, the City will conduct an evaluation of the site-specific environmental impacts of the new park or recreation facility under CEQA. In addition, it is assumed that the majority of future housing in the Southside Area would service University students and staff who would have access to recreational opportunities such as pools, gyms, open space, and other recreational programs associated with the University campus. Future residents would also be able to access existing City parks and regional recreational facilities; including the Bay Trail and Eastshore State Park and Tilden Regional Park and Claremont Canyon Regional Preserve. Therefore, the proposed project would not result in substantial overuse of existing City parks which may cause physical deterioration of these facilities or require the construction or expansion of facilities which may have an adverse physical effect on the environment. Therefore, impacts related to parks and recreational facilities would be less than significant, similar to the HEU.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to public services and recreation, and no new mitigation measures are required.

Conclusion

The proposed project would have less than significant impacts with respect to public services and recreation. No substantial changes have occurred that require major revisions to the 2023 EIR.

[10] (4,391 acres of parkland x 1,000) / 176,136 people = 24.9 acres per 1,000 residents.

There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to public services and recreation than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.14 Transportation

Impacts Identified in the 2023 EIR

As discussed in Section 4.14, *Transportation*, of the 2023 EIR, the HEU would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Although the HEU would increase ridership for AC Transit and BART, AC Transit and BART monitor and plan for anticipated changes in local and regional ridership levels and increased demand through their ongoing evaluation of routes, schedules, ridership, and capacity availability. The HEU would also be consistent with the City's 2017 Bicycle Plan and development would be required to provide long-term and short-term bicycle parking in accordance with BMC Section 23.322.090 as well as meet applicable requirements for pedestrian access under BMC Section 23.304.100.

The 2023 EIR found that the HEU would decrease VMT per capita by 3 percent, from 11.22 to 10.86, which would be below the City of Berkeley VMT threshold of 19.38 (15 percent below regional average household VMT per capita of 22.80). Therefore, VMT impacts were found to be less than significant.

As found in the 2023 EIR, the HEU would not include hazardous geometric design features or incompatible uses, and circulation components and geometric design features for individual projects would be reviewed by the City Engineering division and would be in accordance with all applicable City standards and the building plan check process to minimize design hazards. Therefore, this impact was determined to be less than significant.

The HEU also would not result in inadequate emergency access. The 2023 EIR determined that development under the HEU would be required to comply with basic building designs and standards for residential buildings as mandated by the Berkeley Fire Code, under BMC Chapter 19.48. As a part of development review, representatives from several City departments and representatives, including the Building and Safety Division, the Transportation Division, and the Fire Department, would review the entitlement plan set to ensure compliance with egress requirements and other fire safety features. Individual projects would be required to incorporate all applicable design and safety requirements as set forth in the most current adopted building codes and fire and life safety standards. Compliance with these standards is ensured through the City review and building plan check process. Based on the preceding, impacts related to emergency access were found to be less than significant.

Impacts of the Proposed Project

The proposed project would allow for up to 1,652 more units in the Southside Area, which is an area served by BART and AC Transit, compared to the adopted HEU and therefore would increase the transit ridership for AC Transit and BART. However, AC Transit and BART monitor and plan for anticipated changes in local and regional ridership levels and increased demand through their ongoing evaluation of routes, schedules, ridership, and capacity availability. Therefore, similar to the

HEU, the proposed project would not conflict with AC Transit's or BART's ongoing efforts for facility improvement or capital improvement project planning.

The proposed project would concentrate development in the Southside Area, which is a TPA, and would place residents in proximity to jobs, services, and transit, which would encourage walking, bicycling, and the use of alternative modes of transportation. Future development would be reviewed in accordance with the City's Public Works Department Transportation Program standards, and the department would provide oversight engineering review to ensure that the project is constructed according to City standards. Thus, the proposed project would also be consistent with the City's 2017 *Bicycle Plan*. The proposed project does not include modifications to the public right-of-way and, therefore, would not preclude the installation of the planned or proposed bicycle facilities on the streets in the city. Development facilitated by the proposed project would provide long-term and short-term bicycle parking in accordance with BMC Section 23.322.090 requirements to accommodate the bicycle parking demand generated by the project residents and would also be required to meet applicable requirements for pedestrian access under BMC Section 23.304.100 or other requirements as applicable. Therefore, the proposed project would not conflict with the City's Bicycle Master Plan or the City's Pedestrian Plan, and impacts would be less than significant, similar to the adopted HEU.

As discussed in the 2023 EIR, the City of Berkeley has adopted thresholds to evaluate significant impacts for VMT. For residential uses, the City of Berkeley adopted a threshold of significance for VMT analysis based on the guidance from OPR that a residential project's VMT impact is considered less than significant if its household VMT per capita is at least 15 percent below the regional average household VMT per capita. Therefore, an increase in VMT per capita above 19.38 VMT (15 percent below the regional average of 22.80) would be considered a significant impact. VMT was calculated for the proposed project by Kittelson & Associates in June 2023 (see Appendix A). Table 10 summarizes the VMT for the applicable threshold, 2020 baseline, the adopted HEU, and the proposed project. As shown in Table 10, the proposed project would result in a decreased VMT per capita in comparison to the baseline 2020 condition and to the adopted HEU. Residential VMT per capita would decrease by 5 percent, from 11.22 to 10.61, compared to the baseline 2020 condition, and by 2 percent, from 10.86 to 10.61, compared to the HEU. These reductions indicate that the future residential development would provide more opportunities for residents and employees to access jobs and services within the City within shorter distances and by modes other than vehicle. Therefore, the proposed project would result in VMT per capita below applicable thresholds and impacts would be less than significant, similar to the HEU.

Table 10 VMT Results Summary

Units	Bay Area Region	Berkeley 2020	Adopted HEU (2031)	Proposed Project (2031)
Population	7,915,267	128,004	182,651	186,771
Residential VMT	180,468,151	1,436,244	1,983,715	1,982,372
Household VMT Per Capita	22.80	11.22	10.86	10.61

Source: Kittelson & Associates, Inc. 2023 (Appendix A)

Similar to the HEU, the proposed project's changes would only include residential development, and would not include hazardous geometric design features or incompatible uses. Each housing application would be evaluated at the project-specific level. Circulation components and geometric design features would be reviewed by the City Engineering division and would be in accordance with

all applicable City standards and the building plan check process to minimize design hazards. Design review standards include standards for project access points, location, design, sight lines, roadway modifications, provisions for bicycle and pedestrian transportation connections, and emergency access. Future development facilitated by the proposed project would be required to comply with basic building designs and standards for residential buildings as mandated by the Berkeley Fire Code, pursuant to BMC Chapter 19.48. As part of the development review process, representatives from several City departments and representatives, including the Building and Safety Division, the Transportation Division, and the Fire Department, would review the proposed development plan set to ensure compliance with emergency access requirements and other fire safety features. Future projects would be required to incorporate all applicable design and safety requirements as set forth in the most current building codes and fire and life safety standards, which would reduce impacts related to emergency access. Therefore, as was found in the 2023 EIR, the proposed project would have less than significant impacts related to safety hazards and emergency access.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to transportation and circulation, and no new or revised mitigation measures are required.

Conclusion

The proposed project would have less than significant impacts with respect to transportation. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to transportation than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.15 Tribal Cultural Resources

Impacts Identified in the 2023 EIR

As discussed in Section 4.15, *Tribal Cultural Resources*, of the 2023 EIR, ground-disturbing activities associated with the HEU could expose and adversely affect previously unidentified subsurface archaeological resources that may qualify as tribal cultural resources. However, impacts would be less than significant with adherence to the City's Standard COAs related to archaeological resources and human remains set forth above under Section 5.4, *Cultural Resources*, as well as Mitigation Measure TCR-1, which was adopted and incorporated into the HEU and would require tribal cultural monitoring.

Impacts of the Proposed project

Based on the results of AB 52 and SB 18 consultation conducted as part of preparation of the 2023 EIR, tribal cultural resources were found to be potentially present in areas near the waterfront and near Indian Rock. Although the proposed project would increase potential buildout in the Southside Area compared to what was analyzed in the 2023 EIR by up to 1,652 units, development facilitated by the proposed project would be concentrated in the Southside Area and would not be within the areas sensitive for tribal cultural resources. Therefore, similar to what was concluded in the 2023 EIR, it can be assumed that no tribal cultural resources have been identified. Nonetheless, similar to the HEU, ground-disturbing activities associated with individual development projects under the

proposed project could expose previously unidentified subsurface archaeological resources that may qualify as tribal cultural resources and could be adversely affected by construction. Future projects subject to CEQA and SB 35 would require project-specific tribal cultural resource identification and consultation and incorporation of the appropriate avoidance, minimization, or mitigation identified through the consultation process. In addition, the City's Standard COA related to the protection of archaeological resources and human remains (including remains that are determined to be of Native American origin) would apply to future development. In addition to the City's Standard COAs related to the protection of archaeological resources and human remains set forth in full in Addendum Section 5.4, *Cultural Resources*, previously adopted Mitigation Measure TCR-1 would be required to be implemented and would reduce impacts to tribal cultural resources a less than significant level.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to air quality, and no new mitigation measures are required. Berkeley's Standard COAs related to archaeological resources and human remains, set forth above in Section 5.4, *Cultural Resources*, which apply to the HEU as a whole, would remain applicable. Previously adopted 2023 EIR Mitigation Measure TCR-1 also would remain applicable and would continue to be implemented and monitored.

TCR-1 Tribal Cultural Monitoring

For future projects that are determined through tribal consultation to potentially affect tribal cultural resources, in order to mitigate potential adverse impacts to Native American cultural objects and human remains discovered during construction, tribal cultural monitors will be retained to monitor work done in areas of Tribal concern, as determined through tribal consultation. If Native American cultural objects and/or human remains are discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by tribal cultural monitors and a qualified archaeologist meeting the Professional Qualifications Standards of the Secretary of the Interior (36 CFR Part 61). The archaeologist shall, in accordance with the appropriate Guidelines, identify and evaluate the significance of the discovery and develop recommendations for treatment in consultation with the affected Tribe to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, project impacts shall be mitigated in consultation with the affected Tribe consistent with the *CEQA Guidelines for Determining the Significance of and Impacts to Cultural Resource, Archaeological Historic and Tribal Cultural Resources*. Such mitigation may include, but is not limited to, additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that a TCR might be encountered.

Conclusion

The proposed project would have less than significant impacts with mitigation with respect to tribal cultural resources. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to tribal cultural resources than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

5.16 Utilities and Service Systems

Impacts Identified in the 2023 EIR

As discussed in Section 4.16, *Utilities and Service Systems*, of the 2023 EIR, HEU would increase water demand in the City by an estimated 0.96 MGD, or approximately 0.5 percent, above the 2030 EBMUD water service area demand estimate of 190 MGD. The increase of 0.5 percent from the projected 2030 water demand in EBMUD's Urban Water Management Plan (UWMP) would also increase the gallons per capita per day (GPCD) from 121 GPCD to 127 GPCD. However, this would still be well below the EBMUD service area water reduction goal of 153 GPCD by 2020. Therefore, EBMUD infrastructure and facilities would have adequate capacity to service the HEU, and construction and operation of development facilitated by the HEU would not require new or expanded water supply facilities. With demand management during multi-year droughts, as required by EBMUD, impacts of HEU related to water supply would be less than significant.

As discussed in Section 4.16, *Utilities and Service Systems*, of the 2023 EIR, the HEU would generate approximately 765,688 gallons per day (gpd) of wastewater. EBMUD projects that 61 mgd of wastewater will be collected and treated in the EBMUD Special District No.1 by 2040. Therefore, the HEU would generate approximately 1.3 percent of the wastewater collected and treated in in the district by 2040. The increased wastewater generation would be within the remaining capacity of EBMUD's Main Wastewater Treatment Plant (MWWTP), and the plant's existing wastewater treatment capacity would be sufficient to accommodate the increase in population facilitated by the HEU. Additionally, as discussed in the 2023 EIR, although the construction of new or expanded sewer mains may be necessary to accommodate additional wastewater flow, development would be required to comply with the City's Private Sewer Lateral Ordinance (BMC Section 17.24.130) (City of Berkeley 2023c) and impacts related to individual new sewer main construction projects would be less than significant due to their temporary nature, adherence to existing requirements, and the already developed nature of wastewater conveyance corridors. Development facilitated by the HEU would be required to comply with BMC Title 17 which establishes City standards related to wastewater discharge, peak flow, and sewer capacity. Every person, firm, corporation or entity desiring to construct a new connection to sewer services to the City's sanitary sewer system would be required to pay a connection fee in the amount as established by City Council resolution. With adherence to City regulations and General Plan policies, impacts related to wastewater conveyance and the construction of new or expanded wastewater facilities were found to be less than significant.

As discussed in the 2023 EIR, existing stormwater infrastructure, electricity and natural gas facilities, and telecommunications infrastructure would be able to accommodate the increased demand under the HEU, and the construction or relation of facilities would be required.

Lastly, the 2023 EIR found that the HEU would generate 23.7 cubic yards of solid waste per day or 8,651 cubic yards of solid waste per year, which would be 0.013 percent of the total remaining capacity of 65.4 million cubic yards of the Altamont Landfill. Therefore, impacts to solid wastes were found to be less than significant.

Impacts of the Proposed Project

Similar to the HEU, the proposed project would facilitate development on non-vacant or infill sites within the city that are already served by existing utility infrastructure. New water service connections would be consistent with utility connections in urbanized areas, such that minimal

areas of new disturbance would occur. Although virtually all parcels in Berkeley have access to public utility infrastructure, in some cases the infrastructure is older and in need of replacement or insufficient to meet the needs of a particular project. Future developers would be responsible for funding infrastructure improvements that are required to serve future projects and have not been previously identified as part of a capital improvement program covered by development impact fees. Consistent with applicable State law, the City's development fees ensure that the developers pay the cost attributable to the increased demand for the affected public facilities reasonably related to the development project in order to ensure that existing facilities are able to maintain the existing level of service and achieve an adopted level of service that is consistent with the City's General Plan (California Government Code Section 66001(g)). The proposed project could increase the number of units in the Southside Area by up to 1,652 units compared to the HEU, which could result in increased demands on water supply. As discussed in the 2023 EIR, the adopted HEU has a projected 2031 water demand of 0.96 MGD. Based on the water generation factor of 50 gpd per unit for multi-family residential uses used in the 2023 EIR, the proposed project would result in an increase in projected water demand by 82,600 gpd, or 0.08 MGD, resulting in a total projected 2031 water demand of 1.04 MGD.[11] The 1.04 MGD increase in water demand would result in a 0.54 percent increase from the 2030 EBMUD service area demand estimate of 190 MGD, which would be a small increase from the 0.51 percent increase from the HEU. As discussed in the 2023 EIR, the EBMUD service area has a water reduction goal of 153 gallons per capita per day (GPCD) by 2020, and in 2020 the MPWD reported its GPCD was 121 GPCD which met the target. Based on the increase of approximately 0.5 percent from the projected 2030 water demand in EMBUD's UWMP, estimated GPCD with implementation of the proposed project would be 127 GPCD, which would still be well below the targeted 153 GPCD. Future development facilitated by the project would be required to comply with water conservation regulations and policies which would help maintain sufficient supplies, such as California Code of Regulations (CCR) Title 24, Part 11 (CALGreen), the State's Water Efficient Landscaping Ordinance (WELO), EBMUD's Section 31, and Bay-friendly landscaping. Therefore, similar to the HEU, there would be sufficient water supplies available to serve development facilitated by the proposed project, and impacts would be less than significant.

EBMUD's Main Wastewater Treatment Plant (MWWTP) provides wastewater collection and treatment to Berkeley, currently treating an average daily flow of approximately 63 mgd. As discussed in the 2023 EIR, EBMUD projects that 61 mgd of wastewater will be collected and treated in the EBMUD Special District No.1 by 2040. Applying the same wastewater generation factor for multi-family residential development of 40 gpd per unit as the 2023 EIR, the proposed project would generate an additional 66,080 gpd of wastewater, for a total of 831,768 gpd of wastewater when combined with the adopted HEU.[12] This would be approximately 1.4 percent of the wastewater collected and treated in the district by 2040, which would be an insignificant increase from the 1.3 percent increase projected in the 2023 EIR for the adopted HEU as a whole. New development would be required to comply with the City's Private Sewer Lateral Ordinance, by eliminating wet-weather infiltration and inflow to private sewer laterals, which would regulate wet-weather contribution from the proposed project. Although construction of new or expanded sewer mains may be necessary to accommodate additional wastewater flow, the precise sizing of new wastewater conveyance pipes would be determined at the time of installation and would be subject to the approval of the City to ensure that the system would be adequate. The impacts of sewer main construction projects would be less than significant due to their temporary nature, adherence to existing requirements, and the already developed nature of wastewater conveyance corridors.

[11] 0.96 MGD (adopted HEU) + 0.08 MGD (proposed project) = 1.04 MGD (total water demand)

[12] 765,688 gpd (adopted HEU) + 66,080 gpd (proposed project) = 831,768 gpd

Impacts of construction of projects facilitated by the proposed project are analyzed comprehensively throughout this Addendum and the 2023 EIR (within Section 5.2, *Air Quality*; 5.3, *Biological Resources*; 5.4, *Cultural Resources*; 5.6, *Geology and Soils;* 5.8, *Hazards and Hazardous Materials*; 5.9, *Hydrology and Water Quality*; 5.11, *Noise*; and 5.14, *Transportation*, 5.15, *Tribal Cultural Resources*). Future development facilitated by the proposed project would also be required to comply with BMC Title 17 which establishes City standards related to wastewater discharge, peak flow, and sewer capacity, and future applicants desiring to construct a new connection the City's sanitary sewer system would be required to pay a connection fee in the amount as established by City Council resolution. Therefore, similar to the HEU, impacts related to wastewater would be less than significant.

Impacts regarding stormwater drainage facilities are discussed in Section 5.9, *Hydrology and Water Quality*, of this Addendum. As discussed in that section, the proposed project would be required to comply with existing State and local laws and regulations, which would not result in the relocation or construction of new or expanded storm water drainage facilities, and impacts would be less than significant, similar to the HEU. Although the proposed project would allow for up to 1,652 more units in the Southside Area compared to the adopted HEU, new development would be served by existing electrical, natural gas, and telecommunications infrastructure, and impacts would be less than significant.

As discussed in the 2023 EIR, the Altamont Landfill is an active landfill that can accommodate solid waste from Berkeley. This landfill has a combined remaining capacity of approximately 65.4 million cubic yards. Using the same waste generation rate of 4 pounds per unit per day as the 2023 EIR, the proposed project would generate an estimated 6,608 pounds per day of waste, or 6.6 cubic yards per day of waste. Assuming a 69 percent diversion rate, which the City of Berkeley has achieved and that exceeds the State requirement of 50 percent diversion, the proposed project would generate an estimated 2,048 pounds per day of waste, or 2 cubic yards per day of waste. This would equate to a total of 25,730 pounds per day of waste,[13] or 25.7 cubic yards per day of waste[14] when combined with the adopted HEU. This equates to 9,381 cubic yards of waste per year, which represents 0.014 percent of the current total remaining landfill capacity, which is an insignificant increase compared to the 0.013 percent as analyzed in the 2023 EIR for the adopted HEU. Therefore, impacts related to solid waste would be less than significant, similar to the HEU.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to utilities and service systems, and no new mitigation measures are required.

Conclusion

The proposed project would have less than significant impacts with respect to utilities and service systems. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to utilities and service systems than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

[13] 23,682 pounds per day (HEU) + 6,608 pounds per day (proposed project) = 25,730 pounds per day

[14] 23.7 cubic yards per day (HEU) + 2 cubic yards per day (proposed project) = 25.7 cubic yards per day

5.17 Wildfire

Impacts Identified in the 2023 EIR

As discussed in Section 4.17, *Wildfire*, of the 2023 EIR, 82 units of the HEU would be located in Fire Zones 2 and 3, which are considered Very High Fire Hazard Severity Zones (VHFHSZ). The HEU would also facilitate increased residential development in the R-1, R-2, and R-2A districts, which include portions within the VHFHSZ. Development facilitated by the HEU would be subject to the City's Standard COA to prepare a Transportation Construction Plan, which would limit the extent to which development would impair or physically interfere with adopted emergency response or evacuation procedures. Development also would be required to comply with existing City regulations and prepare a Fire Protection Plan for housing projects in the Wildland-Urban Interface Fire Area, which would reduce the potential to exacerbate wildfire risk during construction and after projects are constructed. This would also reduce the severity of potential impacts related to exposure to pollutant concentrations from a wildfire or the likelihood of wildfire ignition. Furthermore, the BMC requires site-specific geotechnical investigations which would reduce potential impacts related to landslides, post-fire slope instability, or drainage changes following a potential wildfire for individual future development projects. Nonetheless, for some development projects, impacts may result from the potential for unusual site-specific or road conditions, project characteristics, and the general ongoing fire risk in the Berkeley Hills; therefore, impacts were found to be significant and unavoidable.

The 2023 EIR found that new development could require the installation and maintenance of new or improved roads, emergency water sources, power lines or other utilities, the construction and operation of which could introduce potential sources of wildfire ignition, such as the sparking of an overhead power line or construction equipment or the operation of resident vehicles. Although Mitigation Measure W-1, which was adopted and incorporated into the HEU and would reduce potential risks by requiring power lines to be placed underground in areas subject to wildfire risk, it may not be feasible to impose the requirement on all projects. Potentially unusual site-specific conditions or aspects of a specific infrastructure project, including power line installation, may result in wildfire impacts from the installation or maintenance of infrastructure required by build out of the HEU. Therefore, this impact was also found to be significant and unavoidable.

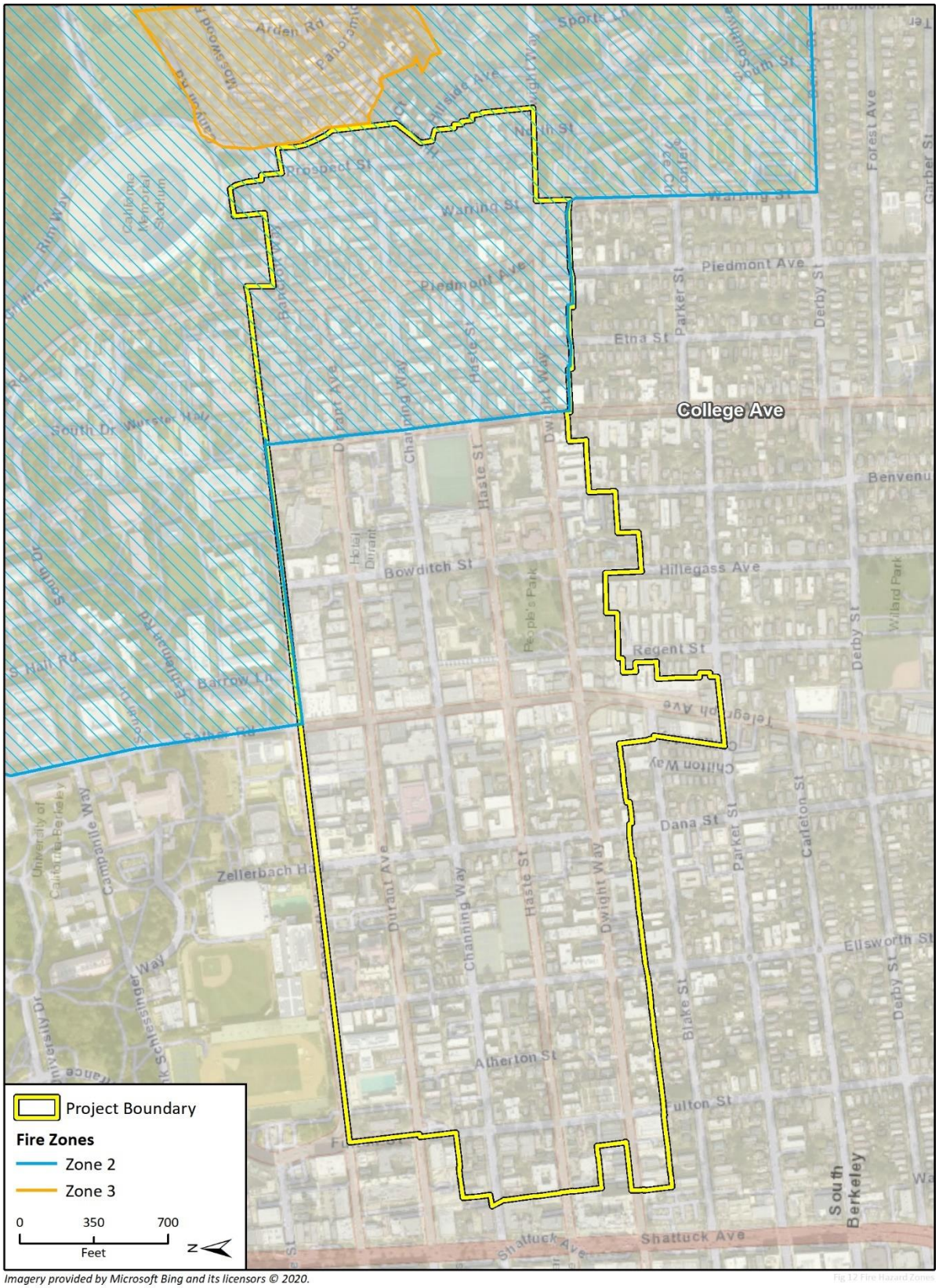
Impacts of the Proposed Project

The City of Berkeley has incorporated Cal Fire's LRA map into its identification of fire hazard three zones within City limits (BMC Section 19.28.030):

- **Zone 1** encompasses the portions of the City not designated within Cal Fire's VHFHSZ.
- **Zone 2** encompasses the portions of the City designated within the VHFHSZ and the Combined Hillside District.
- **Zone 3** encompasses those areas designated in the VHFHSZ and the Environmental Safety--Residential Zoning District (ES-R). The BMC provides the following description the ES-R District: "Because of its substandard vehicular access, steep slopes, inadequate water pressure and proximity to the Hayward Fault and vegetated wildlands, the Panoramic Hill area is exceptionally vulnerable to severe damage or destruction from fire and earthquake hazards" (Section 23.202.070(A)(1)).

Figure 10 shows the fire hazard areas in and near the Southside Area.

Figure 10 Fire Hazard Zones in and near the Southside Area



Imagery provided by Microsoft Bing and its licensors © 2020.

Areas within zones 2 and 3 encompass the City's Wildland-Urban Interface Fire Area, an area designated as a significant risk from wildfires (BMC Section 19.28.030) and a VHFHSZ. As shown in Figure 10, the portion of the Southside Area that is east of College Avenue is within Zone 2, a VHFHSZ. Moreover, Zone 3 abuts the Southside Area at its eastern edge.

The proposed project would allow for the development of up to 1,652 more units in the Southside Area compared to the HEU, which could result in an increased number of residents exposed to wildfire risks. However, there are several streets in the Southside Area that are designated as emergency access routes to move people and emergency response equipment in a disaster, and traffic increase that would result from new development in the Southside Area would not substantially impact one route and would be distributed among existing routes. College Avenue, Bancroft Way, Dwight Way, and Piedmont Avenue are all designated emergency access routes which provide connections between parcels within the VHFHSZ to other areas of the city. Moreover, several City regulations would ensure that the access routes within the VHFHSZ would remain available in the event of an emergency, including evacuations during wildfire. General Plan Policy T-28 identifies required actions to preserve emergency access, including not installing diverters or speed humps on streets identified as Emergency Access and Evacuation Routes. BMC Section 19.28.030 prohibits storage of materials or structures, including construction equipment, at public access roads within the VHFHSZ. Similar to the HEU, the proposed project would also be subject to the City's Standard COA related to preparation of a Transportation Construction Plan which would limit the extent to which development would impair or physically interfere with adopted emergency response or evacuation procedures. Therefore, while traffic increases associated with buildout facilitated by the proposed project would affect streets within the Southside Area, designated access routes would still serve as evacuation routes in case of emergency. Future development would also be required to conform to the latest fire code requirements, including provisions for emergency access. Nonetheless, the proposed project would result in an increased number of residents in the Southside Area and in Zone 2, a VHFHSZ, which could further inhibit safe evacuation and potentially interfere with emergency response. Therefore, impacts would be significant and unavoidable, similar to the HEU.

The Southside Area is urbanized, largely consisting of concrete roads, driveways, parking lots, and structures. Existing vegetation within the Southside Area that could provide fuel for a wildfire is minimal. However, wildfires may potentially occur in wildland and open space areas east of the Southside Area and spread to the Southside Area. In addition, the new housing allowed under the proposed project would introduce new potential ignition sources in the form of building materials (e.g., wood, stucco), vegetation for landscaping, vehicles, and small machinery (e.g., for typical residential and landscape maintenance). The proposed project could therefore expose greater numbers of Southside occupants to pollutant concentrations or the uncontrolled spread of wildfire. In addition, new development facilitated by the proposed project would require the installation and maintenance of infrastructure, such as new power lines, which could exacerbate fire risk. However, new development facilitated by the proposed project would be required to comply with the California Fire Code, and all development within the VHFHSZ would be required to comply with BMC Section 19.28.030, which provides additional regulations to reduce fire hazards, including requirements related to materials of roofing and coverings for exposed utility connections, alarm and fire sprinkler systems, and control of brush and vegetation. BMC Section 19.28.030 also requires that all new utilities serving new construction, including electrical, telephone, and cable television, be installed underground. The continued implementation of previously adopted 2023 EIR Mitigation Measure W-1 would also ensure that new power drops are placed underground in areas subject to wildfire risk. Moreover, development facilitated by the proposed project would be subject to review

by the Berkeley Fire Department (BFD) prior to approval of building permits. The BFD's review would ensure that new construction would comply with applicable fire codes and regulations and would not exacerbate wildfire risk within the Southside Area. Nonetheless, similar to what was discussed in the 2023 EIR, because new development facilitated by the proposed project would occur as infill in previously developed areas in a VHFHSZ, increased risk associated with new development may occur should new development require the installation and maintenance of new or improved roads, emergency water sources, power lines or other utilities. Therefore, even with adherence to State and local regulations as well as continued implementation of previously adopted Mitigation Measure W-1, potentially unusual site-specific conditions or aspects of the infrastructure project, including power line installation, may result in wildfire impacts from the installation or maintenance of infrastructure required by build out facilitated by the proposed project. Impacts would be significant and unavoidable, similar to the HEU.

Because the Southside Area is highly urbanized, development facilitated by the proposed project would not introduce new impervious areas to the extent that the rate or amount of surface runoff would substantially increase. In addition, the Southside Area is relatively flat. However, the portion of the Southside Area east of College Avenue has greater slopes and is within the Hillside Overlay zone. Therefore, development facilitated by the proposed project could expose people and structures to landslides by encouraging development in the hillsides in a VHFHSZ where landslides could occur and could be exacerbated after a wildfire. The City requires a Geotechnical and Seismic Hazard Investigation for all development projects located in a State-designated Seismic Hazard Zone for liquefaction, landslide, or earthquake fault rupture, as defined by the California Seismic Hazards Mapping Act and shown on the "Environmental Constraints Map," sites in the VHFHSZ would be required to prepare a site-specific geotechnical investigation. This would involve identifying the degree of potential hazards, providing design parameters for the project based on the hazard, and describing appropriate design measures to address hazards. Future development would be required to adhere to such recommendations to mitigated landslide hazards. Nonetheless, because of the hillside slopes on the eastern part of the Southside Area, landslide susceptibility, and wildfire susceptibility, development under the proposed project potentially exposes people and structures to significant risks, including landslides, as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be significant and unavoidable, similar to the HEU.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to wildfire, and no new mitigation measures are required. Berkeley's Standard COA requiring preparation of a Transportation Construction Plan, as referenced in the 2023 EIR and shown below, would remain applicable.

> Transportation Construction Plan. The applicant and all persons associated with the project are hereby notified that a Transportation Construction Plan (TCP) is required for all phases of construction, particularly for the following activities:
>
> - Alterations, closures, or blockages to sidewalks, pedestrian paths or vehicle travel lanes (including bicycle lanes);
> - Storage of building materials, dumpsters, debris anywhere in the public ROW;
> - Provision of exclusive contractor parking on-street; or
> - Significant truck activity.

The applicant shall secure the City Traffic Engineer's approval of a TCP. Please contact the Office of Transportation at 981-7010, or 1947 Center Street, and ask to speak to a traffic engineer. In addition to other requirements of the Traffic Engineer, this plan shall include the locations of material and equipment storage, trailers, worker parking, a schedule of site operations that may block traffic, and provisions for traffic control. The TCP shall be consistent with any other requirements of the construction phase.

Contact the Permit Service Center (PSC) at 1947 Center Street or 981-7500 for details on obtaining Construction/No Parking Permits (and associated signs and accompanying dashboard permits). Please note that the Zoning Officer and/or Traffic Engineer may limit off-site parking of construction-related vehicles if necessary to protect the health, safety or convenience of the surrounding neighborhood. A current copy of this Plan shall be available at all times at the construction site for review by City Staff.

Previously-adopted Mitigation Measure W-1 set forth in the 2023 EIR and below would also remain applicable and would and would continue to be implemented and monitored.

W-1 Undergrounding of Power Drops in the VHFHSZs

The City shall require that new or upgraded power drops located in the very high fire hazard severity zone be installed underground. Prior to the issuance of a building permit, the applicant shall submit plans for undergrounding of power drops.

Conclusion

Similar to the HEU, even with continued implementation of previously-adopted Mitigation Measure W-1 and the City's Standard COA for a Transportation Construction Plan, wildfire impacts would remain significant and unavoidable. Nonetheless, no substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to wildfire than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

6 Cumulative Impacts

In addition to the specific impacts of individual projects, CEQA requires consideration of potential cumulative impacts of the proposed project. CEQA defines "cumulative impacts" as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other past, present, and probable future projects producing related or cumulative impacts. For example, noise impacts of two nearby projects may be less than significant when analyzed separately, but could have a significant impact when analyzed together. The cumulative impact analysis provides a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA Guidelines Section 15130 requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a summary of projections contained in an adopted planning document such as a general plan.

Impacts Identified in the 2023 EIR

The cumulative setting for the analysis in the 2023 EIR is explained in Section 3, *Environmental Setting,* of the 2023 EIR. As stated in that section, some analyses including air quality, energy, greenhouse gas emissions, transportation, and population and housing rely on larger geographic areas, such as the Bay Area region. For issues that may have regional cumulative effects, the cumulative impact analysis in the 2023 EIR was based on Plan Bay Area 2040, the Bay Area's most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Based on the forecasts in Plan Bay Area 2040, in 2040 Berkeley is estimated to have a population of 140,900, 55,400 housing units, and 121,700 jobs. Development under the HEU in conjunction with development forecasted in Plan Bay Area 2040 is accounted for in the cumulative impacts analysis.

For analyses that may have more localized or neighborhood implications (biological resources, cultural resources, noise, public services, utilities, wildfire), the cumulative impact analysis includes development proposed under UC Berkeley's LRDP and Housing Projects #1 and #2 as described in the University's Draft EIR dated March 8, 2021 (University of California, Berkeley 2021). The 2021 LRDP planning assumption for the campus population is 48,200 students and 19,000 faculty and staff in the 2036-37 academic year compared to 39,300 students and 15,400 faculty and staff in the 2018-19 academic year. The LRDP also assumes 9,325,88 square feet of development on non-campus University properties throughout Berkeley (including Housing Projects #1 and #2) compared to 4,640,769 square feet of development in 2018-2019.

Cumulative impacts associated with the HEU in combination with cumulative development were analyzed Sections 4.1 through 4.17 of the 2023 EIR. The 2023 EIR found that cumulative development pursuant to the HEU and the LRDP would have the potential to impact historical resources. Historic-period resources could be vulnerable to development activities that could result in damage to or demolition of cultural resources. The HEU would result in significant and unavoidable impacts to historical resources. Implementation of previously-adopted Mitigation Measures CUL-1 and CUL-2, which were adopted and incorporated into the HEU, would reduce or avoid some but not all potential impacts to historical resources in Berkeley. Therefore, cumulative

impacts to historical resources would be significant, and the HEU's contribution would be cumulatively considerable.

According to the Berkeley General Plan Environmental Management Element, noise-sensitive uses include but are not limited to residences, child-care centers, hospitals, and nursing homes (City of Berkeley 2001). The 2023 EIR found that construction of future development projects in Berkeley would produce temporary noise impacts that would be localized to a project site and could affect noise-sensitive receptors within the immediate vicinity. Therefore, only sensitive receptors located in proximity to each construction site would be potentially affected by each activity. However, construction activities associated with individual housing development projects accommodated under the HEU may overlap for some time with construction activities for other development projects. Based on the locations of the potential housing sites included in the HEU and shown in Figure 2-4 of Section 2, *Project Description*, of the 2023 EIR this could substantially increase noise levels at specific neighboring noise-sensitive receivers since many sites are located in proximity to each other. Therefore, concurrent construction of development projects facilitated by the HEU could result in cumulatively considerable impacts. This impact would be cumulatively considerable and cumulative impacts would be significant and unavoidable.

The 2023 EIR also found that in and near Berkeley, the VHFHSZs are located largely along the WUI borders within the hilly northwestern areas. Within the geographic scope for this cumulative analysis wildfire-related impacts could be significant if development is in or near Berkeley's VHFHSZ. The University's proposed LRDP update would involve improvements and development in Campus Park, the Hill Campus West, the Hill Campus East, the Clark Kerr Campus, and the City Environs Properties, areas of which fall within the VHFHSZ. Development within this area could exacerbate wildfire risks. Like development under the HEU, new development under the LRDP would be subject to statewide standards for fire safety in the California Fire Code. Nonetheless, because the proposed HEU could exacerbate wildfire risk in a VHFHSZ and development under the proposed LRDP update could also exacerbate such risks, a cumulative impact would occur and the proposed projects' contribution would be cumulative considerable.

For all other impact areas, the 2023 EIR found that the HEU would not result in cumulatively considerable impacts.

Impacts of the Proposed Project

Because the conditions in the 2023 EIR are substantially the same as the current conditions in the city and region, the cumulative setting in the 2023 EIR has not changed and remains the same for the purposes of this analysis. The proposed project would not result in new impacts compared to the HEU as analyzed in the 2023 EIR. Like the HEU, the proposed project would result in impacts related to historical resources, construction noise, and wildfire, and also would result in cumulatively considerable impacts related to historical resources, construction noise, and wildfire, even with implementation of previously adopted Mitigation Measure CUL-1, Mitigation Measure CUL-2, and Mitigation Measure W-1, as well as the City's Standard COAs related to historical resources, construction noise, and wildfire. Similar to the HEU, the proposed project would result in less than significant cumulative impacts related to all other impact areas with adherence to State and local regulations as well as the City's Standard COAs; therefore, the proposed project would not make a cumulatively considerable contribution to a cumulative impact.

Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to cumulative impacts, and no new mitigation measures are required.

Conclusion

The proposed project would have cumulatively considerable impacts related to historical resources, construction noise, and wildfire, and less than significant cumulative impacts with respect to all other impact areas. No substantial changes have occurred that require major revisions to the 2023 EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to cumulative impacts than were identified in the 2023 EIR. None of the conditions listed in *CEQA Guidelines* Section 15162 requiring preparation of a subsequent EIR have been met.

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7 Conclusion

As discussed in detail in the preceding sections, potential impacts associated with the proposed project are consistent with potential impacts disclosed in the 2023 EIR. Major revisions to the 2023 EIR are not required, because no new significant impacts or significant impacts of substantially greater severity than previously described would occur because of the proposed project. Therefore, the conditions outlined in *CEQA Guidelines* Section 15162(3)(A) and (D) for preparation of a subsequent EIR would not be met.

Based on the analysis contained in this Addendum, the following determinations are applicable:

- No further evaluation of environmental impacts is required for the proposed project.
- No subsequent EIR is required pursuant to *CEQA Guidelines* Section 15162.
- This Addendum is the appropriate level of environmental analysis and documentation for the proposed project pursuant to *CEQA Guidelines* Section 15164.

Pursuant to *CEQA Guidelines* Section 15164(c), the decisionmaking body of the City will consider this Addendum along with the 2023 EIR prior to making a decision on the proposed project. Documents related to this Addendum will be available at the City of Berkeley Planning & Development Department, located at 1947 Center Street in Berkeley, California 94704.

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8 References and Preparers

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8.2 List of Preparers

Rincon prepared this addendum under contract to the City of Berkeley. Persons and firms involved in data gathering, analysis, project management, and quality control include:

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Appendix A

Vehicle Miles Traveled Impact Assessment Memorandum

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Technical Memorandum

July 18, 2023

Project# 29096

To: Karly Kaufman
Rincon Consultants
449 25th Street, Suite 303
Oakland, CA 94612

From: Anusha Musunuru, Damian Stefanakis, Kittelson & Associates, Inc.

CC: Ashley James, City of Berkeley

RE: **City of Berkeley Southside Zoning Implementation Program Housing Element Addendum – Vehicle Miles Traveled (VMT) Impact Assessment Memorandum – FINAL**

INTRODUCTION

Kittelson and Associates (Kittelson) has prepared this vehicle miles traveled (VMT) impact assessment for the Addendum to the City of Berkeley 2023-2031 Housing Element Update Environmental Impact Report (Housing Element Update EIR) for the Southside Zoning Implementation Program. Similar to the 2023-2031 Housing Element Update EIR, Kittelson conducted the travel demand modeling with the Southside upzoning using the Alameda County Transportation Commission (CTC) Countywide Model. The VMT assessment is based on the SB 743 requirements and City of Berkeley VMT Guidelines.

Overall, the Housing Element Update EIR assumes development of up to 19,098 units located within 106 selected traffic analysis zones (TAZs) around the City. Of these units, 1,000 were assumed to be located in the Southside area associated with the proposed zoning modifications to facilitate housing development in the Southside. This Addendum assumes an additional 1,652 units added to the Southside to reflect additional residential development capacity that would be feasible under the proposed zoning modifications. Travel forecasts were prepared for both existing 2020 model year and future 2040 cumulative model year conditions. Since the year 2031 represents the Housing Element buildout, VMT for year 2031 was interpolated between 2020 and 2040.

VMT results were extracted at the citywide level based on the efficiency metric, VMT per Capita and total VMT. Per SB 743 and City VMT guidelines, the results were compared to the Bay Area regionwide average to determine if the additional housing units contribute to any more VMT impacts beyond those disclosed under the Housing Element Update EIR.

The results indicate the overall effect on VMT of adding 1,652 additional units in the Southside in the locations identified by the TAZs within the Southside is to shorten average trip lengths, reduce auto trips by promoting mode choice to transit-related modes, and contribute to a reduction in VMT per capita for the City under both 2020 plus project and 2040 plus cumulative plus project conditions. While many of the Southside sites are near transit opportunities and may screen out for VMT and other effects at the individual project level, Kittelson evaluated the full Housing Element Update at the programmatic level using an overall systemwide VMT assessment, i.e., considering all the TAZs within the city for evaluating the VMT impacts.

VMT THRESHOLDS

VMT thresholds are defined using recommendations from the California Office of Planning and Research (OPR) based on their final report, dated December 2018. Cities and counties could opt to develop their own methods, but the California Environmental Quality Act (CEQA) impact criteria are generally consistent with OPR recommendations. The City of Berkeley's VMT Criteria and Thresholds were developed and published on June 29, 2020.[1] This CEQA analysis is based on the City policy and supplemented with OPR recommendations (where applicable and necessary).

The City of Berkeley has opted to compare VMT to the Bay Area regionwide average. Based on OPR and City guidelines, any development that does not immediately screen out for a VMT per capita assessment should produce a VMT per capita of 15% less than the baseline Bay Area regionwide average.

In the City of Berkeley, the screening criteria used to evaluate whether a housing project could qualify for an Exemption under CEQA related to VMT impacts include the following:

1. Within ½ mile of BART and Amtrak stations,
2. Within ¼ mile of high-quality transit corridor, which has 15-minute frequency fixed-route bus service,
3. Contains 100% affordable housing,
4. All projects (housing related) expected to generate less than 836 daily VMT (usually around 20 residential units), and
5. All projects located in TAZs with household VMT per capita of 15% below the baseline regional average.

VMT RESULTS

For Berkeley, VMT metrics are compared to the Bay Area regionwide average, and an impact is assessed if the project VMT per capita (VMT/Population) is higher than the established threshold of 15% below the regionwide average. At the aggregate level, Table 1 through Table 3 indicates that the Housing Element Update projects overall VMT per capita lower than 15% below the regionwide average (10.32 vs 19.30 in 2020, 10.61 vs 19.09 in 2031, and 10.84 vs 18.96 in 2040), and in aggregate is ***less than significant*** and therefore screens out the project from further VMT analysis and evaluation under CEQA. No mitigations for VMT are therefore recommended at the programmatic level.

Tables of the VMT analysis are summarized below.

- Table 1 provides a summary of 2020 VMT per capita at the City, County, and Regionwide level.
- Table 2 provides a summary of 2040 VMT per capita at the City, County, and Regionwide level.
- Table 3 provides a summary of 2031 VMT per capita at the City, County, and Regionwide level.

[1] City of Berkeley VMT Criteria and Thresholds, June 2020. Link: https://berkeleyca.gov/sites/default/files/2022-02/VMT-Criteria-and-Thresholds.pdf

Table 1. 2020 City, County, and Regionwide VMT per Capita

Scenario	Households	Population	VMT	VMT/Capita	15% Below
2020 No-Project					
City	52,293	128,004	1,436,244	11.22	
County	620,008	1,720,139	33,432,049	19.44	
Regionwide	2,887,140	7,915,267	180,468,151	22.80	19.38
2020 with Housing Element Project					
City	71,391	175,466	1,867,472	10.64	
County	639,106	1,767,601	33,888,385	19.17	
Regionwide	2,906,238	7,962,729	180,855,141	22.71	19.31
2020 with Southside Zoning Changes					
City	73,043	179,597	1,853,029	10.32	
County	640,758	1,771,732	33,920,424	19.15	
Regionwide	2,907,890	7,966,860	180,896,597	22.71	19.30

SOURCE: KITTELSON & ASSOCIATES, INC., 2023
NOTE: NET CHANGE IN METRICS IS ASSOCIATED WITH HOUSING ELEMENT UPDATE
2020 PLUS PROJECT ADDENDUM VMT/CAPITA IS LOWER THAN 15% BELOW REGIONWIDE AVERAGE

Table 2. 2040 City, County, and Regionwide VMT per Capita

Scenario	Households	Population	VMT	VMT/Capita	15% Below
2040 No-Project					
City	*55,366*	*141,068*	*1,607,349*	*11.39*	
County	*738,755*	*2,082,721*	*37,007,548*	*17.77*	
Regionwide	*3,431,389*	*9,626,790*	*215,286,847*	*22.36*	*19.01*
2040 with Housing Element Project					
City	*74,464*	*188,530*	*2,078,822*	*11.03*	
County	*757,853*	*2,130,183*	*37,536,311*	*17.62*	
Regionwide	*3,450,487*	*9,674,252*	*215,459,688*	*22.27*	*18.93*
2040 with Southside Zoning Changes					
City	*76,116*	*192,641*	*2,088,198*	*10.84*	
County	*759,505*	*2,134,294*	*37,290,458*	*17.47*	
Regionwide	*3,452,139*	*9,678,363*	*215,847,640*	*22.30*	*18.96*

SOURCE: KITTELSON & ASSOCIATES, INC., 2023
NOTE: NET CHANGE IN METRICS IS ASSOCIATED WITH HOUSING ELEMENT UPDATE
2040 PLUS PROJECT ADDENDUM VMT/CAPITA IS LOWER THAN 15% BELOW REGIONWIDE AVERAGE

*Table 3. 2031 City, County, and Regionwide VMT per Capita***

Scenario	Households	Population	VMT	VMT/Capita	15% Below
2031 No-Project					
City	53,983	135,189	1,530,352	11.32	
County	685,319	1,919,559	35,398,573	18.44	
Regionwide	3,186,477	8,856,605	199,618,434	22.54	19.16
2031 with Housing Element Project					
City	73,081	182,651	1,983,715	10.86	
County	704,417	1,967,021	35,894,744	18.25	
Regionwide	3,205,575	8,904,067	199,887,642	22.45	19.08
2031 with Southside Zoning Changes					
City	74,733	186,771	1,982,372	10.61	
County	706,069	1,971,141	35,773,943	18.15	
Regionwide	3,207,227	8,908,187	200,119,671	22.46	19.09

SOURCE: KITTELSON & ASSOCIATES, INC., 2023; **- INTERPOLATED RESULTS FROM 2020 & 2040.
NOTE: NET CHANGE IN METRICS IS ASSOCIATED WITH HOUSING ELEMENT UPDATE
2031 PLUS PROJECT ADDENDUM VMT/CAPITA IS LOWER THAN 15% BELOW REGIONWIDE AVERAGE

CONCLUSION

The VMT assessment for the Southside Zoning Implementation Program reflects the full buildout potential of the Southside area. The VMT analysis was conducted using the Alameda CTC Countywide model. An additional 1,652 housing units were added to the model in each TAZ that represent the sites inventory and projected ADUs that would be feasible in the Southside area. VMT per capita was extracted at the systemwide level (City, County, and Regionwide) for 2020 and 2040. Year 2031 was interpolated from the 2020 and 2040 to represent the Regional Housing Needs Allocation (RHNA) horizon. The results indicate that at the programmatic level, the VMT/Capita associated with the additional residential units in the Southside area is 15% below the existing regionwide average, and is therefore not impacted under SB-743 and City VMT Guidelines. As a result, no mitigations are recommended.

Appendix B

Greenhouse Gas Emissions Modeling Results

Southside Addendum Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Southside Addendum
Construction Start Date	7/3/2023
Operational Year	2031
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.90
Precipitation (days)	44.2
Location	Southside, Berkeley, CA, USA
County	Alameda
City	Berkeley
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1525
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.14

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Apartments Mid Rise	1,652	Dwelling Unit	43.5	1,585,920	0.00	0.00	4,130	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.48	362	39.8	65.1	0.06	1.81	19.8	21.6	1.66	10.1	11.8	—	17,682	17,682	0.50	1.12	57.5	18,087
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.01	362	39.8	59.3	0.06	1.81	19.8	21.6	1.66	10.1	11.8	—	16,924	16,924	0.55	1.15	1.49	17,282
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.13	54.6	16.1	39.4	0.04	0.52	7.69	8.08	0.48	1.92	2.36	—	11,944	11,944	0.37	0.80	16.5	12,208
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.75	9.96	2.94	7.19	0.01	0.10	1.40	1.47	0.09	0.35	0.43	—	1,978	1,978	0.06	0.13	2.74	2,021

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	4.77	4.01	39.8	36.3	0.05	1.81	19.8	21.6	1.66	10.1	11.8	—	5,453	5,453	0.22	0.05	0.72	5,474
2024	6.48	5.61	20.2	65.1	0.06	0.56	11.1	11.6	0.52	2.65	3.17	—	17,682	17,682	0.50	1.12	57.5	18,087
2025	5.85	5.32	18.8	61.3	0.06	0.50	11.1	11.6	0.46	2.65	3.11	—	17,402	17,402	0.47	1.09	53.5	17,792
2026	5.57	4.78	17.9	58.5	0.06	0.44	11.1	11.5	0.41	2.65	3.06	—	17,126	17,126	0.47	1.09	49.3	17,512
2027	0.89	362	1.27	9.16	< 0.005	0.02	1.97	1.99	0.02	0.46	0.48	—	2,117	2,117	0.04	0.08	6.72	2,148
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	4.77	4.01	39.8	36.2	0.06	1.81	19.8	21.6	1.66	10.1	11.8	—	6,765	6,765	0.27	0.06	0.02	6,790
2024	6.01	5.42	34.4	59.3	0.06	1.45	11.1	11.6	1.33	3.69	5.02	—	16,924	16,924	0.55	1.15	1.49	17,282
2025	5.71	5.16	20.2	56.1	0.06	0.50	11.1	11.6	0.46	2.65	3.11	—	16,660	16,660	0.55	1.12	1.39	17,007
2026	5.45	4.64	19.0	53.3	0.06	0.44	11.1	11.5	0.41	2.65	3.06	—	16,400	16,400	0.52	1.12	1.28	16,747
2027	0.92	362	6.98	10.4	0.01	0.30	1.97	1.99	0.27	0.46	0.48	—	1,974	1,974	0.06	0.08	0.17	2,000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	1.46	1.23	12.0	10.5	0.02	0.52	2.89	3.41	0.48	1.33	1.81	—	1,834	1,834	0.07	0.02	0.11	1,841
2024	4.13	3.71	16.1	39.4	0.04	0.47	7.61	8.08	0.43	1.92	2.36	—	11,407	11,407	0.36	0.74	15.9	11,653
2025	4.04	3.67	14.1	39.1	0.04	0.36	7.69	8.05	0.33	1.84	2.17	—	11,944	11,944	0.37	0.80	16.5	12,208
2026	3.70	3.14	12.8	35.5	0.04	0.31	7.25	7.57	0.29	1.73	2.02	—	11,148	11,148	0.34	0.73	14.3	11,390
2027	0.23	54.6	0.98	2.37	< 0.005	0.04	0.30	0.34	0.03	0.07	0.10	—	481	481	0.01	0.01	0.46	486
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.27	0.22	2.19	1.92	< 0.005	0.10	0.53	0.62	0.09	0.24	0.33	—	304	304	0.01	< 0.005	0.02	305
2024	0.75	0.68	2.94	7.19	0.01	0.09	1.39	1.47	0.08	0.35	0.43	—	1,889	1,889	0.06	0.12	2.64	1,929
2025	0.74	0.67	2.57	7.14	0.01	0.06	1.40	1.47	0.06	0.34	0.40	—	1,978	1,978	0.06	0.13	2.74	2,021
2026	0.67	0.57	2.33	6.47	0.01	0.06	1.32	1.38	0.05	0.32	0.37	—	1,846	1,846	0.06	0.12	2.37	1,886
2027	0.04	9.96	0.18	0.43	< 0.005	0.01	0.05	0.06	0.01	0.01	0.02	—	79.6	79.6	< 0.005	< 0.005	0.08	80.4

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.0	51.1	24.2	190	0.41	1.51	31.0	32.5	1.51	7.85	9.36	709	57,769	58,478	60.7	1.45	76.2	60,505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.40	43.0	24.4	79.3	0.39	1.48	31.0	32.4	1.47	7.85	9.32	709	55,702	56,411	60.7	1.53	13.0	58,395
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.76	46.1	8.53	120	0.29	0.21	31.0	31.2	0.20	7.85	8.05	709	35,803	36,512	60.3	1.46	39.4	38,494
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.42	8.41	1.56	21.9	0.05	0.04	5.65	5.69	0.04	1.43	1.47	117	5,928	6,045	9.98	0.24	6.52	6,373

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.54	2.69	6.98	89.1	0.30	0.16	31.0	31.1	0.15	7.85	8.00	—	31,078	31,078	0.61	1.03	64.9	31,464
Area	10.5	48.4	17.2	101	0.11	1.35	—	1.35	1.36	—	1.36	0.00	20,947	20,947	0.40	0.04	—	20,969
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	5,532	5,532	0.89	0.11	—	5,586
Water	—	—	—	—	—	—	—	—	—	—	—	125	212	338	0.47	0.28	—	432
Waste	—	—	—	—	—	—	—	—	—	—	—	584	0.00	584	58.3	0.00	—	2,042

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.4
Total	14.0	51.1	24.2	190	0.41	1.51	31.0	32.5	1.51	7.85	9.36	709	57,769	58,478	60.7	1.45	76.2	60,505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.49	2.66	8.13	72.3	0.29	0.16	31.0	31.1	0.15	7.85	8.00	—	29,261	29,261	0.59	1.10	1.68	29,605
Area	1.91	40.3	16.3	6.94	0.10	1.32	—	1.32	1.32	—	1.32	0.00	20,697	20,697	0.39	0.04	—	20,718
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	5,532	5,532	0.89	0.11	—	5,586
Water	—	—	—	—	—	—	—	—	—	—	—	125	212	338	0.47	0.28	—	432
Waste	—	—	—	—	—	—	—	—	—	—	—	584	0.00	584	58.3	0.00	—	2,042
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.4
Total	5.40	43.0	24.4	79.3	0.39	1.48	31.0	32.4	1.47	7.85	9.32	709	55,702	56,411	60.7	1.53	13.0	58,395
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.50	2.66	7.70	73.3	0.29	0.16	31.0	31.1	0.15	7.85	8.00	—	29,425	29,425	0.60	1.07	28.0	29,788
Area	4.27	43.4	0.83	46.6	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	634	634	0.01	< 0.005	—	635
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	5,532	5,532	0.89	0.11	—	5,586
Water	—	—	—	—	—	—	—	—	—	—	—	125	212	338	0.47	0.28	—	432
Waste	—	—	—	—	—	—	—	—	—	—	—	584	0.00	584	58.3	0.00	—	2,042
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.4
Total	7.76	46.1	8.53	120	0.29	0.21	31.0	31.2	0.20	7.85	8.05	709	35,803	36,512	60.3	1.46	39.4	38,494
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.64	0.49	1.41	13.4	0.05	0.03	5.65	5.68	0.03	1.43	1.46	—	4,872	4,872	0.10	0.18	4.64	4,932
Area	0.78	7.92	0.15	8.50	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	105	105	< 0.005	< 0.005	—	105
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	916	916	0.15	0.02	—	925
Water	—	—	—	—	—	—	—	—	—	—	—	20.8	35.1	55.9	0.08	0.05	—	71.5
Waste	—	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.66	0.00	—	338
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Total	1.42	8.41	1.56	21.9	0.05	0.04	5.65	5.69	0.04	1.43	1.47	117	5,928	6,045	9.98	0.24	6.52	6,373

3. Construction Emissions Details

3.1. Demolition (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.39	2.84	27.3	23.5	0.03	1.20	—	1.20	1.10	—	1.10	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	3.75	3.22	< 0.005	0.16	—	0.16	0.15	—	0.15	—	469	469	0.02	< 0.005	—	471
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.68	0.59	< 0.005	0.03	—	0.03	0.03	—	0.03	—	77.7	77.7	< 0.005	< 0.005	—	77.9
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.67	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	135	135	< 0.005	0.01	0.61	137
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.3	17.3	< 0.005	< 0.005	0.04	17.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.86	2.86	< 0.005	< 0.005	0.01	2.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	4.70	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.70	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.32	3.27	2.92	< 0.005	0.15	—	0.15	0.14	—	0.14	—	435	435	0.02	< 0.005	—	437
Dust From Material Movement	—	—	—	—	—	—	1.62	1.62	—	0.83	0.83	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.60	0.53	< 0.005	0.03	—	0.03	0.02	—	0.02	—	72.1	72.1	< 0.005	< 0.005	—	72.3
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.15	0.15	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	0.78	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	158	158	< 0.005	0.01	0.72	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.69	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	146	146	< 0.005	0.01	0.02	148
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.1	12.1	< 0.005	< 0.005	0.03	12.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.00	2.00	< 0.005	< 0.005	< 0.005	2.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.43	3.72	37.3	31.4	0.06	1.59	—	1.59	1.47	—	1.47	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.50	4.96	4.18	0.01	0.21	—	0.21	0.20	—	0.20	—	878	878	0.04	0.01	—	881
Dust From Material Movement	—	—	—	—	—	—	1.22	1.22	—	0.49	0.49	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.91	0.76	< 0.005	0.04	—	0.04	0.04	—	0.04	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.79	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.02	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.4	22.4	< 0.005	< 0.005	0.05	22.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	0.01	3.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.55	2.24	< 0.005	0.11	—	0.11	0.10	—	0.10	—	491	491	0.02	< 0.005	—	492
Dust From Material Movement	—	—	—	—	—	—	0.68	0.68	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.47	0.41	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.2	81.2	< 0.005	< 0.005	—	81.5
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.73	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.02	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.02	12.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.03	2.03	< 0.005	< 0.005	< 0.005	2.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.92	0.77	7.20	8.42	0.02	0.32	—	0.32	0.29	—	0.29	—	1,539	1,539	0.06	0.01	—	1,544
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.31	1.54	< 0.005	0.06	—	0.06	0.05	—	0.05	—	255	255	0.01	< 0.005	—	256
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.67	4.26	2.93	49.4	0.00	0.00	9.83	9.83	0.00	2.30	2.30	—	10,506	10,506	0.21	0.39	44.8	10,671
Vendor	0.38	0.15	6.00	2.63	0.03	0.07	1.24	1.31	0.07	0.34	0.41	—	4,779	4,779	0.19	0.72	12.7	5,010
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.21	4.08	3.76	43.5	0.00	0.00	9.83	9.83	0.00	2.30	2.30	—	9,744	9,744	0.26	0.41	1.16	9,874
Vendor	0.37	0.14	6.32	2.71	0.03	0.07	1.24	1.31	0.07	0.34	0.41	—	4,782	4,782	0.19	0.72	0.33	5,001
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.65	2.58	2.36	27.0	0.00	0.00	6.13	6.13	0.00	1.43	1.43	—	6,297	6,297	0.15	0.26	12.4	6,392
Vendor	0.24	0.09	3.98	1.71	0.02	0.04	0.78	0.82	0.04	0.22	0.26	—	3,068	3,068	0.12	0.46	3.51	3,212
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.47	0.43	4.93	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,042	1,042	0.03	0.04	2.05	1,058
Vendor	0.04	0.02	0.73	0.31	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	508	508	0.02	0.08	0.58	532
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	7.46	9.31	0.02	0.31	—	0.31	0.28	—	0.28	—	1,713	1,713	0.07	0.01	—	1,719
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.36	1.70	< 0.005	0.06	—	0.06	0.05	—	0.05	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.13	4.05	2.60	45.7	0.00	0.00	9.83	9.83	0.00	2.30	2.30	—	10,300	10,300	0.18	0.39	40.9	10,461
Vendor	0.38	0.15	5.76	2.52	0.03	0.07	1.24	1.31	0.07	0.34	0.41	—	4,704	4,704	0.19	0.69	12.6	4,925
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.02	3.89	3.71	40.5	0.00	0.00	9.83	9.83	0.00	2.30	2.30	—	9,555	9,555	0.26	0.41	1.06	9,685
Vendor	0.34	0.14	6.08	2.60	0.03	0.07	1.24	1.31	0.07	0.34	0.41	—	4,707	4,707	0.19	0.69	0.33	4,917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.84	2.76	2.37	28.0	0.00	0.00	6.82	6.82	0.00	1.60	1.60	—	6,871	6,871	0.17	0.29	12.6	6,975
Vendor	0.24	0.10	4.26	1.83	0.02	0.05	0.87	0.91	0.05	0.24	0.29	—	3,361	3,361	0.14	0.49	3.91	3,514
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.50	0.43	5.10	0.00	0.00	1.25	1.25	0.00	0.29	0.29	—	1,138	1,138	0.03	0.05	2.09	1,155
Vendor	0.04	0.02	0.78	0.33	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	556	556	0.02	0.08	0.65	582
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.72	6.63	8.73	0.02	0.25	—	0.25	0.23	—	0.23	—	1,614	1,614	0.07	0.01	—	1,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.21	1.59	< 0.005	0.05	—	0.05	0.04	—	0.04	—	267	267	0.01	< 0.005	—	268
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.56	2.55	43.1	0.00	0.00	9.83	9.83	0.00	2.30	2.30	—	10,105	10,105	0.18	0.39	37.2	10,261
Vendor	0.34	0.15	5.52	2.45	0.03	0.07	1.24	1.31	0.07	0.34	0.41	—	4,624	4,624	0.19	0.69	12.1	4,845
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.84	3.43	3.35	37.8	0.00	0.00	9.83	9.83	0.00	2.30	2.30	—	9,375	9,375	0.24	0.41	0.97	9,504

Vendor	0.33	0.14	5.83	2.49	0.03	0.07	1.24	1.31	0.07	0.34	0.41	—	4,628	4,628	0.19	0.69	0.31	4,837
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.57	2.29	1.99	24.7	0.00	0.00	6.43	6.43	0.00	1.50	1.50	—	6,354	6,354	0.14	0.26	10.8	6,445
Vendor	0.23	0.10	3.85	1.65	0.02	0.04	0.82	0.86	0.04	0.23	0.27	—	3,114	3,114	0.13	0.46	3.53	3,258
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.42	0.36	4.50	0.00	0.00	1.17	1.17	0.00	0.27	0.27	—	1,052	1,052	0.02	0.04	1.79	1,067
Vendor	0.04	0.02	0.70	0.30	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	516	516	0.02	0.08	0.58	539
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.03	0.29	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.1	62.1	< 0.005	< 0.005	—	62.3
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.3	10.3	< 0.005	< 0.005	—	10.3
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.48	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	0.01	0.01	120
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.89	4.89	< 0.005	< 0.005	0.01	4.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.81	0.81	< 0.005	< 0.005	< 0.005	0.82
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.77	1.11	< 0.005	0.03	—	0.03	0.03	—	0.03	—	169	169	0.01	< 0.005	—	169
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.9	27.9	< 0.005	< 0.005	—	28.0
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.45	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	116	116	< 0.005	0.01	0.01	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.0	13.0	< 0.005	< 0.005	0.02	13.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.16	2.16	< 0.005	< 0.005	< 0.005	2.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	361	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	361	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.2
Architectural Coatings	—	54.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.33	3.33	< 0.005	< 0.005	—	3.34
Architectural Coatings	—	9.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.68	0.44	8.03	0.00	0.00	1.97	1.97	0.00	0.46	0.46	—	1,984	1,984	0.03	0.08	6.72	2,014
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.66	0.60	7.11	0.00	0.00	1.97	1.97	0.00	0.46	0.46	—	1,840	1,840	0.05	0.08	0.17	1,866
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.08	1.04	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	279	279	0.01	0.01	0.44	283
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.19	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	46.2	46.2	< 0.005	< 0.005	0.07	46.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	5,532	5,532	0.89	0.11	—	5,586
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,532	5,532	0.89	0.11	—	5,586
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	5,532	5,532	0.89	0.11	—	5,586
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,532	5,532	0.89	0.11	—	5,586
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	916	916	0.15	0.02	—	925
Total	—	—	—	—	—	—	—	—	—	—	—	—	916	916	0.15	0.02	—	925

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	1.91	0.95	16.3	6.94	0.10	1.32	—	1.32	1.32	—	1.32	0.00	20,697	20,697	0.39	0.04	—	20,718
Consumer Products	—	33.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	5.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	8.56	8.10	0.87	94.1	< 0.005	0.03	—	0.03	0.04	—	0.04	—	251	251	0.01	< 0.005	—	251
Total	10.5	48.4	17.2	101	0.11	1.35	—	1.35	1.36	—	1.36	0.00	20,947	20,947	0.40	0.04	—	20,969
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	1.91	0.95	16.3	6.94	0.10	1.32	—	1.32	1.32	—	1.32	0.00	20,697	20,697	0.39	0.04	—	20,718

Consum Products	—	33.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	—	5.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.91	40.3	16.3	6.94	0.10	1.32	—	1.32	1.32	—	1.32	0.00	20,697	20,697	0.39	0.04	—	20,718
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	84.5	84.5	< 0.005	< 0.005	—	84.6
Consum er Products	—	6.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	—	0.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	0.77	0.73	0.08	8.47	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.5	20.5	< 0.005	< 0.005	—	20.5
Total	0.78	7.92	0.15	8.50	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	105	105	< 0.005	< 0.005	—	105

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	212	338	0.47	0.28	—	432
Total	—	—	—	—	—	—	—	—	—	—	—	125	212	338	0.47	0.28	—	432

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	212	338	0.47	0.28	—	432
Total	—	—	—	—	—	—	—	—	—	—	—	125	212	338	0.47	0.28	—	432
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.8	35.1	55.9	0.08	0.05	—	71.5
Total	—	—	—	—	—	—	—	—	—	—	—	20.8	35.1	55.9	0.08	0.05	—	71.5

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	584	0.00	584	58.3	0.00	—	2,042
Total	—	—	—	—	—	—	—	—	—	—	—	584	0.00	584	58.3	0.00	—	2,042
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	584	0.00	584	58.3	0.00	—	2,042
Total	—	—	—	—	—	—	—	—	—	—	—	584	0.00	584	58.3	0.00	—	2,042

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.66	0.00	—	338
Total	—	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.66	0.00	—	338

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	7/3/2023	9/11/2023	5.00	50.0	—
Site Preparation	Site Preparation	9/12/2023	10/24/2023	5.00	30.0	—
Grading	Grading	10/25/2023	2/7/2024	5.00	75.0	—
Building Construction	Building Construction	2/8/2024	12/10/2026	5.00	740	—
Paving	Paving	12/11/2026	2/26/2027	5.00	55.0	—
Architectural Coating	Architectural Coating	2/27/2027	5/15/2027	5.00	55.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT

Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,189	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	177	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	238	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	3,211,488	1,070,496	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation	—	—	45.0	0.00	—
Grading	—	—	225	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	204	0.03	< 0.005
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	43,819	43,819	43,819	15,994,045

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	843
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	809
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
3211488	1,070,496	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	9,898,238	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	58,663,924	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	1,083	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	7.10	annual days of extreme heat
Extreme Precipitation	7.50	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	3.12
AQ-PM	38.1
AQ-DPM	34.5
Drinking Water	4.21
Lead Risk Housing	52.1
Pesticides	0.00
Toxic Releases	56.8
Traffic	0.03
Effect Indicators	—
CleanUp Sites	22.6
Groundwater	74.8
Haz Waste Facilities/Generators	65.9
Impaired Water Bodies	12.5
Solid Waste	0.00

Sensitive Population	—
Asthma	1.55
Cardio-vascular	10.1
Low Birth Weights	75.1
Socioeconomic Factor Indicators	—
Education	5.86
Housing	99.6
Linguistic	7.38
Poverty	96.7
Unemployment	79.0

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	8.045682022
Employed	1.822148082
Median HI	4.298729629
Education	—
Bachelor's or higher	80.88027717
High school enrollment	100
Preschool enrollment	43.50057744
Transportation	—
Auto Access	0.795585782
Active commuting	99.7305274
Social	—
2-parent households	0.333632747

Voting	0.461953035
Neighborhood	—
Alcohol availability	97.0101373
Park access	81.35506224
Retail density	79.64840241
Supermarket access	6.659822918
Tree canopy	91.32554857
Housing	—
Homeownership	6.018221481
Housing habitability	22.28923393
Low-inc homeowner severe housing cost burden	45.7590145
Low-inc renter severe housing cost burden	9.931990248
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	86.94982677
Arthritis	99.5
Asthma ER Admissions	94.6
High Blood Pressure	99.7
Cancer (excluding skin)	99.5
Asthma	18.0
Coronary Heart Disease	99.5
Chronic Obstructive Pulmonary Disease	96.5
Diagnosed Diabetes	99.7
Life Expectancy at Birth	5.6
Cognitively Disabled	43.0
Physically Disabled	99.4
Heart Attack ER Admissions	93.7

Mental Health Not Good	34.8
Chronic Kidney Disease	99.7
Obesity	97.4
Pedestrian Injuries	60.6
Physical Health Not Good	96.4
Stroke	99.6
Health Risk Behaviors	—
Binge Drinking	6.6
Current Smoker	46.7
No Leisure Time for Physical Activity	78.5
Climate Change Exposures	—
Wildfire Risk	50.2
SLR Inundation Area	0.0
Children	98.8
Elderly	98.2
English Speaking	92.5
Foreign-born	44.9
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	49.4
Traffic Density	1.9
Traffic Access	87.4
Other Indices	—
Hardship	61.5
Other Decision Support	—
2016 Voting	6.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	26.0
Healthy Places Index Score for Project Location (b)	15.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Per Section 5.12, Population and Housing, used persons per household number of 2.5 consistent with 2023 EIR
Construction: Architectural Coatings	BAAQMD Regulation 8 Rule 3
Operations: Architectural Coatings	BAAQMD Regulation 8 Rule 3
Operations: Energy Use	Pursuant to Berkeley's all-electric ordinance, natural gas converted to electricity
Operations: Water and Waste Water	WTP 100% aerobic

Attachment 4

RESOLUTION NO. ##,###-N.S

A RESOLUTION (A) ADOPTING THE ADDENDUM TO THE HOUSING ELEMENT UPDATE EIR AND RELATED CALIFORNIA ENVIRONMENTAL QUALITY ACT(CEQA) FINDINGS; AND (B) APPROVING AND ADOPTING GENERAL PLAN AMENDMENTS, INCLUDING AMENDMENTS TO THE LAND USE DIAGRAM TO RE-DESIGNATE CERTAIN PARCELS WITHIN THE SOUTHSIDE PLAN AREA, AND AMENDMENTS TO THE MEDIUM DENSITY RESIDENTIAL, HIGH DENSITY RESIDENTIAL, RESIDENTIAL MIXED USE, AND AVENUE COMMERCIAL LAND USE DESIGNATIONS TO BE CONSISTENT WITH ASSOCIATED ZONING TEXT AMENDMENTS TO INCREASE RESIDENTIAL DEVELOPMENT POTENTIAL IN THE SOUTHSIDE PLAN AREA.

WHEREAS, the City of Berkeley, in accordance with the provisions of California Government Code Section 65300 et seq., is required to adopt a General Plan for its long-range development, and further to periodically update that plan to reflect current conditions; and

WHEREAS, on January 18, 2023, the City Council of the City of Berkeley approved and adopted a General Plan Amendment to update the Housing Element for the period of 2023-2031, including extensive community outreach and public input between June 2021 and January 2023, and certified the Final Environmental Impact Report (referred to as EIR or Final EIR) (Resolution No. 70,669-N.S), which evaluated the environmental effects of the proposed amendments prepared in connection with the Housing Element Update (HEU); and

WHEREAS, on February 28, 2023, the California Department of Housing and Community Development (HCD) found the adopted Housing Element to be in substantial compliance with State Housing Element Law; and

WHEREAS, in connection with the amendments, an Addendum to the certified Final EIR pursuant to Section 15164 of the CEQA Guidelines has been prepared that describes the changes the proposed Project would have to the HEU, and compares the impacts of those changes to the impacts of the HEU identified in the EIR; and

WHEREAS, the Addendum to the certified Final EIR determined that potential impacts associated with the proposed Project are consistent with potential impacts disclosed in the EIR. That is, the proposed Project would not result in any new significant environmental effects or a substantial increase in the severity of significant effects previously identified in the EIR. Therefore, none of the conditions outlined in CEQA Guidelines Section 15162(a)(1-2) requiring preparation for a subsequent EIR have been met. Further, none of the conditions outlined in CEQA Guidelines Section 15162(a)(3)(A-D) requiring preparation of a subsequent EIR have been met; and

WHEREAS, based on the analysis contained in the Addendum, no further evaluation of environmental impacts is required for the proposed Project, no subsequent EIR is required pursuant to CEQA Guidelines Section 15162, and the Addendum is the appropriate level of environmental analysis and documentation for the proposed Project

pursuant to CEQA Guidelines Section 15164, and therefore the Mitigation Monitoring and Reporting Program in the Final EIR sufficiently addresses impacts from the proposed Project; and

WHEREAS, the adopted Housing Element includes “Program 27 – Priority Development Areas (PDAs), Commercial and Transit Corridors” to pursue zoning map and development standard amendments in the Southside Plan Area to increase housing supply and production in the Southside Plan Area through changes to the allowable building envelope, ground-floor residential use, and existing zoning district boundaries by December 2024; and

WHEREAS, the adopted Housing Element includes “Program 33—Zoning Code Amendment: Residential” to apply minimum density standards expressed in “units per acre” to higher density residential and mixed-use developments with five or more units, as well as to study and establish residential objective standards to provide clarity and predictability to ensure adequate baseline capacity to meet housing targets; and

WHEREAS, since 2016, the City Council has forwarded to the City of Berkeley Planning and Development Department, Land Use Planning Division, five referrals related to increasing the pace of housing production and the overall development potential in the Southside Plan Area; and

WHEREAS, on March 6, 2019, the Planning Commission received a presentation on Affordable Housing and Community Benefits and provided comments concurring with community feedback that consistently emphasized affordable housing above other community benefits for land value capture with increased development potential; and

WHEREAS, on September 20, 2022, the City Council of the City of Berkeley received a presentation from Staff and provided feedback on proposed zoning and development standards to increase residential development potential – particularly student-oriented housing – within the Southside Plan Area; and

WHEREAS, on November 2, 2022, the Planning Commission received a presentation from Staff and provided comments and recommendations on proposed zoning and development standards to increase residential development potential – particularly student-oriented housing – within the Southside Plan Area, and requested Staff return for a public hearing with zoning ordinance and associated general plan amendments; and

WHEREAS, on April 19, 2023, the Planning Commission received a presentation from Staff and provided additional comments and recommendations on proposed zoning and development standards, which considered comments received at the November 2, 2022 meeting, and requested Staff return for a public hearing with zoning ordinance and associated general plan amendments; and

WHEREAS, on September 6, 2023, the Planning Commission held a duly noticed public hearing and took public testimony, which was preceded by the distribution of notices in accordance with State and local noticing requirements; and, after conducting and closing

the public hearing, recommended that the City Council (1) Adopt a Resolution, as recommended by the Planning Commission to (a) amend the General Plan Land Use Diagram to re-designate certain parcels within the Southside Plan Area from Medium Density Residential to High Density Residential, and from High Density Residential to Residential Mixed Use, and (b) amend the General Plan Medium Density Residential, High Density Residential, Residential Mixed Use, and Avenue Commercial Land Use Designations to be consistent with associated zoning text amendments that increase residential development potential; and (2) Adopt an Ordinance, as recommended by the Planning Commission, amending the Berkeley Municipal Code (BMC) to increase residential development potential on parcels within the R-3, R-3(H), R-S, R-S(H), R-SMU, and C-T zoning districts and make conforming changes to other BMC sections, as well as adopt Zoning Map changes; and

WHEREAS, on November 14, 2023 the City Council held a duly noticed public hearing to consider the General Plan re-designation of certain parcels within the Southside Plan Area as well as an ordinance amending the BMC to increase residential development potential on parcels within the R-3, R-3(H), R-S, R-S(H), R-SMU, and C-T zoning districts, adopt Zoning Map changes, and make conforming changes to other BMC sections; and

WHEREAS, the proposed amendments are consistent with the adopted Housing Element and serve the public interest by facilitating additional housing capacity and production to better meet student-oriented housing demand in the Southside Plan Area; and

WHEREAS, the amendments would not be detrimental to the public health, safety and welfare of the City because they would facilitate development that does not substantially deviate from the current pattern of development and mix of land uses within the Southside Plan Area; would be completed in compliance with current building and fire codes and regulations; and would be subject to the City's standard conditions of approval regarding noise and air quality, waste diversion, toxics and stormwater requirements, as well as applicable mitigation measures included in the Southside Specific Plan EIR and the Housing Element Update EIR ; and

WHEREAS, the amendments do not change the designation of any parcel to reduce the intensity of use allowed under the existing General Plan or zoning pursuant to Gov. Code section 66300(b)(1); and

WHEREAS, all documents constituting the record of this proceeding are and shall be retained by the City of Berkeley Planning and Development Department, Land Use Planning Division, at 1947 Center Street, Berkeley, California.

NOW THEREFORE, BE IT RESOLVED, that the amendments are consistent with Program 27 and Program 33 of the adopted HEU; that the environmental effects of the amendments were evaluated in the certified Final EIR of the HEU and the Addendum to the Final EIR; and

NOW THEREFORE, BE IT FURTHER RESOLVED by the City Council that the General Plan Land Use Diagram is hereby amended, as shown in Exhibit A, and the General Plan Land Use Designations are hereby amended, as shown in Exhibit B; and

BE IT FURTHER RESOLVED, that the Addendum is hereby incorporated by reference into the certified Final EIR for the HEU; and

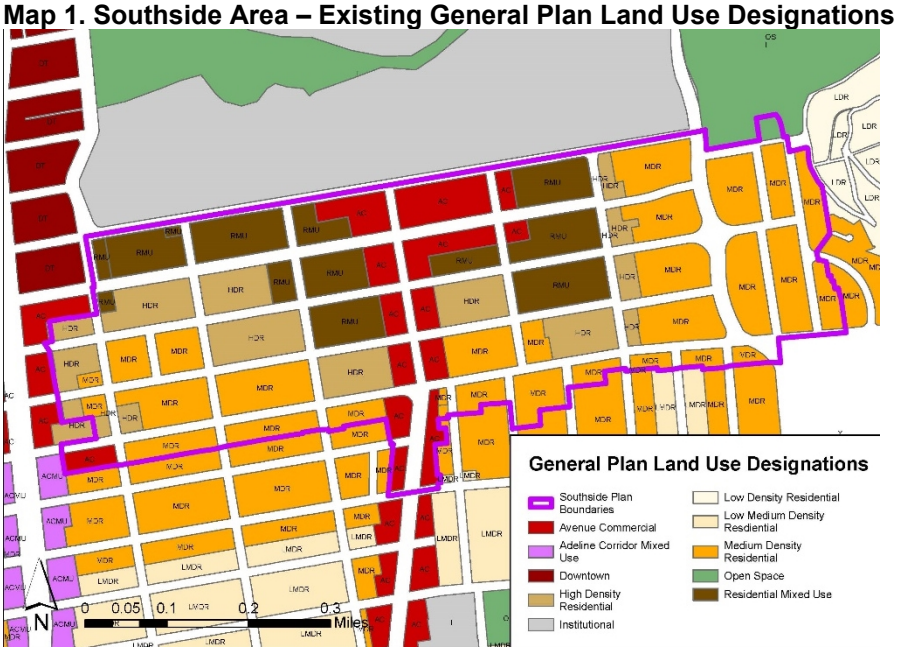
BE IT FURTHER RESOLVED that the City Council hereby authorizes the City Manager to make non-substantive, technical conforming edits (e.g., correction of typographical errors and/or clerical errors) to the Berkeley Municipal Code, including but not limited to page, figure or table numbering, or internal cross-references to amended or new sections of the Berkeley Municipal Code, and to return to the Planning Commission and City Council for major revisions only; and

BE IT FURTHER RESOLVED that nothing in this Resolution shall be interpreted or applied so as to create a requirement, power, or duty in conflict with any federal or State law.

Exhibits
A: Maps of existing and proposed General Plan Land Use Diagram.
B: Text of General Plan Land Use Designation amendments.

Exhibit A

Map 1. Southside Area – Existing General Plan Land Use Designations



Map 2. Southside Area – Proposed General Plan Land Use Designations

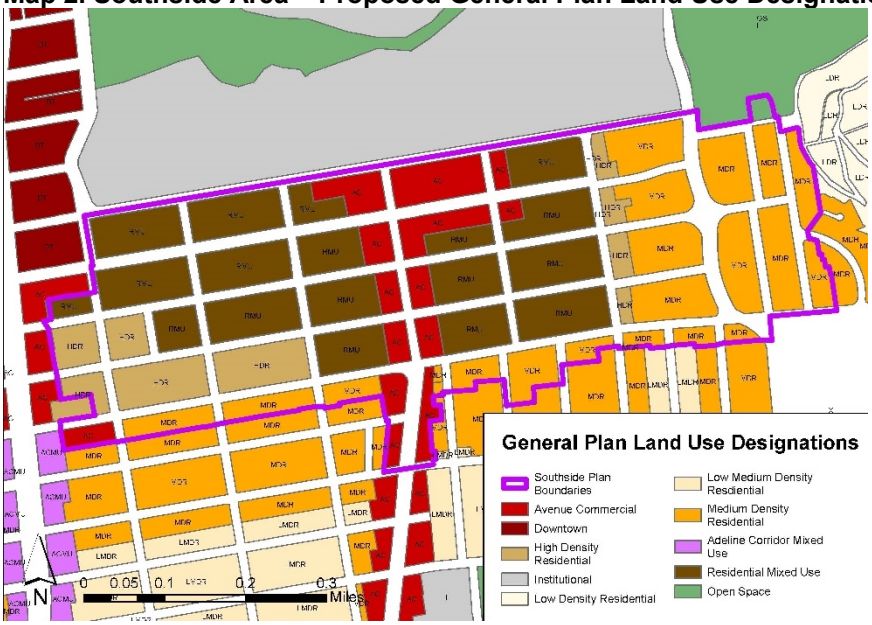


Exhibit B

Medium Density Residential
These areas of Berkeley are generally characterized by a mix of single-family homes and small to medium sized multi-family structures. The same uses appropriate in Low Density Residential are appropriate in Medium Density Residential areas. Building intensity will range from 20 to 40 dwelling units per net acre, and the population density will generally range from 44 to 88 persons per acre, with the exception of the Southside Plan Area.

Within the Southside Plan Area, except in areas located in the Hillside Overlay zoning district, building intensity will range from a FAR of less than 1.0 to a FAR of 3.0. Residential development is subject to a minimum density of 60 dwelling units per acre and a minimum population density of 150 persons per acre. There is no residential density limit. This allows for greater flexibility in housing types to maximize housing opportunities in the Southside Plan Area.

For information purposes, the compatible zoning districts for this classification are: Restricted Multi-family Residential (R-2A), which allows approximately 17 units per acre, and Multiple-family Residential (R-3), which allows approximately 26 units per acre. Height limits in the R-2A zoning district are typically 28 feet with provisions to allow up to 35 feet, and are 35 feet in the R-3 and R-3H zoning district (or 45 feet in the R-3 zoning district within the Southside Plan Area).

High Density Residential
In Berkeley, these areas are generally characterized by large, multi-family structures conveniently located near transit, the Downtown, the University campus, or BART. Appropriate uses for these areas include: residential, community service, schools, institutional, recreational uses, open space, and in some cases where allowed by zoning, ground-floor commercial and office. Building intensity will range from 40 to 100 dwelling units per net acre, and the population density will generally range from 88 to 220 persons per net acre, with the exception of the Southside Plan Area.

Within the Southside Plan Area, building intensity will generally range from a FAR of less than 1.0 to a FAR of 4.0. Residential development is subject to a minimum density of 100 dwelling units per acre and minimum population density of 250 persons per acre. There is no residential density limit. This allows for greater flexibility in housing types to maximize housing opportunities in the Southside Plan Area.

For information purposes, the compatible zoning districts for this classification are: Multi-Family Residential (R-4), which allows building heights of 35 feet with provisions to allow buildings up to 65 feet, and High Density Residential (R-5), which allows building heights of 40 feet with provisions to allow buildings up to 65 feet, and Residential Southside (R-S) which allows building heights of ~~35~~ 55 feet ~~with provisions to allow buildings up to 45 feet~~.

Residential Mixed Use
These areas are generally characterized by a diverse mixture of residential, commercial and institutional structures~~,~~ located in close proximity to transit and major shopping and employment centers. Appropriate uses for these areas include residential, neighborhood~~-~~ serving retail, offices, school, institutional, recreational uses, and open space. Building heights will generally range from two stories to eight ~~either four or five~~ stories, depending on type of use and location. Building intensity will range ~~from 40 to 100 dwelling units per net acre, and the population density will generally range from 88 to 220 persons per net acre~~from a ~~Floor Area Ratio (FAR)~~FAR of less

than 1.0 to a FAR of 7.0. Residential development is subject to a minimum density of 150 dwelling units per acre and minimum population density of 375 persons per acre. There is no residential density limit. This allows for greater flexibility in housing types to maximize housing opportunities in the Southside Plan Area.

For information purposes, the compatible zoning district for this classification is Residential Southside Mixed Use (R-SMU), which allows building heights up to ~~60 feet with provisions to allow buildings up to 65 feet or 75~~ 85 feet ~~depending on their location within the district~~.

Avenue Commercial
These areas of Berkeley are characterized by pedestrian-oriented commercial development and multi-family residential structures. These areas are typically located on wide, multi-lane avenues served by transit or BART. Appropriate uses for these areas include: local-serving and regional-serving commercial, residential, office, community service, and institutional. Building intensity will generally range from a Floor Area Ratio (FAR) of less than 1.0 to a~~n~~ FAR of 8.0~~5~~. Population density will generally range from 44 to 88 persons per acre.

Within the Southside Plan Area, residential development in the Telegraph Avenue Commercial (C-T) district is subject to a minimum density of 200 dwelling units per acre and minimum population density of 500 persons per acre. There is no residential density limit. This allows for greater flexibility in housing types to maximize housing opportunities in the Southside Plan Area.

For information purposes, the compatible zoning districts for this classification are shown below with accompanying development standards.

Zoning District	Maximum FAR	Maximum Height
South Area Commercial (C-SA):	4.0	24-60 ft
General Commercial (C-1)[1]:	3.0	35-50 ft
Telegraph Avenue Commercial (C-T):	3.0-~~8.0~~5	50-~~86~~5 ft
West Berkeley Commercial (C-W)[2]:	3.0	40-50 ft

Attachment 5

To: Berkeley City Council,
From: Planning Commission (Jeff Vincent, Chair)
Date: September 15, 2023

RE: Southside Zoning Changes

We are pleased to forward you our recommendation for zoning changes, general plan amendments, and the Housing Element Update EIR Addendum for the Southside. We are grateful to staff's thoughtful work to integrate multiple City Council (CC) referrals and incorporate community feedback through extensive outreach, in addition to ensuring alignment with the Housing Element.

Per our September 6, 2023 action, we look forward to CC's swift action on Southside zoning changes. As you discuss, we wish to raise 3 issues discussed by the PC that were not ultimately included in the recommendation:

Workforce development and prevailing wage in construction. The PC considered the idea of a prevailing wage requirement for larger construction projects in the Southside area, such as those with 50 or more units or having 50,000 square feet or more in floor area. We did not feel the zoning code was the appropriate place to include such provisions, but we encourage Council to consider the feasibility of such provisions in the Southside.

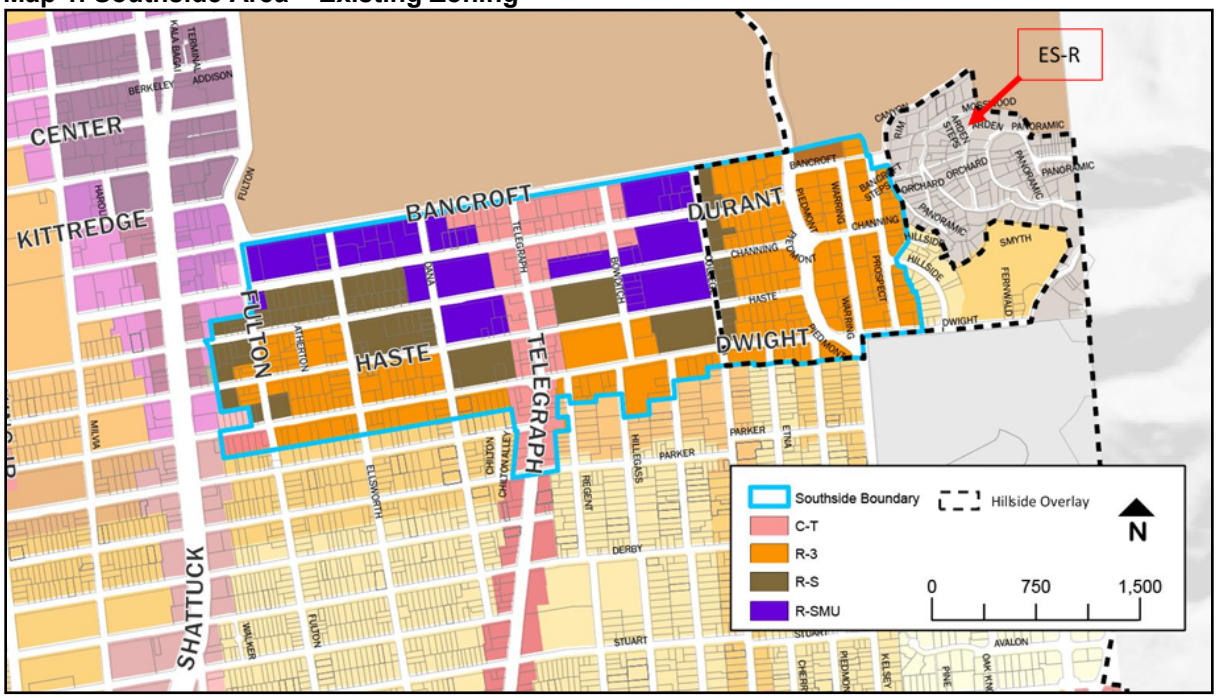
Land value recapture policy. Council's July 25, 2017 Resolution No. 68,133-N.S. (which "requires that land value recapture is included the preparation and implementation of all area plans and zoning considerations") was referenced in our discussion. The PC did not feel there was enough guidance to propose any additional "capture" provisions, although we agree that they can be beneficial in concert with upzoning. For example, to support community benefits such as parks/open space and/or funding for affordable housing. In general, we do feel that the proposed zoning changes in the Southside may increase property values and that the city should explore ways to capture some of that increase to fund public goods. We encourage Council to consider the feasibility of this approach with regard to Southside.

Master leasing with UC Berkeley. The issue of property owners leasing their property to UCB and the resulting exemption from property taxes pursuant to California Constitution Article XII, Section 3(e) and California Revenue and Taxation Code Section 203 was discussed. While property tax exemption may be beneficial in some contexts, we raised concern about how this practice of leasing privately owned property to the university results in "lost" local tax revenue. We were informed by staff that an agreement between UC Berkeley and the City on this topic is pending negotiation, so we declined to integrate any particular recommendation on this topic in the zoning and general plan amendments, however we feel this is an important and relevant issue for CC to address.

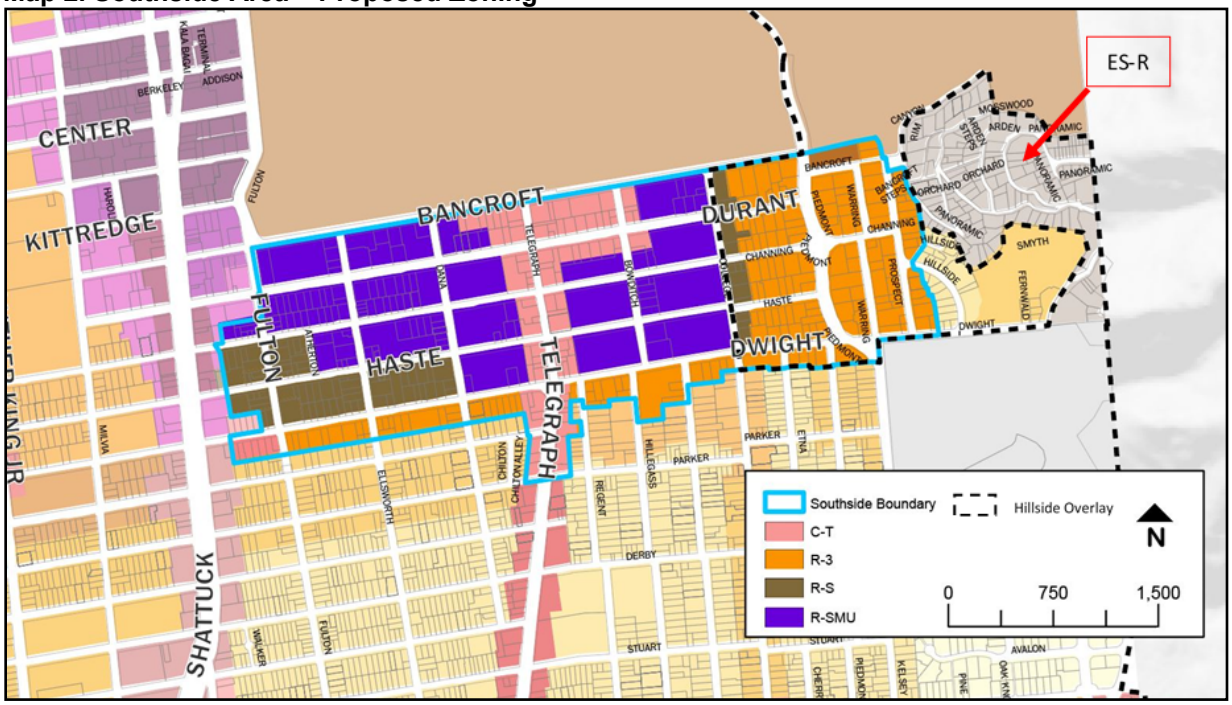
We appreciate your consideration of these items and we encourage your swift action to implement the recommended zoning changes in Southside.

ATTACHMENT 6. MAPS OF SOUTHSIDE PLAN AREA ZONING

Map 1. Southside Area – Existing Zoning



Map 2. Southside Area – Proposed Zoning



Planning and Development Department
Land Use Planning Division

STAFF REPORT

DATE: September 6, 2023

TO: Members of the Planning Commission

FROM: Ashley James, Senior Planner

SUBJECT: Amendments to Title 23, the Zoning Map, and the General Plan Relating to the Southside Zoning Implementation Program of the 2023-2031 Housing Element Update

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RECOMMENDATION

Planning Commission is asked to hold a public hearing, receive and provide comment on the proposed zoning text and map amendments, as well as associated General Plan text and map amendments, pertaining to the Southside Zoning Implementation Program of the 2023-2031 Housing Element Update, and make a recommendation for consideration by the City Council.

SUMMARY

City staff have prepared amendments to Title 23 (Zoning Ordinance) and the Zoning Map of the Berkeley Municipal Code (BMC) in response to: (a) City Council referrals, (b) recent changes in State laws related to housing, and (c) the City's 2023-2031 Housing Element Update, which includes Program 27 to pursue zoning map and development standard amendments in the Southside Plan Area intended to increase housing capacity and production, and Program 33 to apply minimum densities to higher density residential and mixed-use developments with five or more units. The full text of the zoning ordinance changes can be found in ***Attachment 1***. A summary table that identifies each Zoning Ordinance section and the proposed changes is ***Attachment 2.***

BACKGROUND

Scope of Amendments

"The Southside" refers to the area located on the south side of the UC Berkeley campus, roughly bounded by Bancroft Way, Dwight Way, Fulton Street and Prospect Street[1] (***see Attachment 3***). The Southside Plan was adopted in 2011. City staff have prepared Zoning Ordinance and zoning map changes to create or modify objective

[1] Southside Plan Areas east of Piedmont Avenue are not part of this study, as they are in the Hillside Overlay area and have less development potential.

standards, including building height, minimum residential density, Floor Area Ratio (FAR), lot coverage, setbacks, ground-floor residential uses, and zoning district boundary adjustments, to increase residential development potential—particularly student-oriented housing—in the following zoning districts within the Southside:

- Multiple-Family Residential (R-3) and Hillside Overlay (R-3(H))
- Residential Southside (R-S) and Hillside Overlay (R-S(H))
- Residential Southside Mixed-Use (R-SMU)
- Telegraph Commercial (C-T)

The Southside also includes seven parcels zoned C-SA, but no changes are proposed for those parcels. In addition, the zoning district boundary adjustments require conforming General Plan Land Use text and map amendments.

City Council Referrals

Since 2016, the City Council has forwarded five referrals related to increasing the pace of housing production and the overall development potential in the Southside by considering and codifying new zoning regulations for streamlined processes and less restrictive objective development standards. These referrals directed staff to reduce the development costs and administrative burden associated with discretionary review processes. (***see Attachment 4***).

State Laws Related to Housing

State law requires the City to identify objective zoning standards for the purpose of defining housing development projects that qualify for protections under the Housing Accountability Act (HAA) and to define a base project for the purposes of calculating density bonuses. The protections afforded by the HAA and the definition of a base project for density bonus calculations apply to a housing development project up to and including the maximum development allowed with use permits and/or administrative use permits. For example, the minimum rear setback in the R-3 district is 15 feet; however, the Zoning Officer may issue an Administrative Use Permit (AUP) to reduce the setback to zero. The reduced setback (in this case, zero) is the applicable objective standard. State Density Bonus Law requires the City to grant a density increase over "the otherwise maximum allowable gross residential density," which is the density allowed including standards modified with a discretionary permit.[2]

2023-2031 Housing Element Update

The recently adopted and certified Housing Element Update includes two implementation programs relating to this effort. First, Program 27 states that the City will complete the Southside zoning text and map amendments by December 2024, which are intended to increase housing capacity and production. Second, Program 33 states that the City will study and establish residential objective standards to provide clarity and predictability, as well as establish a minimum density standard expressed in "units

[2] Land Use Planning Division Memorandum, August 2, 2021. Housing Accountability Act / Density Bonus Base Projects – Objective Standards. State Density Bonus - Objective Standards-Housing Accountability Memo 08-21.pdf (berkeleyca.gov)

per acre" to ensure adequate baseline capacity to meet housing targets and achieve Housing Element Compliance.

Community Outreach

The proposed amendments are based on input from community engagement through the Housing Element Update and specific outreach related to the proposed changes in the Southside, as well as prior meetings with the City Council, Planning Commission, and the Southside Environmental Impact Report (EIR) Subcommittee.

Between September 2022 and May 2023, staff have presented the proposed Southside zoning changes to the following advisory bodies:

- September 20, 2022 - City Council worksession on Residential Objective Standards, including proposed zoning changes to promote Middle Housing in lower density districts and encourage increased housing capacity in the Southside.[3]
- October 14, 2022 - City/University of California (UC)/Students Relations Committee presentation and discussion.
- November 2, 2022- Planning Commission presentation and discussion.
- April 19, 2023 - Planning Commission presentation and discussion.
- May 18, 2023 - Design Review Committee presentation and discussion.
- June 15, 2023 - Design Review Committee presentation and discussion, continued.

Between 2021 and 2023, staff have presented the proposed Southside zoning changes to the following community organizations:

- East Bay for Everyone (EB4E);
- UC Berkeley Campus Planning;
- The Associated Students of the University of California (ASUC) Housing Commission;
- Southside Neighborhood Consortium (SNC);
- Berkeley Design Advocates (BDA); and
- Berkeley Architectural Heritage Association (BAHA).

Staff also conducted in-person events at the Berkeley Harvest Festival (October 15, 2022) and on Sproul Plaza (October 18, 2022) to collect community feedback, as well as an online survey (November 27, 2022 to December 18, 2022) to seek feedback from UC Berkeley students.[4]

[3] September 20, 2022. Council Worksession Residential Objective Standards on Middle Housing and the Southside. https://berkeleyca.gov/sites/default/files/documents/2022-09-20%20WS%20Item%2001%20Residential%20Objective%20Standards.pdf

[4] December 2022. Final Summary Southside Area UC Student Housing Survey. https://berkeleyca.gov/sites/default/files/documents/FinalSummary_Southside%20Area%20UC%20Student%20Housing%20Survey%20-%2019%20December%202022.pdf

DISCUSSION

Staff are proposing: a) zoning district and General Plan designation boundary adjustments within the Southside; and b) new or modified development standards for zoning districts within the Southside (***See Attachments 3 and 4***). The zoning map and the proposed development standards can be considered independently, but are being proposed together for a comprehensive approach. With the exception of allowing ground-floor residential use in the C-T district, staff are not proposing any changes to permitted land uses or land use permit requirements in any district. However, the zoning map changes would result in changes to permitted land uses and permit requirements. For example, the R-S district does not permit certain commercial uses such as food product stores and food service establishments; if re-zoned to R-SMU, those establishments would be permitted. Finally, consistent with the policy direction in the adopted 2023-2031 Housing Element Update and recent state laws, staff proposes to remove discretionary permits that would otherwise be required for residential additions (BMC Section 23.202.030(A)(1)) and adding the fifth or more bedroom to a lot on Southside parcels within the Hillside Overlay (R-3(H) and R-S(H) districts) (AB 916, 2002; BMC Section 23.202.030(B)).

<u>Southside Zoning District and General Plan Designations Boundary Adjustments</u>
The proposed zoning district boundary adjustments consist of the following:

- *R-SMU Expansion.* The R-SMU district would expand into the areas indicated in Figure 1, below. Approximately four blocks west of Telegraph Avenue would change from R-S to R-SMU, and three blocks east of Telegraph Avenue would change from R-3 and R-S to R-SMU (**see *Figure 1*)**.
- *R-S Expansion.* The R-S district would expand into the areas currently zoned R-3 indicated in Figure 2, below (***see Figure 2***).

No zoning boundary adjustments are proposed for the C-T district nor within the Hillside Overlay zone. These adjustments retain the overall north-to-south gradual stepping down of development intensity, along with denser development along the Telegraph Avenue corridor, consistent with the original Southside plan.

Maps of existing and proposed zoning and General Plan designations can be found in ***Attachment 3*** and ***Attachment 5***, respectively. The R-S, R-SMU, and C-T zoning districts are unique to the Southside and each has an underlying General Plan designation. For the R-S district, the underlying General Plan designation is High Density Residential; for the R-SMU district, the underlying General Plan designation is Residential Mixed Use; for the C-T district, the underlying General Plan designation is Avenue Commercial.

To make the proposed adjustments to the zoning district boundaries, the City Council would also need to amend the General Plan Land Use map to match the new zoning boundaries. Staff also proposes to make General Plan text amendments to the Land Use designations so that they reflect the proposed development standards for each zoning district (***see Attachment 5***).

Figure 1. Expansion of R-SMU District

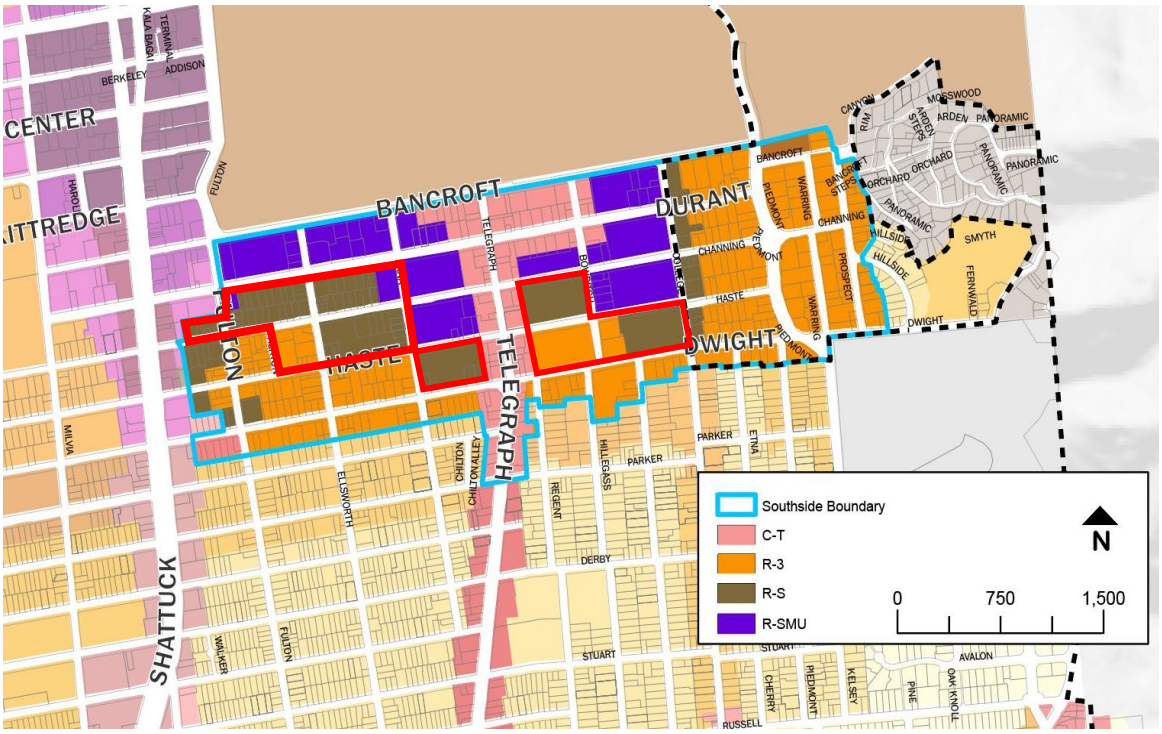
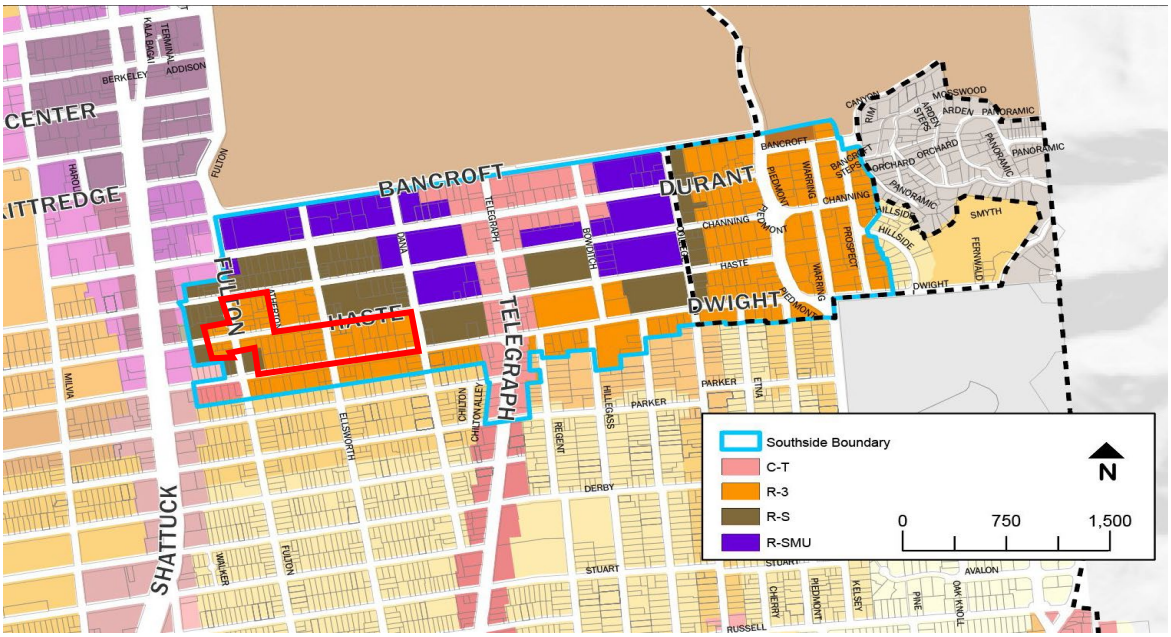


Figure 2. Expansion of R-S District



<u>Telegraph Commercial (C-T) District – Allowed Ground Floor Uses</u>

The zoning text amendments include allowing ground-floor residential uses in the C-T district when located behind a commercial use that fronts the street (Telegraph Avenue, Bancroft Way, Durant Avenue, Channing Way, Haste Street). A permitted commercial

use would be required to occupy at least the front 30 feet of depth on the ground floor, measured from the front property line, and the entire building frontage, except for required utilities, driveways, pedestrian access and lobbies for residential uses. Ground-floor residential use is already permitted in all other existing and proposed zoning districts in the Southside.

Staff conducted outreach to the local commercial real estate and development community on this topic and heard that 30 feet would be the ideal depth for most retail, personal service, small office, and food and beverage uses that do not require storage space. The proposed standard is a minimum and therefore does not preclude a commercial depth that exceeds 30 feet. The requirement to provide commercial space along the entire building frontage, with some exceptions, is intended to balance to the creation of a pedestrian-friendly environment without overburdening new development.

Development Standards

Table 1 provides the general direction of the recommended changes for each development standard and the policy rationale for each recommendation. Each standard is further discussed below and the specific development standard changes can be found in ***Attachment 6***.

Table 1: Summary of Proposed Southside Development Standards

Development Standard and Recommendation	**Policy Goal**
Floor Area Ratio (FAR) – Set a maximum FAR	• Allow flexibility in project design • Provide predictability for the review process and outcome • Facilitate calculations for State Density Bonus and possible local density bonus
Lot Coverage – Remove maximum requirement	• Encourage housing development through increasing capacity • Increase predictability of development outcomes through objective standards • Increase flexibility through a menu of options for open space and residential amenities
Setbacks – Reduce setbacks and remove Use Permit exceptions	
Open Space – • Reduce requirement and increase flexibility in meeting open space standard • Set requirement to a per 1,000 square foot of gross residential floor area standard, rather than per unit	
Building Separation – Remove minimum requirement	
Building Height – Set a maximum height limit and remove Use Permit exceptions	

Density – • Set a minimum dwelling unit-per-acre standard • Remove minimum lot size requirement	• Help meet Housing Element goals to achieve Regional Housing Needs Allocation (RHNA) • Set a density measurement (units/acre) that is aligned with State Law

Floor Area Ratio (FAR)

Existing FAR standards are summarized in Table 2.

Table 2: Existing Maximum Height, Lot Coverage, and Floor Area Ratio Standards

	R-3/R-3(H)[1]	R-S/R-S(H)[1]	R-SMU	C-T (south of Dwight)	C-T (north of Dwight)
Maximum Height	35 ft	35 ft (45 with UPPH)	60 ft (Subarea 2 - 65 ft; Subarea 1 - 75 ft with UPPH)	50 ft (65 with UPPH)	65 ft (75 with UPPH)
Maximum Lot Coverage	1-2 Stories: 45% 3 Stories: 30%	1-2 Stories: 65% 3 Stories: 60% 4 Stories: 55%	1-2 Stories: 55% 3 Stories: 50% 4 Stories: 45% 5 Stories: 40% (100% with AUP)	100%	100%
Maximum FAR	No Maximum			4.0	5.0, 6.0 with UPPH
1 The allowed height in the Hillside Overlay Zone for new buildings on parcels with an underlying base district of R-3 or R-S is 35 feet (average and maximum) and 3 stories. For residential additions, the allowed average height is as required by the base district or the highest existing portion of the roof, whichever is lower; the maximum is 20 feet (BMC Section 23.210.020(C)).					

Staff proposes to establish a new maximum FAR standard for each district in the Southside. The proposed FAR is based upon approximately 95 percent of a parcel's maximum zoning envelope, including height, lot coverage, and setback requirements. Table 3 summarizes the proposed FAR standards.

Table 3: Proposed Maximum Height, Lot Coverage, and Floor Area Ratio Standards

	R-3	R-3(H)	R-S	R-S(H)	R-SMU	C-T
Maximum Height	45 ft	35 ft/ 3 stories	55 ft	35 ft/ 3 stories	85 ft	85 ft
Maximum Lot Coverage (included for the purpose of calculating FAR only)	70%	70%	75%	75%	85%	100%
Proposed FAR	**3.0**	**3.0**	**4.0**	**4.0**	**7.0**	**8.0**

Lot Coverage

Some members of the Planning Commission expressed an interest in further simplifying the package of proposed Southside development standards. In response, staff propose eliminating the maximum lot coverage requirement because it is accounted for in the proposed maximum FAR standard. Removing lot coverage as a separate standard simplifies the package of development standards applicable in the Southside.

Building Height

The proposed changes to maximum height include: 1) increases in the maximum height; and 2) the removal of additional discretionary permits to exceed the maximum height. Height would continue to be measured as an average in the R-3 district and as a maximum in the R-S, R-SMU, and C-T districts. Height limits stated would be the maximum allowed, unless waived through State density bonus law,[5] and would be measured only in feet and not also the number of stories. Specifically, the proposed changes are:

- Allow up to 85 feet in the R-SMU district (increase from 60 feet / four stories).
- Allow up to 85 feet in the C-T district (currently 65 feet or up to 75 feet with a Use Permit north of Dwight, and 50 feet or up to 65 feet and 5 stories with a Use Permit south of Dwight). In response to Councilmember feedback, the distinction between C-T parcels north and south of Dwight would be removed, resulting in one height standard across the district.
- Allow up to 55 feet in the R-S district (increase from a base of 35 feet / three stories and allowable increases with an AUP). Currently, a maximum of 45 feet and 4 stories is allowed in the R-S with a Use Permit if at least 50 percent of the total building floor area is designated for residential use.
- Allow up to 45 feet in the R-3 district (increase from a base of 35 feet / three stories and allowable increases with an AUP).

The current maximum height allowed in the Hillside Overlay (H) zone would continue to apply to parcels in the R-3(H) and R-S(H) districts.[6] Consistent with Council referrals, the proposed maximum height standard in the R-SMU and C-T districts provide opportunities to reach 12 stories if a project were to utilize State density bonus law. Parapets would be allowed to exceed the maximum height by up to 5 feet as of right; this change has been included in the general development standards for measuring building height.

Setbacks

The proposed changes to minimum setbacks include: 1) decreases in required setbacks; and 2) the removal of additional discretionary permits to further reduce setbacks. The proposed changes to existing minimum setback requirements are:

- *Front Setback.* No minimum front setback required for R-S, R-SMU districts. Currently, a minimum of 10 feet is required, which may be reduced to zero with an AUP.

[5] A Southside local density bonus program is under consideration. See Program 35 of the City's 2023-2031 Housing Element (https://berkeleyca.gov/construction-development/land-use-development/general-plan-and-area-plans/housing-element-update) and November 2, 2023 Planning Commission (https://berkeleyca.gov/sites/default/files/legislative-body-meeting-agendas/2022-11-02_PC%20Agenda%20Packet.pdf).
[6] BMC Section 23.210.020(C)

- *Rear Setback*. A minimum setback of 4 feet for R-S and R-SMU districts. Currently, a minimum of 10 feet is required for the first through third stories of a building, and a minimum of 17 feet is required for the fourth story. These minimums may be reduced to zero with an AUP.
- *Street Side Setback.* No minimum street side setbacks required for R-SMU and R-S districts. Currently, the minimum requirement varies from between 6 feet and 10 feet, depending on the number of stories. The minimum may be reduced to zero with an AUP.
- *Side Setback.* No minimum side setback required for the R-SMU district. Currently, the minimum requirement varies from between 4 feet and 10 feet, depending on the number of stories. The minimum may be reduced to zero with an AUP.
- *Lower- and Upper-Story Setback.* Reduce the various lower-story and upper-story side setbacks for R-SMU, R-S, and R-3 districts to a single setback of 4 feet (currently varies between 4 feet and 10 feet). Reduce lower-story and upper-story rear setbacks for R-SMU, and R-S districts to a single setback of 4 feet (currently varies between 10 feet and 19 feet; minimum rear setback can be reduced to zero in the R-SMU with an AUP).
- *Shade Study.* Eliminate the requirement for shade studies in the C-T district.
- *Front and Rear Setbacks in the R-3 District*. Two members of the Planning Commission recommended open space at the rear of the lot to maintain transitions between the various districts within the Southside Plan Area. Based on this feedback, staff propose revising the R-3 front and rear minimum setbacks as follows:
    - Front setback: Reduce from 15 feet to 10 feet.
    - Rear setback: Reduce from 15 feet to 10 feet.

  This proposal would allow for additional open space in the rear yard, offset by a reduced front yard setback requirement.[7]

Open Space

Table 4 summarizes existing and proposed minimum open space requirements.

Table 4: Existing and Proposed Required Open Space

		R-3/ R-3(H)	R-S/ R-S(H)	R-SMU	C-T
Existing	Per Dwelling Unit (sq. ft.)	200	50	40	40
	Per GLA Resident (sq. ft.)	90	20	20	No min.
Proposed	Per 1,000 sq. ft. gross residential floor area (sq. ft.)	150	50	40	40

[7] Note that for ADU projects, the minimum required rear setback remains 4 feet in accordance with State laws.

- *Replace Unit Standard with Floor Area Standard:* The proposed minimum requirement is based on a per 1,000 square foot ratio of gross residential floor area to provide greater predictability and flexibility in accommodating open space requirements for the variety of residential use types allowed in the Southside. The standard is designed to increase floor area dedicated to residential uses while also preserving the requirement to provide residents with common and/or private usable open space and amenities on-site. Furthermore, the proposed standards are consistent with open spaces provided in recently-approved projects in the Southside. Both a new definition and measurement of gross residential floor area have been added to the zoning ordinance.

- *Allow Shared Residential and Pedestrian Amenities*. Based on responses to the Southside survey, staff propose greater flexibility in meeting the open space requirement by allowing a project to provide a portion of the total amount of required usable open space through the following amenities:

    - Shared Residential Amenities. A project may provide up to 50 percent of the total required usable open space with one or more of the following:

        - Multipurpose rooms (e.g., conference space, study/library)
        - Fitness centers
        - Pet washing room

      Some Commissioners noted that shared indoor common spaces should promote opportunities for social connection and recreation among building residents, while still requiring usable open space located outdoors. The allowed amenities would accommodate a range of recreation and assembly activities, including social gatherings, meetings, and studying, and would be required to have a minimum width and length of 10 feet, consistent with current usable open space requirements. The proposed maximum allowance of 50 percent would ensure that both indoor and outdoor open spaces are provided in each project. Definitions of these terms are provided in the Glossary.

    - Pedestrian Amenities. Several Commissioners expressed a need to improve the pedestrian experience in the Southside, as the proposed development standards allow additional development that is similar to a downtown environment, and to consider different types of social circles that benefit from open space – personal, building and neighborhood. In response, staff considered a new standard that would encourage pedestrian amenities along the building frontage within private property (between the sidewalk and building). Typically, this type of amenity space is required in downtown areas. For example, San Francisco requires streetscape elements such as planters, lighting, landscaping, and a minimum sidewalk width of 15 feet, and allows sidewalk widening or pedestrian street improvements to meet open space requirements. In Oakland, usable open space may be provided through public plazas that

are landscaped and include pedestrian amenities within the Central Business District.

The proposed change would allow a development project to provide pedestrian amenity space on private property along the building frontage toward meeting the usable open space requirement. Staff presented this concept to the Design Review Commission in May 2023 and June 2023 for discussion. Feedback included the need to incentivize this type of amenity space, to provide flexibility so that a wide range of creative designs may be possible, and to avoid creating standards that would result in monolithic building frontages. In response, the proposed standards include a minimum average depth of six feet from the front property line, not continuous along the building frontage. The following standards would apply:

- *Incentive Credit:* Each square foot of pedestrian amenity space is weighted as 1.5 square feet of required usable open space.
- *Location:* The space cannot contain an area dedicated to off-street parking, loading or driveways.
- *Minimum Dimension:* Minimum average depth of six feet measured from the front property line.
- *Design Standards:* The space must be open to the sky, with exceptions for certain building encroachments (i.e., bay windows, balconies, galleries, awnings/canopies, or covered walkways). Pedestrian-scale lighting must be provided, and a definition has been included in the Glossary. The definition is based on the proposed Street Light Comprehensive Plan, which will be considered by the Transportation and Infrastructure Commission this fall. Enclosed structures are not permitted.

- *Residential Unit Entries*: To provide a buffer between private ground floor residential spaces and the public sidewalk, staff proposes a minimum grade separation of 18 inches above finished grade for residential unit entries located on the ground floor within six feet of the front property line. Consistent with the BZO style guide, this requirement has been added to the supplemental use regulations section of the zoning ordinance (23.302.070).

Building Separation

Table 5 summarizes existing building separation standards for zoning districts in the Southside. Staff propose eliminating the building separation requirement in all districts; building and fire code requirements for fire rating and separation would still apply.

Table 5: Existing Building Separation Standards

	R-3	R-S	R-SMU	C-T
1st story	8 ft	8 ft	8 ft	No minimum
2nd story	12 ft	12 ft	12 ft	

3rd story	16 ft	16 ft	16 ft	
4th story		20 ft	20 ft	
5th story			24 ft	

Density

Table 6 summarizes existing and proposed density standards. The proposed changes include: 1) removing the *maximum* density standard for GLAs in all Southside zoning districts; 2) establishing *minimum* dwelling units per acre standards; and 3) removing the *minimum* lot area requirement. A new section (23.106.100 – Residential Density) is proposed to define residential density and its rules of measurement.

Table 6: Density Standards

		R-3/R-3(H)	R-S/R-S(H)	R-SMU	C-T
Existing	Minimum or Maximum Dwelling Units per Acre	None	None	None	None
	Minimum lot area (sq. ft.) per GLA Resident	350 [1]	350 [1]	175 [2]	350 [1]
	Minimum Lot Area	5,000 sq. ft.	5,000 sq. ft.	5,000 sq. ft.	None
Proposed	Minimum Dwelling Units per Acre	60	100	150	200
	Maximum Dwelling Units per Acre	No Maximum	No Maximum	No Maximum	No Maximum
	Minimum Lot Area	None	None	None	None

[1] 124 residents per acre
[2] 248 residents per acre

Based on input from the Planning Commission and the community during the recent Housing Element Update process, a minimum density standard is proposed. As discussed above, a maximum FAR is proposed in the Southside. Regulating FAR allows more flexibility in unit size when designing a project, while still capping the overall built form and the resultant impacts to shade, etc. Further, a minimum density standard is consistent with Council's stated intention to increase residential development in the Southside, as well as Density Bonus law, which recognizes density as being measured only in units per acre, and helps ensure adequate baseline capacity to meet housing targets set forth in the recently adopted Housing Element. Removing the minimum lot size requirement is complementary to the proposed minimum density standard, and simplifies the package of zoning standards by providing a single density standard.

Technical Edits

The proposed substantive changes to the Zoning Ordinance created the need for certain technical edits. These edits include table numbering in sections adjacent to those that have been modified. For example, edits to the table numbers in the R-3 district require re-numbering in the remainder of the R-prefixed districts (i.e., R-4, R-5), and Figure numbers. The addition of new definitions requires re-numbering of certain sections of the Glossary.

ENVIRONMENTAL REVIEW

Development projections for this project were analyzed in the Environmental Impact Report (EIR) for the 2023-2031 Housing Element Update, which was certified by the City Council on January 18, 2023.[8] The Housing Element Update (HEU) EIR assumed that approximately 1,000 additional dwelling units would be feasible with implementation of this project. Staff found that the changes to the development standards as currently proposed would allow approximately 2,650 additional dwelling units, an increase in development potential compared to the amount analyzed in the HEU EIR of approximately 1,650 units, which requires supplemental CEQA review. An Addendum to the HEU EIR has been prepared, as some changes or additions to the HEU EIR are necessary. The Addendum concludes that the proposed changes would not introduce new, significant environmental impacts beyond those that have already been identified and characterized in the HEU EIR.[9] Further, there are no substantial changes in the project, its circumstances, or substantially important new information that would cause the project to have new significant impacts or substantially increase previously identified significant impacts. None of the conditions described in CEQA Guidelines Section 15162 that would call for preparation of a subsequent EIR have occurred or would occur because of the changes currently proposed to the zoning regulations in the Southside. Therefore, Staff recommends the Planning Commission recommend adoption of the Addendum to the certified Final HEU EIR ***(see Attachment 7).***

NEXT STEPS

Upon receiving Planning Commission recommendation and public comment, staff will forward a proposed draft Zoning Ordinance, Zoning Map and General Plan Text and Map Amendments, as well as the Addendum to the certified Final HEU EIR, to City Council for consideration and adoption.

ATTACHMENTS

1. Draft Ordinance – Zoning Ordinance Text Amendments
2. Reference Matrix – Southside Zoning Ordinance Amendments
3. Existing and Proposed Zoning Map
4. Referenced City Council Referrals
5. Draft Resolution - General Plan Map and Text Amendments
6. Existing and Proposed Development Standards Tables
7. Addendum to the 2023-2031 Housing Element Update EIR
8. Public Hearing Notice

[8] Housing Element Update 2023-2031 Final EIR.
https://berkeleyca.gov/sites/default/files/documents/ATT%202%20FEIR_RTC.pdf
[9] CEQA Guidelines Section 15164.

ATTACHMENT 8. EXISTING AND PROPOSED SOUTHSIDE DEVELOPMENT STANDARDS TABLES

Table 1. Existing Development Standards - Southside Area

Standards in gray are included in proposed changes.

"-" = not applicable; P = Permitted AUP = Administrative Use Permit UPPH = Use Permit Public Hearing NP = Not Permitted	R-3	R-3H	R-S	R-SH	R-SMU	C-T (south of Dwight)	C-T (north of Dwight)
	Multiple-Family Residential	Multiple-Family Residential Hills Overlay	Residential High Density Subarea	Residential High Density Subarea Hills Overlay	Residential Southside District	Telegraph Avenue Commercial	
Single-Family	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH
Two-Family	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH
Multi-Family	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH
Group Living Accommodation	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH
Mixed-Use Residential	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH
Live/Work	NP	NP	NP	NP	NP	ZC	ZC
Ground-floor residential	Allowed	Allowed	Allowed	Allowed	Allowed	Not allowed	Not allowed
Commercial Uses	Not Permitted	Not Permitted	Hotel, Retail w/ UPPH	Hotel, Retail w/ UPPH	Personal & Household Service w/ ZC; Hotel, Retail, Food Service w/UPPH	Personal & Household Service, Retail w/ ZC; Food Service w/ ZC >1,500 sq.ft.; Hotel w/ UPPH	Personal & Household Service, Retail w/ ZC; Food Service w/ ZC >1,500 sq.ft.; Hotel w/ UPPH
Max. Density (sf per GLA resident)	350	350	350	350	175 (increase w/UPPH)	350 (increase w/UPPH)	350 (increase w/UPPH)
Min. Lot Area (sf)	5000	5000	5000	5000	5000	No Min.	No Min.
Max. FAR	No Max.	No Max.	No Max.	No Max.	No Max.	4.0	5.0 (6.0 w/UPPH)
Min. Open Space (sf per DU)	200; 90/GLA Resident	200; 90/GLA Resident	50; 20/GLA Resident	50; 20/GLA Resident	40; 20/GLA Resident	40; No Min. for GLA	40; No Min. for GLA
Min. Height (ft)	No Min.	No Min.	No Min.	No Min.	No Min.	35	35
Max. Height (stories)	3	3	3 (4 with UPPH)	3 (4 with UPPH)	4 (5 with UP)	5 with UP	No max
Max. Height (ft)	35	35	35 (45 with UPPH)	35 (45 with UPPH)	60 (65 in Subarea 2 or 75 in Subarea 1 with UPPH)	50 (65 w/ UPPH)	65 (75 w/ UPPH)
Max. Lot Coverage, Interior/Thru Lot (%)	1-2 Stories: 45 3 Stories: 30	1-2 Stories: 45 3 Stories: 30	1-2 Stories: 65 3 Stories: 60 4 Stories: 55	1-2 Stories: 65 3 Stories: 60 4 Stories: 55	1-2 Stories: 55 3 Stories: 50 4 Stories: 45 5 Stories: 40 (100 w/AUP)	100	100
Max. Lot Coverage, Corner Lot (%)	1-2 Stories: 50 3 Stories: 45	1-2 Stories: 50 3 Stories: 45	1-2 Stories: 70 3 Stories: 65 4 Stories: 60	1-2 Stories: 70 3 Stories: 65 4 Stories: 60	1-2 Stories: 60 3 Stories: 55 4 Stories: 50 5 Stories: 45 (100 w/AUP)	100	100
Min. Setback, Front (ft)	15	15	10 (No Min. w/ AUP)	10 (No Min. w/ AUP)	10 (No Min. w/AUP)	No Min.	No Min.
Min. Setback, Rear (ft)	15 (No Min. w/ AUP)	15 (No Min. w/ AUP)	1st-3rd Story: 10 4th Story: 17 (No Min. w/ AUP)	1st-3rd Story: 10 4th Story: 17 (No Min. w/ AUP)	1st-3rd Story: 10 4th Story: 17 5th Story: 19 (No Min. w/ AUP)	No Min.	No Min.
Min. Setback, Interior (ft)	1st -2nd Story: 4 3rd Story: 6	1st -2nd Story: 4 3rd Story: 6	1st-2nd Story: 4 3rd Story: 6 4th Story: 8	1st-2nd Story: 4 3rd Story: 6 4th Story: 8	1st-2nd Story: 4 3rd Story: 6 4th Story: 8 5th Story: 10 (No Min. with AUP)	5 if Adjacent to Res. District, Otherwise No Min.	5 if Adjacent to Res. District, Otherwise No Min.
Min. Setback, Street Side (ft)	1st Story: 6 2nd Story: 8 3rd Story: 10	1st Story: 6 2nd Story: 8 3rd Story: 10	1 story: 6 2nd Story: 8 3rd-4th Story: 10	1 story: 6 2nd Story: 8 3rd-4th Story: 10	1st Story: 6 2nd Story: 8 3rd-5th Story: 10 (No Min. with AUP)	Same as Adjacent Res. District, Otherwise No Min.	Same as Adjacent Res. District, Otherwise No Min.
Min. Building Separation (ft)	1st Story: 8 2nd Story: 12 3rd Story: 16 (Reduce w/AUP)	1st Story: 8 2nd Story: 12 3rd Story: 16 (Reduce w/AUP)	1st story: 8 2nd Story: 12 3rd Story: 16 4th Story: 20 (Reduce w/AUP)	1st story: 8 2nd Story: 12 3rd Story: 16 4th Story: 20 (Reduce w/AUP)	1st Story: 8 2nd Story 12 3rd Story: 16 4th Story: 20 5th Story: 24 (Reduce w/AUP)	No min	No min
Min. Residential Parking Spaces	No Min.	No Min (1 space/unit if road narrower than 26 ft)	No Min.	No Min (1 space/unit if road narrower than 26 ft)	No Min.	No Min.	No Min.
Max. Residential Parking Spaces	0.5 spaces/unit	0.5 spaces/unit (None if road narrower than 26 ft)	0.5 spaces/unit	0.5 spaces/unit (None if road narrower than 26 ft)	0.5 spaces/unit		

ATTACHMENT 6. EXISTING AND PROPOSED SOUTHSIDE DEVELOPMENT STANDARDS TABLES

Table 2. Proposed Development Standards - Southside Area

Standards in gray are changed from existing standards.

"-" = not applicable; P = Permitted AUP = Administrative Use Permit UPPH = Use Permit Public Hearing NP = Not Permitted	**R-3** **Multiple-Family Residential**	**R-3H** **Multiple-Family Residential Hillside Overlay**	**R-S** **Residential Southside District**	**R-SH** **Residential High Density Subarea Hillside Overlay**	**R-SMU** **Residential Southside District**	**C-T** **Telegraph Avenue Commercial**
Single-Family	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH
Multi-Unit Residential	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH
Group Living Accommodation	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH
Mixed-Use Residential	UPPH	UPPH	UPPH	UPPH	UPPH	UPPH
Live/Work	NP	NP	NP	NP	NP	ZC
Ground-floor residential	Allowed	Allowed	Allowed	Allowed	Allowed	Allowed. Commercial use must occupy front 30 feet of depth
Commercial Uses	Not Permitted	Not Permitted	Hotel, Retail w/ UPPH	Hotel, Retail w/ UPPH	Personal & Household Service w/ ZC; Hotel, Retail, Food Service w/UPPH	Personal & Household Service, Retail w/ ZC; Food Service w/ ZC <1,500 sq.ft. or AUP >1,500 sq.ft.; Hotel w/ UPPH
Min. Density (DU/acre) - Round to the nearest whole number	60	60	100	100	150	200
Max. Density (DU/acre)	No Max.	No Max.	No Max.	No Max.	No Max.	No Max.
Min. Lot Area (sf)	No Min.	No Min.	No Min.	No Min.	No Min.	No Min.
Max. FAR	3.0	3.0	4.0	4.0	7.0	8.0
Min. Usable Open Space (sf per 1,000 sf residential floor area)	150	150	50	50	40	40
Min. Height (ft)	No Min.	No Min.	No Min.	No Min.	No Min.	35
Max. Height (ft) [1]	45	35	55	35	85	85
Max. Height (stories)	No Max.	3	No Max.	3	No Max.	No Max.
Min. Setback, Front (ft)	10	10	No Min.	No Min.	No Min.	No Min.
Min. Setback, Rear (ft)	10	10	4	4	4	No Min.
Min. Setback, Interior (ft)	4	4	4	4	No Min.	5 if adjacent to R District, otherwise no min
Min. Setback, Street Side (ft)	4	4	No Min.	No Min.	No Min.	Same as adjacent R District, otherwise no min
Min. Building Separation (ft)	No Min.	No Min.	No Min.	No Min.	No Min.	No Min.
Min. Residential Parking Spaces	No Min.	No Min (1 space/unit if road narrower than 26 ft)	No Min.	No Min (1 space/unit if road narrower than 26 ft)	No Min.	No Min.
Max. Residential Parking Spaces	0.5 spaces/unit	0.5 spaces/unit (None if road narrower than 26 ft)	0.5 spaces/unit	0.5 spaces/unit (None if road narrower than 26 ft)	0.5 spaces/unit	0.5 spaces/unit

[1] Except in the R-3 and R-4(H) districts, building height is measured to the top of the roof. Parapets may exceed the height limit by up to 5 feet as of right.

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ACTION CALENDAR
July 12, 2016
(Continued from May 24, 2016)

To: Honorable Mayor and Members of the City Council
From: Councilmember Kriss Worthington

Subject: Allow Increased Development Potential in the Telegraph Commercial (C-T) District Between Dwight Avenue and Bancroft Avenue and Refer to the City Manager to Develop Community Benefit Requirements, with a Focus on Labor Practices and Affordable Housing

RECOMMENDATION

That the Council immediately amend the Berkeley Zoning Ordinance to allow increased development potential in the Telegraph Commercial (C-T) District between Dwight Avenue and Bancroft Avenue and refer to the City Manager to develop community benefit requirements, with a focus on labor practices and affordable housing.

BACKGROUND

The City Council sent a referral to the Planning Commission on June 30, 2015, regarding the conflict between the 5.0 FAR adopted by the Council for the C-T District and the other development regulations in the district.

On April 20, 2016, the Planning Commission considered modifying the development standards and community benefits. The Planning Commission voted to recommend the following to the Berkeley City Council:

a) That the staff proposed Zoning Ordinance development standards for buildings adjacent to Bancroft Way be applied to the entirety of the C-T District north of Dwight Way; and

b) That the Council develop community benefit requirements, with a focus on labor practices and affordable housing, before implementation of the proposed Zoning Ordinance language.

FINANCIAL IMPLICATIONS:

Minimal.

ENVIRONMENTAL SUSTAINABILITY:
Consistent with Berkeley's Environmental Sustainability Goals and no negative impact.

CONTACT PERSON:
Councilmember Kriss Worthington 510-981-7170

Attachment:
1. April 20, 2016 Planning Commission Staff Report on "Changes to the Zoning Ordinance to Allow Development Potential Increases in the Telegraph Avenue Commercial (C-T) District"

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CONSENT CALENDAR
April 4, 2017

To: Honorable Mayor and Members of the City Council

From: Councilmembers Worthington, Wengraf, and Harrison

Subject: Referral to the Planning Commission to Allow Non-commercial Use on Ground Floor

RECOMMENDATION:
Refer to the Planning Commission an amendment to the Zoning Ordinance to create a use permit process to allow non-commercial use on the ground floor in appropriate locations, where commercial might otherwise be required.

BACKGROUND:
On January 20, 2015 the City Council passed a similar item. This item seeks to indicate that this is a time sensitive issue that needs to be addressed this year.

The purpose and intent of the current ground-floor commercial requirement is to preserve, enhance, and ensure establishment of retail commercial use and to support active pedestrian-oriented uses for the street level of buildings that abut a public street. In certain locations, especially on less commercially important side streets, that are midblock and away from commercial nodes, this requirement may result in vacant space that detracts from the original intent of the requirement. An amendment to the Zoning Ordinance that allows for broader definitions and flexibility of use on the ground floor, as a condition of approval of a Use Permit, would result in better projects and less empty commercial space.

If the City Staff determine that a full adoption would take a substantial amount of time we suggest a pilot program for the C-T Telegraph commercial district not including telegraph itself.

FINANCIAL IMPLICATIONS:
Minimal.

ENVIRONMENTAL SUSTAINABILITY:
Consistent with Berkeley's Environmental Sustainability Goals and no negative impact.

CONTACT PERSON:
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Kriss Worthington

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ACTION CALENDAR
October 31, 2017

To: Honorable Mayor and Members of the City Council
From: Councilmembers Kriss Worthington and Kate Harrison

Subject: City Manager and Planning Commission Referral:Facilitate Primarily Student Housing by a Twenty Feet Height Increase and Adjust Floor Area Ratio in the R-SMU, R-S and R-3 Areas Only from Dwight to Bancroft and from College to Fulton

RECOMMENDATION

Refer to the City Manager and Planning Commission to facilitate primarily Student Housing by amending the Zoning Ordinance to add a twenty feet height increase and adjust Floor Area Ratio in the R-SMU, R-S and R-3 areas only from Dwight to Bancroft and from College to Fulton.

BACKGROUND:

In the last few years students have become increasingly active at proposing ways to increase student housing. Housing is urgently needed in close proximity to the UC Berkeley campus as rents increase and the University population steadily rises. Students, recent graduates, employees of the University, and local businesses contribute to the local economy, create jobs for the local community, and greatly enrich the community through their presence. Implementing this action would provide a place to live for many individuals who would otherwise have to reside far from campus. Oftentimes, the quest to find living spaces is emotionally taxing on students and can decrease academic performance or leave students without affordable and safe places to live.

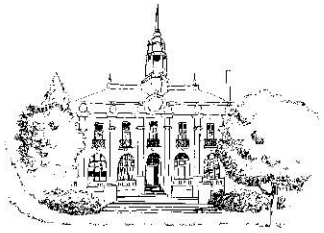
Increasing density in the area surrounding campus proves better for the environment, better for campus area businesses, and better for students. By reducing commute times, students will opt to walk or bike to class, reducing congestion on the road. A shorter commute will also increase student safety and allow students to participate in extracurricular activities that may run through the evening because students have to worry less about how they will get home. An enhanced sense of safety in the surrounding region is beneficial for all in the community. Finally, higher density benefits campus area businesses because it brings them more customers which supports the local economy.

Previous efforts to increase southside campus housing improved project viability just for the very small area of the C-T zoned blocks. Unfortunately even blocks on Bancroft directly across from the University still have excessive restrictions.

FINANCIAL IMPLICATIONS:
Minimal.

ENVIRONMENTAL SUSTAINABILITY
Consistent with Berkeley's Environmental Sustainability Goals and no negative impact.

CONTACT PERSON:
Councilmember Kriss Worthington 510-981-7170



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ACTION CALENDAR
May 1, 2018

To: Honorable Mayor and Members of the City Council
From: Councilmember Kriss Worthington

Subject: Referral to the Planning Commission to allow 4 temporary zoning amendments to increase student housing in the Southside Area.

RECOMMENDATION:
That the Council refers the Planning Commission to allow 4 zoning amendments to increase student housing in the Southside Area though a Temporary Emergency Pilot Project.

BACKGROUND:
In current Planning Commission work plan indicates student housing zoning changes may take several years. The Planning Commission should explore the creation of a Temporary Emergency Pilot Project that allows 4 zoning amendments to increase student housing in the Southside area between College to Fulton and Bancroft to Dwight.
A Temporary Emergency Pilot Project is the best solution especially with a surge in the undergraduate population. Because this Temporary Emergency Pilot Project will be in place of immediate policy change, this will deliver quick relief to those that need it most--the students.

The proposed Temporary Emergency Pilot Project will take place over a set time period of 3 years with a limited and clearly outlined number of projects. During this time period, notwithstanding what is outlined in the current Zoning Ordinance, projects will be permitted:

1) Allow 4 projects that convert commercial space to residential space;
2) Allow 4 new projects to allow ground floors on any street to be converted into residential use expect on Telegraph Avenue;
3) Allow up to 2 tall buildings up to 12 stories
4) Allow 6 projects to include a 20-foot height increase in order to increase the availability of student housing

The Temporary Emergency Pilot Project will help to ameliorate those suffering from the shortage in student housing. It will also make a greener Berkeley by cutting the commute times for students at UCB, BCC, or other schools in the vicinity.

FINANCIAL IMPLICATIONS:
Minimal as this is only a referral.

ENVIRONMENTAL SUSTAINABILITY:
Denser Housing close to campus will dramatically reduce greenhouses gases compare to students commuting by cars.

CONTACT PERSON:

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CONSENT CALENDAR
11/27/2018

To: Honorable Mayor and Members of the City Council
From: Councilmember Kriss Worthington
Subject: Short Term Referral to Expedite Components of the More Student Housing Now Resolution

RECOMMENDATION:
Short term referral to the City Manager and the Planning Department to promptly move forward with components of the More Student Housing Now Resolution and any efforts to increase student housing that do not require additional CEQA review, amend existing City ordinances and policies that prevent the implementation of SB 1227, and provide a budget referral that would allocate the necessary resources as determined by the Planning Staff.

BACKGROUND:
This referral is intended to expedite the implementation of particular components of the More Student Housing Now Resolution. The Planning Staff have identified the conversion of second floor commercial spaces to residential units, the expansion of car-free housing, and the creation of ground floor residential units as not requiring additional CEQA review. Therefore, the Planning Commission should be given the opportunity to vote on these policies at the earliest possible date. This Referral would also allow the City Council to approve a budget based on Planning Staff determination of needed resources for consultants and/or CEQA compliance.

Senator Nancy Skinner introduced and secured the passage of SB 1227, which "requires a density bonus to be provided to a developer that agrees to construct a housing development in which all units in the development will be used for students enrolled full-time at an institution of higher education." This bill was created with both the City of Berkeley and UC Berkeley in mind, but existing City law may restrict the implementation of SB 1227. Therefore, the Council should recommended that the City of Berkeley make any administrative or ordinance changes necessary in order to take advantage of SB 1227. Doing so would not require additional CEQA review and would help actualize elements of the More Student Housing Resolution.

FINANCIAL IMPLICATIONS:
Budget referral to be determined by Planning Staff recommendation.

ENVIRONMENTAL SUSTAINABILITY: No negative impact and consistent with city standards.

CONTACT PERSON: Councilmember

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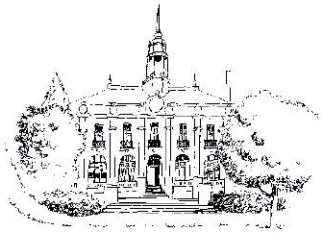
Holden Valentine 516-282-5400



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CONSENT CALENDAR
May 30, 2017

To: Honorable Mayor and Members of the City Council

From: Councilmembers Kriss Worthington and Ben Bartlett, and Mayor Arreguin

Subject: Planning Commission Referral for a Pilot Density Bonus Program for the Telegraph Avenue Commercial District to Generate Revenue to House the Homeless and Extremely Low-Income Individuals

RECOMMENDATION

That the Berkeley City Council refer a City Density Bonus policy for the Telegraph Avenue Commercial District to the Planning Commission to generate in-lieu fees that could be used to build housing for homeless and extremely low-income residents.

BACKGROUND

Under current state law, new development projects that get a density bonus, allowing up to 35 percent more density, are required to build inclusionary housing. Inclusionary housing is typically defined as below-market rate housing for people who earn 50 percent or 80 percent of the Area Median Income (AMI).

While it's great that developers are including some affordable housing in their market-rate projects, affordable housing for the homeless and extremely low-income who don't qualify for inclusionary units can be provided if developers instead paid fees into the Housing Trust Fund. This can be achieved through the use of a City Density Bonus for the Telegraph Avenue Commercial District, an area where many residents have expressed support for housing the homeless and the extremely low-income.

The City bonus fee would be equal to the in-lieu affordable housing mitigation fee, currently set at $34,000 per unit. Fees paid into the fund could be leveraged with other Federal, State and Regional affordable housing sources, resulting in significantly more affordable housing built through the Housing Trust Fund than currently available. The City has important policy proposals to assist the homeless and extremely low-income residents that urgently need funding.

The pilot program of a City Density Bonus in the Telegraph Avenue Commercial District could go a long way toward easing Berkeley's critical housing shortage by increasing incentives for developers to add more housing and give the city greater ability to deliver affordable housing.

FISCAL IMPACTS
This proposal will generate millions in new revenue to the Housing Trust Fund.

ENVIRONMENTAL IMPACTS
The proposed change is consistent with City Climate Action Plan goals supporting increased residential density. Additionally, new residential construction is subject to more stringent green building and energy efficiency standards and will help reduce per capita greenhouse gas emissions.

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CITY COUNCILMEMBER
RIGEL ROBINSON
DISTRICT 7

CONSENT CALENDAR
February 14, 2023

To: Honorable Mayor and Members of the City Council

From: Councilmember Rigel Robinson (author), Vice Mayor Ben Bartlett (co-sponsor), Councilmember Kate Harrison (co-sponsor), Councilmember Mark Humbert (co-sponsor)

Subject: Referral: Southside Impact Fee Nexus Study

RECOMMENDATION

1. Refer to the City Manager to establish a development impact fee for projects within the Southside Plan boundary for the purpose of funding Southside public realm improvements. Staff should complete all necessary actions, including preparation of a Nexus Study pursuant to the Mitigation Fee Act.
2. Refer $250,000 to the FY 2023 budget process for a consultant to be engaged over a two-year process, starting in 2024, to assist with the vision, capital list, nexus study, fee schedule, and other requirements.

BACKGROUND

Under the Mitigation Fee Act, local governments are authorized to impose fees on development projects to fund new public facilities. Prior to approval of an impact fee, a Nexus Study is required to establish the purpose of the impact fee, the uses the fee will fund, the reasonable relationship of the fee, and the types of development that will be subject to the fee.

The Downtown Streets and Open Space Improvement Plan (SOSIP), adopted in 2013, is funded by development impact fees and in-lieu fees alongside grants and other sources.[1] The SOSIP implements the Downtown Area Plan and provides guidance for actions to make Downtown Berkeley more bicycle- and pedestrian-friendly, support community vitality, and promote economic development. Examples of major projects identified in the SOSIP include the Downtown Berkeley BART plaza, Shattuck reconfiguration, and Milvia bike lanes.

Much like Downtown, Southside is an economically vibrant, dense, mixed-use neighborhood with high levels of pedestrian activity. Southside also serves as the gateway between the UC Berkeley campus and the City of Berkeley. Establishing a

[1] https://berkeleyca.gov/your-government/our-work/adopted-plans/streets-and-open-space-improvement-plan-sosip

Southside SOSIP to fund public realm projects would enable the City to close funding gaps and meet the neighborhood's infrastructure needs.

While the list of projects that can be funded by the impact fee are subject to the findings of the Nexus Study, potential projects include those outlined in the Telegraph Public Realm Plan (TPRP). The TPRP is a vision plan established in 2016 that seeks to "enhance Telegraph Avenue as a pedestrian-friendly place and distinctive destination" through scramble intersections, sidewalk improvements, public art, and more. The Southside SOSIP impact fee could also generate funding for Car-Free Telegraph, which was established as a Council priority through a February 2022 referral. Funding allocations for Southside SOSIP projects shall be determined in consultation with the appropriate City Councilmembers and shall be approved by the City Council.

ALTERNATIVES CONSIDERED

The Council could also consider an open space in-lieu fee. City staff is considering amendments to the 2011 Southside Plan to encourage the production of housing at all income levels.[2] The draft objective standards presented in September 2022 propose a reduction in the minimum open space requirement — referring to areas such as balconies, courtyards, and rooftops — in order to increase floor area dedicated to residential development.[3] Establishing an open space in-lieu fee would allow developers to pay the fee and opt out of building on-site open space, allowing more flexibility in project design.

FINANCIAL IMPLICATIONS

Staff time and $250,000 from the General Fund.

ENVIRONMENTAL SUSTAINABILITY

None.

CONTACT PERSON

Councilmember Rigel Robinson, (510) 981-7170
Angie Chen, Legislative Assistant
Chloe Park, Intern

Attachments:
1: Berkeley Municipal Code 23.204.130: Open Space Requirements for C-DMU
2: Staff Report and Resolution Adopting C-DMU Open Space In-Lieu Fee
3: Downtown Area Plan SOSIP Fee Nexus Study

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[2] https://berkeleyca.gov/your-government/our-work/adopted-plans/southside-plan
[3] https://berkeleyca.gov/sites/default/files/documents/2022-09-20%20WS%20Item%2001%20Residential%20Objective%20Standards.pdf

CITY OF BERKELEY
FIRE DEPARTMENT

October 30, 2023

To: Honorable Mayor and Members of the City Council
From: Dee Williams-Ridley, City Manager
Submitted by: David Sprague, Fire Chief

Re: Possible Impacts to Fire & Emergency Services from Southside Zoning Changes

Introduction

In 2023 the City completed a Standards of Coverage and Community Risk Assessment (SOC) to define appropriate levels of service based on a comprehensive analysis which included the impacts of increasing density and vertical growth. The SOC determined that fire and emergency resources need to be enhanced to meet current and future demand.

The ongoing intensification of land uses, building heights, and population will increase demand for fire and emergency services. The cumulative effect of zoning amendments and development projects necessitates an evolution of the City's fire and emergency response programs to those suitable for a major urban fire department in staffing, unit types, and facility locations. Determining when, where and what type of resources to add requires monitoring of response times and Unit Hour Utilization (UHU) - the percentage of time that a response resource is committed to active incidents during a given hour of the day.

Current Situation

Fire service deployment, simply summarized, is about the speed and weight of response. Speed refers to initial (first-due) response of all-risk intervention resources (e.g., engines, ladder trucks, and ambulances) strategically deployed across a jurisdiction for response to emergencies within a travel time interval sufficient to control routine-to-moderate emergencies without the incident escalating to greater size or

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severity. Weight refers to multiple-unit (Effective Response Force, or ERF) responses for more serious emergencies such as building fires, multiple-patient medical emergencies, vehicle collisions with extrication required, hazardous materials releases, or technical rescue incidents. In these situations, enough firefighters must be assembled within a time interval to safely control the emergency and prevent it from escalating into an even more serious event.

The following table summarizes the Department's operational response performance for calendar year 2020. These best practices were used as the City has not yet adopted performance measures.

Response Component	Best Practice		90th Percentile Performance	Performance Versus Best Practice and Current Goal
	Time	Reference		
Call Processing / Dispatch	1:30	NFPA	**2:29**	**+ 0:59**
Crew Turnout	2:00	Citygate	**2:05**	**+ 0:05**
First-Unit Travel	5:00	CityGate	**5:53**	**+ 0:53**
First-Unit Call to Arrival	8:30	Citygate	**9:32**	**+ 1:02**
ERF Call to Arrival	11:30	Citygate	**18:50**	**+ 7:20**

As density and population increase, so will the volume of 911 calls. Each call has an impact on the system, including the availability of resources. Determining when to add additional resources requires monitoring of response times and UHU. The UHU percentage is calculated using the number of responses and duration of the responses to show the percentage of time that a response resource is committed to an active incident during a given hour of the day. **A unit-hour utilization of 30 percent or higher over *multiple* consecutive hours becomes the point at which other responsibilities, such as training and meals, do not get completed**. The following table shows a UHU summary for the City's fire engine companies. The columns with blue header rows are the engines that are first due to the Southside area. The busiest engines are listed first. Engine 5 has two hours over 50 percent utilization and 11 consecutive hours over 30 percent utilization. The black outline represents all hours and fire engines that are over 30% UHU.

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CITY OF BERKELEY
FIRE DEPARTMENT

Hour	Engine 5	Engine 1	Engine 2	Engine 6	Engine 4	Engine 3	Engine 7
00:00	23.23%	15.11%	17.16%	9.62%	10.14%	11.33%	0.58%
01:00	25.88%	10.21%	15.51%	11.19%	6.41%	9.09%	3.37%
02:00	18.81%	12.81%	10.79%	11.12%	9.66%	7.74%	3.56%
03:00	13.47%	6.63%	12.40%	6.71%	7.76%	4.40%	2.06%
04:00	11.55%	13.59%	10.26%	10.62%	7.61%	7.62%	1.69%
05:00	15.01%	6.44%	7.62%	3.69%	9.87%	4.93%	2.59%
06:00	11.08%	19.01%	10.05%	9.78%	13.02%	5.63%	3.00%
07:00	25.01%	21.97%	20.84%	18.37%	13.97%	8.97%	6.10%
08:00	30.47%	31.19%	22.80%	20.58%	20.92%	13.10%	5.44%
09:00	38.00%	31.75%	22.75%	28.75%	21.67%	14.57%	5.65%
10:00	41.58%	42.32%	28.32%	23.47%	25.77%	19.88%	11.49%
11:00	52.86%	31.20%	35.07%	41.62%	28.02%	23.70%	7.28%
12:00	49.05%	28.41%	31.70%	34.37%	20.78%	18.56%	9.29%
13:00	53.48%	43.37%	30.66%	31.32%	31.70%	29.91%	7.95%
14:00	45.24%	43.90%	39.12%	34.42%	36.53%	25.40%	15.68%
15:00	38.09%	38.93%	32.49%	31.93%	20.30%	18.31%	7.38%
16:00	47.27%	34.35%	34.50%	28.96%	22.18%	20.99%	12.14%
17:00	44.46%	33.94%	34.26%	22.25%	22.90%	20.69%	8.62%
18:00	32.84%	31.45%	30.75%	22.85%	23.40%	20.74%	11.46%
19:00	29.80%	30.92%	25.06%	29.59%	21.39%	18.51%	10.09%
20:00	25.59%	32.76%	23.66%	24.96%	20.72%	15.76%	9.20%
21:00	29.23%	20.37%	20.49%	18.23%	12.64%	12.76%	6.77%
22:00	26.99%	21.79%	16.67%	12.63%	9.51%	12.90%	4.69%
23:00	19.81%	24.27%	15.45%	21.47%	16.11%	8.64%	3.85%

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The next table illustrates UHU for the City's emergency medical service transport ambulances. The City's ambulances have a high enough UHU that all four ambulances routinely respond to emergencies in the Southside area. **Medic 5 (M5), M2, and M1 each have several hours of 50 percent utilization and Medic 5 and Medic 2 each have one hour over 60 percent utilization and at least 13 consecutive hours at or above 30 percent utilization.** When ambulances are consistently this busy, assigned personnel often miss training, meals, and breaks, and are at higher risk to develop physical and mental health impacts.

Hour	M5	M2	M1	M3
00:00	22.87%	17.48%	12.56%	9.32%
01:00	22.85%	15.75%	19.46%	9.27%
02:00	17.34%	16.40%	17.53%	7.35%
03:00	13.61%	16.98%	10.92%	4.04%
04:00	8.71%	14.86%	18.86%	6.86%
05:00	13.06%	14.24%	8.26%	3.46%
06:00	8.95%	13.17%	16.14%	2.94%
07:00	25.50%	34.83%	33.70%	12.56%
08:00	48.33%	29.77%	33.16%	15.43%
09:00	44.71%	39.61%	38.97%	27.70%
10:00	48.82%	45.75%	42.94%	33.54%
11:00	51.40%	60.08%	41.92%	34.01%
12:00	49.60%	55.48%	42.34%	27.61%
13:00	51.46%	44.70%	54.43%	42.82%
14:00	65.37%	47.39%	56.38%	36.85%
15:00	45.36%	37.26%	52.01%	28.99%
16:00	52.28%	54.10%	44.79%	36.74%
17:00	41.93%	46.57%	42.89%	27.86%
18:00	48.24%	46.87%	35.45%	25.95%
19:00	31.61%	34.82%	42.09%	19.44%
20:00	30.19%	34.40%	38.01%	15.91%
21:00	22.49%	30.65%	26.78%	17.02%
22:00	26.16%	22.41%	23.65%	11.37%
23:00	21.09%	26.63%	25.70%	6.88%

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Background

According to US Census data, of the top 51 largest cities in California, Berkeley is already the second most densely populated city per square mile—second only to San Francisco—without factoring in the daily influx of Citywide employment, tourism, and cars on the freeways.

The City is evolving to improve its housing shortages by approving mid- and high-rise residential buildings. UC Berkeley is completing its new master plan to add students, faculty, on-campus buildings and housing off-campus. The ongoing intensification of land uses, building heights, and population density will make several sections of the City very urban—typical of the largest metropolitan cities for building fire and rescue/EMS challenges. The cumulative effect of these projects around the City necessitates a shift in staffing and response models as well as an increase in the flexibility of emergency medical resources. The City's fire and ambulance programs must evolve to those suitable for a major urban fire department in staffing, unit types, and facility locations.

Conclusion

The Department's objective is to elevate that there is likely to be an impact from this work that may result in changes to the risk profile the Department is obligated to prepare for, additional 911 calls, and additional density on the roadways. All of these would likely lead to an increased response time and unit-hour-utilization of Fire Department resources. The Department will monitor performance and make regular reports to the City Council along with budget requests aimed at maintaining or improving service levels.

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Attachment 11

NOTICE OF PUBLIC HEARING
BERKELEY CITY COUNCIL
Adoption of Zoning Ordinance Amendments to Title 23 of the Berkeley Municipal Code, Zoning Map Amendments, General Plan Amendments and General Plan Map Amendments for the Southside Zoning Modification Project

The public may participate in this hearing by remote video or in-person.

The Department of Planning and Development is proposing amendments to the City's Zoning Ordinance (Title 23) in response to City Council referrals, recent changes in housing-related State laws, and the requirements of the City's 2023-2031 Housing Element, to increase residential development potential—particularly for student-oriented housing—within the Southside Plan Area, by December 2024. The proposed amendments also include non-substantive technical corrections to ensure consistency throughout the Zoning Ordinance.

Proposed amendments affect the following Sections of Title 23: 23.202.020 (Allowed Land Uses), 23.202.030 (Additional Permit Requirements), 23.202.100 (R-3 Multiple Family Residential District), 202.130 (R-S Residential Southside District), 23.202.140 (R-SMU Residential Southside Mixed Use District), 23.204.020 (Allowed Land Uses), 23.204.110 (C-T Telegraph Avenue Commercial District), 23.302.070 (Use-Specific Regulations), 23.304.030 (Setbacks), 23.304.040 (Building Separation in Residential Districts), 23.304.050 (Building Height), 23.304.090 (Usable Open Space), and 23.502.020 (Defined Terms). New BMC Sections 23.106.035 (Gross Residential Floor Area), and 23.106.100 (Residential Density) are proposed.

The hearing will be held on, November 14, 2023 at 6:00pm in the School District Board Room, located at 1231 Addison Street, Berkeley CA 94702.

A copy of the agenda material for this hearing will be available on the City's website at https://berkeleyca.gov/ as of November 2, 2023. **Once posted, the agenda for this meeting will include a link for public participation using Zoom video technology, as well as any health and safety requirements for in-person attendance.**

For further information, please contact Justin Horner, Associate Planner, at 510-981-7476. Written comments should be mailed or delivered directly to the City Clerk, 2180 Milvia Street, Berkeley, CA 94704, or e-mailed to council@berkeleyca.gov in order to ensure delivery to all Councilmembers and inclusion in the agenda packet.

Communications to the Berkeley City Council are public record and will become part of the City's electronic records, which are accessible through the City's website. **Please note: e-mail addresses, names, addresses, and other contact information are not required, but if included in any communication to the City Council, will become**

part of the public record. If you do not want your e-mail address or any other contact information to be made public, you may deliver communications via U.S. Postal Service or in person to the City Clerk. If you do not want your contact information included in the public record, please do not include that information in your communication. Please contact the City Clerk at (510) 981-6900 or clerk@berkeleyca.gov for further information.

Published: November 3, 2023 – the Berkeley Voice
Public Hearing required per Berkeley Municipal code 23.412.040(A) and 22.04.020(A)

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I hereby certify that the Notice for this Public Hearing of the Berkeley City Council was posted at the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way, as well as on the City's website, on November 2, 2023.

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Mark Numainville, City Clerk
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