September 13, 2024

#### Dear Supervisors:

The Dogpatch Neighborhood Association and the Potrero Boosters Neighborhood Association (together, the "Appellants") have appealed the decision<sup>1</sup> by the San Francisco Planning Commission (the "Commission") that the laboratory development located at 700 Indiana (the "Project") is exempt from additional environmental review pursuant to a consistency with an area plan as described in the General Plan Evaluation (the "GPE") prepared by the San Francisco Planning Department (the "Department") related to the Project.<sup>2</sup> This letter outlines the basis of this appeal.

The Appellants argue that:

- 1. The description of the Project in the GPE was incomplete and failed to describe the use of the Project.
- The GPE failed to adequately analyze and mitigate Project impacts, including those peculiar to the Project that were not analyzed and mitigated in the Eastern Neighborhoods Area Plan Environmental Impact Report (the "PEIR") or were unknown at the time the PEIR was certified. Such impacts relate to air quality, the shadowing of open space and hazardous materials.

#### **Project Background**

The Project proposes a 70,650 gross-square foot biotechnology laboratory rising 48 feet tall (exclusive of roof-top mechanical components) at 700 Indiana Street, a lot zoned for Urban Mixed Use ("UMU"). The Project would include 51 off-street parking spaces and 2 car-share spaces below grade, one off-street loading space and 15 off-street bicycle parking spaces. The Project would be operated by MBC BioLabs, an affiliate of life science investor Mission Bay Capital, that leases biotechnology laboratory space and equipment to entrepreneurs conducting research to design and develop life science products and services.



<sup>1</sup> Made pursuant to Planning Commission Motion No. 21576, adopted June 13, 2024, attached as Exhibit A.

<sup>&</sup>lt;sup>2</sup> General Plan Evaluation for Projects Consistent with Eastern Neighborhoods Area Plan, Case No.: 2023-001074ENV, 700 Indiana Street, dated April 5, 2024, attached as Exhibit B.

700 Indiana stretches between 19th and 20th Streets in the Dogpatch neighborhood, and backs against the frontage of Interstate 280. It is directly across the street from Esprit Park, Dogpatch's sole Recreation and Park Department resource. The Avalon Dogpatch Dog Park is adjacent to the Project to the south, and the Dogpatch Arts Plaza is adjacent to the project to the north—both are amenities provided on public rights of way under encroachment permits taken by the developers of the respective residential projects to the immediate north and south of the Project. The Project would replace a 15,000 square foot warehouse and a similarly sized paved yard.

## The GPE's Project Description was Incomplete

The inaccuracy of the Project Description in the GPE prevented the public from meaningfully commenting on the Project's environmental review. The California Environmental Quality Act requires an "accurate, stable and finite project description."<sup>3</sup> The GPE described the proposed project as a Laboratory and Office use, without specific mention of biotechnology and an explicit attempt to disclaim any life science uses<sup>4</sup>. While MBC BioLabs' business model, as described above, is well documented on their website and elsewhere,GPE's description of the project omits the words "life science" and "biotechnology." This omission limits adequate analysis of environmental impacts specific to a biotech incubator at this site, resulting in the Department failing to identify impacts and proper mitigations, adversely affecting the public's ability to comment on the project, leading ultimately to a violation of CEQA.<sup>5</sup>

The Planning Code's definition of "Laboratory" includes a broad range of activities:

*Laboratory.* A Non-Retail Sales and Services Use intended or primarily suitable for scientific research. The space requirements of uses within this category include specialized facilities and/or built accommodations that distinguish the space from Office uses, Light Manufacturing, or Heavy Manufacturing. Examples of laboratories include the following:

- (a) Chemistry, biochemistry, or analytical laboratory;
- (b) Engineering laboratory;
- (c) Development laboratory;

(d) Biological laboratories including those classified by the Centers for Disease Control(CDC) and National Institutes of Health (NIH) as Biosafety level 1, Biosafety level 2, or Biosafety level 3;

 <sup>&</sup>lt;sup>3</sup> See, e.g., *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193, 199; *South of Market Community Action Network v. City and County of San Francisco* (2019) 33 Cal.App.5th 321, 332.
<sup>4</sup> Whether the Project is a "life science" laboratory under the San Francisco Planning Code or "non-life science"laboratory engaged in biotechnology is subject to an appeal pending before the San Francisco Board of Appeals. This CEQA appeal ultimately does not depend on the adjudication of that matter, although we maintain the Project is a life science use.

<sup>&</sup>lt;sup>5</sup> See Save Our Capitol! v. Department of General Services (Joint Committee On Rules of the California State Senate and Assembly, Real Party in Interest)/Save the Capitol, Save the Trees v. Department of General Services, et al. (2022) 85 Cal.App.5th 1101.

(e) Animal facility or vivarium, including laboratories classified by the CDC/NIH as Animal Biosafety level 1, Animal Biosafety level 2, or Animal Biosafety level3;

- (f) Support laboratory;
- (g) Quality assurance/Quality control laboratory;
- (h) Core laboratory; and
- (i) Cannabis testing (License Type 8—Testing laboratory, as defined in California Business and Professions Code, Division 10).<sup>6</sup>

Only when questioned directly by the Planning Commission during the Project entitlement hearing on June 13, 2024, did the Project sponsor acknowledge that the project was intended to be a Biosafety 2 level facility. To the best of our knowledge, and after a review of the record, this information was never made public or considered by the Planning Department in its environmental review.

The intention to install a Biosafety 2 laboratory is non-binding—the Planning Code permits Life Science facilities operating under Biosafety level 3 as well. A change in Biosafety levels implicates different considerations for hazardous materials and air quality. For reference, the NIH describes these levels as follows:

Biosafety level 2 (BSL-2) labs are used to study moderate-risk agents that pose a danger if accidentally inhaled, swallowed, or exposed to the skin. Safety measures include the use of gloves and eyewear as well as handwashing sinks and waste decontamination facilities.

Biosafety level 3 (BSL-3) labs are used to study agents that can be transmitted through the air and cause potentially lethal infection. Researchers perform lab manipulations in a gas-tight enclosure. Other safety features include clothing decontamination, sealed windows, and specialized ventilation systems.<sup>7</sup>

Without certainty as to the precise type of laboratory use, whether in the entitlement document or via written agreements, hazardous materials and air quality impacts cannot be adequately analyzed under the PEIR by either the Department or by the public. Furthermore, the GPE failed to address the biotechnical use of the Project, putting the public at a disadvantage by the omission of information in the GPE. Therefore, the Commission's determination that the Project is consistent with the PEIR, as asserted in the GPE, should be rescinded.

#### Impacts Remain Unanalyzed and Unmitigated

For the Project to be exempt from further environmental review based on its consistency with the PEIR, the Department must implement reasonable mitigations identified in the PEIR that counter impacts of the Project.<sup>8</sup> The GPE must also analyze the Project to identify and analyze

<sup>&</sup>lt;sup>6</sup> San Francisco Planning Code, Sec. 102.

<sup>&</sup>lt;sup>7</sup> See <u>https://www.niaid.nih.gov/research/biodefense-biosafety-labs</u> (last accessed Sept. 13, 2024).

<sup>&</sup>lt;sup>8</sup> California Public Resources Code Sec. 21083.3(c).

impacts peculiar to the Project.<sup>9</sup> The GPE and the action taken by the Commission to approve the GPE fail to do both with respect to air quality, the shadowing of open space and hazardous materials. As a result, the Project should be subject to additional environmental review.

### Air Quality

The Planning Department failed to properly implement PEIR Mitigation G-4 to address the air quality impacts of the project. Chapter V of the PEIR prescribes four mitigation measures to address air quality. Mitigation Measure G-4 addresses uses that would be expected to generate toxic air contaminants as part of its everyday operations. Mitigation G-4 reads as follows (*emphasis added*):

## Mitigation Measure G-4: Siting of Uses that Emit Other TACs

For new development including commercial, industrial or other uses that would be expected to generate toxic air contaminants (TACs) as part of everyday operations, the Planning Department shall require the preparation of an analysis that includes, at a minimum, a site survey to identify residential or other sensitive uses within 1,000 feet of the project site, *prior to the first project approval action*. This measure shall be applicable, at a minimum, to the following uses: dry cleaners; drive-through restaurants; gas dispensing facilities; auto body shops; metal plating shops; photographic processing shops; textiles; apparel and furniture upholstery; leather and leather products; appliance repair shops; mechanical assembly cleaning; printing shops; hospitals and medical clinics; *biotechnology research facilities*; warehousing and distribution centers; and any use served by at least 100 trucks per day.<sup>10</sup>

As established above, the Project entitles a laboratory use, that is, a facility intended or suitable for scientific research. The business model and statements of the Project sponsor further indicate that the Project would be a biotechnology laboratory or research facility. As a result, the Department should have required an analysis, including a site survey identifying all sensitive receptors within 1,000 feet of the project site, prior to the entitlement of the project. No such analysis and site survey is on the record. They have not been performed.

Instead, the Department recommended, and the Commission approved the following mitigation:

Prior to the beginning of operations, the project sponsor shall ensure that all laboratory uses prepare an analysis that includes, at a minimum, a site survey identifying all residential or other sensitive receptors within 1,000 feet of the project site, as well as all potential toxic air contaminants (TACs) emissions from equipment associated with the laboratory operations. The sponsor must demonstrate efforts taken to reduce TAC emissions including incorporating best available control technology and

<sup>&</sup>lt;sup>9</sup> California Code of Regulations, Title 14 Sec. 15183.

<sup>&</sup>lt;sup>10</sup> Eastern Neighborhoods Rezoning and Area Plans Final EIR, certified August 7, 2008, at p. 512, (available at <u>https://archives.sfplanning.org/documents/4007-EN\_Final-EIR\_Part-9\_Mits-Alts.pdf</u>, last accessed Sept. 13, 2024).

that all relevant regulations, such as from the Bay Area Air Quality Management District (Air District) are met.<sup>11</sup>

The Department is welcome to require additional mitigations to ensure ongoing compliance, as the tenancy of the Project will be transitory. However, by failing to comply with the mitigation prescribed by the PEIR, and to prepare an analysis and site survey *prior to the entitlement of the Project*, the Department has limited the necessary data for both public and Commission discussion of the environmental impacts of the project. And it has failed to implement a reasonable mitigation as required by statute. As a result, the Commission cannot find necessary consistency with the PEIR, and its environmental approval of the Project should be rescinded.<sup>12</sup>

#### Shadowing of Public Open Space

The environmental impacts of the Project related to Shadow on the Dogpatch Arts Plaza were not adequately considered in the GPE and its underlying shadow study.<sup>13</sup> The Dogpatch Arts Plaza, a public right-of-way under the jurisdiction of the Department of Public Works, is a publicly-accessible open space.<sup>14</sup> It was not considered in the required CEQA review.

In the City and County of San Francisco, there are two circumstances which could trigger the need for a shadow analysis:

1. If the proposed project would be over 40 feet tall, and could potentially cast new shadow on a property under the jurisdiction of the Recreation and Park Department, per San Francisco Planning Code Section 295; and/or

2. If the proposed project is subject to review under the California Environmental Quality Act ("CEQA") and would potentially cast new shadow on a park or open space such that the use or enjoyment of that park or open space could be adversely affected.

As the Project is over 40 feet tall, a shadow analysis is required. A thorough report was prepared for Esprit Park per San Francisco Planning Code Section 295 and CEQA standards, as well as the Avalon Dogpatch Dog Park, a privately-owned public open space (POPOS) directly south of the Project.

<sup>&</sup>lt;sup>11</sup> Attachment B, Mitigation Monitoring and Reporting Program, as attached to Planning Commission Motion No, 21576, at p. 12.

<sup>&</sup>lt;sup>12</sup> Note that the GPE did include a pre-entitlement analysis and site-survey of noise-sensitive uses within 900 feet of the Project as required by PEIR Mitigation F-5, despite uncertainty on the noise generating equipment that will be used at the Project, indicating an ability to provide such an analysis assumed conditions. We further note that despite the effort, the study failed to identify a significant noise-sensitive use—that at Esprit Park, directly across the street from the Project. See the Environmental Noise Assessment dated March 21, 2024, p. 4 et. seq., attached as Exhibit C hereto.

<sup>&</sup>lt;sup>13</sup> Shadow Analysis Report for the Proposed 700 Indiana Street Project per San Francisco Planning Section 295 & CEQA Standards, dated January 22, 2024, attached as Exhibit D.

<sup>&</sup>lt;sup>14</sup> See, e.g., The Central Waterfront Public Realm Plan, p. 77, wherein the Planning Department acknowledges the Arts Plaza as a public open space (available at

https://default.sfplanning.org/Citywide/Dogpatch\_CtrlWaterfront/CWD\_Public\_Realm\_Plan\_ADOPTED\_O\_ct2018.pdf, last accessed Sept. 13, 2024).

However, the January 22, 2024, final shadow report contains no analysis whatsoever of the Arts Plaza. It goes so far as to state that outside of Esprit Park and the Dog Park that, "net new shadow from the proposed project does not have the potential to affect any other publicly accessible parks or plazas", and ignores the existence of the Arts Plaza entirely.

There is no doubt that the Project will shadow the Arts Plaza.<sup>15</sup> This can be seen in the November 2, 2021, Preliminary Shadow Fan prepared for the Project. It indicates there will in fact be more than occasional net new shadow in the area directly north of the Project, but there is no label indicating that this is the Arts Plaza, a public open space.

Planning Department's July 2014 memo, *Shadow Analysis Procedures and Scope Requirements* states the following:

Potentially affected properties including: parks, publicly- accessible open spaces, and community gardens identified in the graphical depictions should be listed and described. The description of these properties should include the physical features and uses of the affected property, including but not limited to: topography, vegetation, structures, activities, and programming. Each identified use should be characterized as 'active' or 'passive.' Aerial photographs should be included, along with other supporting photos or graphics. The programming for each property should be verified with the overseeing entity, such as the Port of San Francisco, the Recreation and Parks Department, etc. Any planned improvements should also be noted.<sup>16</sup>

The GPE description for the Project notes the existence of the Arts Plaza but omits impact analysis entirely:

The project site also abuts Dogpatch Arts Plaza to the north and Avalon Dogpatch Dog Park to the south. The Dogpatch Arts Plaza currently contains stadium-type seating, art installation space and tables and chairs. Additionally, the project intends to include improvements to the Dogpatch Arts Plaza space such as a shade canopy over the stadium seating, adding planter boxes and landscaping, elevate the plaza to align it with the proposed building face, adding an art installation space and a rock garden with furniture.

During the Planning Commission hearing on June 13, 2024, a memo from Prevision Design, dated June 13, 2024, was distributed to the Planning Commission, discussing shadowing of the Arts Plaza.<sup>17</sup> It referenced exhibits from the Final Shadow Analysis, but lacked the quantitative analysis that would normally be part of the review. More importantly, this memo was not included in the GPE and was thus not made available for review by the public or for the Planning Department, who had no opportunity to opine on its findings in the GPE.

<sup>&</sup>lt;sup>15</sup> Shadow Analysis Report at p. 24.

<sup>&</sup>lt;sup>16</sup> Id. at p. 4 (available at <u>https://sfplanning.s3.amazonaws.com/sfmea/Shadow%20Memo.pdf</u>, last accessed Sept. 13, 2024).

<sup>&</sup>lt;sup>17</sup> 700 Indiana Street: Dogpatch Arts Plaza Qualitative Shadow Analysis, dated June 13, 2024, attached as Exhibit E.

The findings made by the Commission state that the Project does not "Create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces." Because the GPE relied on a shadow analysis omitting adequate discussion of impacts to the Dogpatch Arts Plaza, and what information that was ultimately presented lacked quantitative analysis and the opportunity for review, the Board should rescind the environmental determination of the Commission.

### Hazardous Materials

The PEIR failed to analyze Hazards or Hazardous Materials related to biotechnology in any detail, and such analysis was completely omitted from the GPE. Under CEQA, city agencies must give full consideration to the potential for environmental risks and dangers to health and safety. The Project is peculiar in that it proposes a biotech laboratory in a mixed use zone where the adjacent uses are either principally residential or a public park, a condition not anticipated or analyzed by the PEIR. The potential for dangers to nearby communities due to human error, accidents or natural disasters must be thoroughly analyzed.

The PEIR studied the following sources of hazardous materials, focusing on historical uses on formerly industrial land, and construction-related impacts:

- fill materials, including those placed east of the historic high tide line; historic and existing uses of hazardous materials, including underground storage tanks (USTs), and permitted handling of hazardous wastes;
- identified sites where soil or groundwater has been affected by a chemical release(s) from past or present land uses (referred to as "environmental cases"); and
- hazardous building materials that were historically used in construction.<sup>18</sup>

The PEIR gave additional consideration to future industrial uses including: *Core PDR uses such as small trucking operations, apparel manufacturing, food and flower distribution centers, construction material suppliers, paper manufacturing, large publishing operations, and large showrooms; and Light and Medium PDR uses such as auto repair, catering services, graphic design, small radio stations, small messenger operations, printers and publishers, showrooms, landscaping and horticultural services, and film producing.* The sole mention of Biotechnology is with regards to its need to comply with existing regulations regarding the handling of waste and any future regulations imposed by the industry.<sup>19</sup>

Biotech laboratories deal with a variety of materials not of the type considered in the PEIR, including infectious agents of varying degrees of lethality, radioactive materials and various organic compounds. Many of those materials pose a risk to workers and to the community. A laboratory facility such as the one proposed for 700 Indiana, in close proximity to residential buildings, a public park and several schools and child care facilities, has the potential to pose tremendous risk to public health and safety.

<sup>&</sup>lt;sup>18</sup> See, Eastern Neighborhoods Rezoning and Area Plans Final EIR, certified August 7, 2008, at p. 475 et. seq., (available at <u>https://archives.sfplanning.org/documents/4007-EN\_Final-EIR\_Part-9\_Mits-Alts.pdf</u>, last accessed Sept. 13, 2024)

<sup>&</sup>lt;sup>19</sup> Id. at p. 487.

CEQA regulations require projects that construct a facility that would be reasonably anticipated to emit hazardous air emissions or handle hazardous substances in certain concentrations within one-quarter mile of a school to notify and consult with the school district on potential impacts prior to receiving environmental clearance.<sup>20</sup> Neither the PEIR nor the GPE indicate whether this was done. But we do know from the PEIR mitigations related to air quality, as discussed above, that the PEIR considers biotech laboratories to be de facto emitters of toxic air contaminants. Such an analysis would be prudent—it appears that while aspiring to be a leader in biotechnology and authorizing biotech facilities directly adjacent to existing residential uses, the City has not kept up with best practices from other jurisdictions for environmental review and community protection.<sup>21</sup>

In sum, the PEIR and the GPE fail to adequately analyze and mitigate the potential impacts related to hazardous materials inherent to the Project, a biotech laboratory proposed for a mixed use district surrounded by residential development and public space.

[Conclusion Follows]

<sup>&</sup>lt;sup>20</sup> California Code of Regulations, Title 14 Sec. 15186.

<sup>&</sup>lt;sup>21</sup> See, e.g., Planning Review and Entitlements of Biotech Developments, a letter published by the Loma Prieta Sierra Club dated November 11, 2024, attached as Exhibit F hereto. Ironically, the introduction to the PEIR refers to work being done by the San Francisco Bioscience Task Force to address such concerns; the recommendations from the task force were never completely implemented. PEIR at p. I-9 (available at <a href="https://archives.sfplanning.org/documents/3991-EN\_Final-EIR\_Part-1\_Intro-Sum.pdf">https://archives.sfplanning.org/documents/3991-EN\_Final-EIR\_Part-1\_Intro-Sum.pdf</a>, last accessed Sept. 13, 2034).

#### Conclusion

The Eastern Neighborhoods Plan intended to preserve a light industrial base while preserving historic residential neighborhoods. UMU zoning was created to provide a buffer between residential uses and large-scale industrial and commercial uses. In the Central Waterfront Plan Area, which covers Dogpatch, that UMU became heavily residential in character. The parcel at 700 Indiana, with residential uses at two ends and Esprit Park across the street, is one of the few remaining un- or under-developed parcels in Dogpatch's UMU zone; given its location it is primed to contribute to San Francisco's much needed housing stock. Instead, however, we see the Project, authorizing a sterile, inactive biotechnology laboratory that minimally contributes to the surrounding community and that, as we will argue before the Board of Appeals, fails to adhere to the Planning Code.

That is the context. What is relevant, however, is that deficiencies exist in the GPE for the project and thus its entitlement under CEQA. The description of the Project in the GPE was incomplete and failed to describe the use of the Project. The GPE failed to adequately analyze and mitigate Project impacts, including those peculiar to the Project that were not analyzed and mitigated in the Eastern Neighborhoods Area Plan Environmental Impact Report (the "PEIR") or were unknown at the time the PEIR was certified—impacts relating to air quality, the shadowing of open space and hazardous materials.

As a result, we ask you to overturn the Commission's CEQA determination for the Project.

Thank you for your consideration.

Sincerely,

The Dogpatch Neighborhood Association

The Potrero Boosters Neighborhood Association

Exhibit A: Planning Commission Motion No. 21576, adopted June 13, 2024

Exhibit B: General Plan Evaluation for Projects Consistent with Eastern Neighborhoods Area Plan, Case No.: 2023-001074ENV, 700 Indiana Street, dated April 5, 2024

Exhibit C: Environmental Noise Assessment dated March 21, 2024

Exhibit D: Shadow Analysis Report for the Proposed 700 Indiana Street Project per San Francisco Planning Section 295 & CEQA Standards, dated January 22, 2024

Exhibit E: 700 Indiana Street: Dogpatch Arts Plaza Qualitative Shadow Analysis, dated June 13, 2024

Exhibit F: Planning Review and Entitlements of Biotech Developments, a letter published by the Loma Prieta Sierra Club dated November 11, 2024

## Exhibit A

Planning Commission Motion No. 21576, adopted June 13, 2024



## **PLANNING COMMISSION MOTION NO. 21576**

HEARING DATE: JUNE 13, 2024

Record No.:	2023-001074ENX/SHD
Project Address:	700 Indiana Street
Zoning:	UMU (Urban Mixed Use) Zoning District
	58-X Height and Bulk District
	Fringe Financial Service Special Use District
Block/Lot:	4062/007
Project Sponsor:	John Kevlin
	Reuben, Junius & Rose
	1 Bush Street
	San Francisco, CA 94104
Property Owner:	MBC BioLabs @ 700
	Burlingame, CA 94010
Staff Contact:	Charles Enchill – (628) 652-7551
	Charles.Enchill@sfgov.org

ADOPTING FINDINGS RELATING TO A LARGE PROJECT AUTHORIZATION PURSUANT TO PLANNING CODE SECTIONS 329, TO ALLOW THE CONSTRUCTION OF MORE THAN 25,000 GROSS SQUARE FEET IN THE URBAN MIXED USE DISTRICT AND TO ALLOW FOR AN EXCEPTION FROM HORIZONTAL MASS REDUCTION REQUIREMENTS FOR LARGE LOTS OF PLANNING CODE AS PART OF A PROJECT THAT WOULD DEMOLISH A 15,068-SQUARE-FOOT, ONE-STORY COMMERCIAL BUILDING AND CONSTRUCT A NEW 70,650 GROSS-SQUARE-FOOT, THREE-STORY, 48-FOOT TALL NON-LIFE SCIENCE LABORATORY BUILDING LOCATED AT 700 INDIANA STREET, BLOCK 4062 LOT 007 WITHIN THE UMU (URBAN MIXED USE) ZONING DISTRICT, FRINGE FINANCIAL SERVICE RESTRICTED USE DISTRICT AND A 58-X HEIGHT AND BULK DISTRICT, AND ADOPTING FINDINGS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

## PREAMBLE

On February 8, 2023, Edward Hall, AIA of MBH Architects (hereinafter "Project Sponsor") filed Application No. 2023-001074ENX (hereinafter "Application") with the Planning Department (hereinafter "Department") for a Large Project Authorization to construct a new three-story, 48-ft tall, non-life science laboratory building containing 51 off-street parking spaces and 2 car-share spaces below grade, one off-street loading space, 15 bicycle parking spaces and approximately 8,000 sq. ft. of non-residential open space at rooftop level (hereinafter "Project") at 700 Indiana Street, Block 4062 Lot 007 (hereinafter "Project Site"). Pursuant to the Guidelines of the State Secretary of Resources for the implementation of the California Environmental Quality Act (CEQA), on April 5, 2024, the Planning Department of the City and County of San Francisco determined that the proposed application was exempt from further environmental review under Section 15183 of the CEQA Guidelines and California Public Resources Code Section 21083.3. The Project is consistent with the adopted zoning controls in the Central Waterfront Area Plan and was encompassed within the analysis contained in the Central Waterfront Area Plan Final EIR. Since the Final EIR was finalized, there have been no substantial changes to the Central Waterfront Area Plan and no substantial changes in circumstances that would require major revisions to the Final EIR due to the involvement of new significant environmental effects or an increase in the severity of previously identified significant impacts, and there is no new information of substantial importance that would change the conclusions set forth in the Final EIR. The file for this project, including the Central Waterfront Area Plan Final EIR, and the General Plan Evaluation certificate is available for review at the San Francisco Planning Department, 49 South Van Ness Avenue, Suite 1400, San Francisco, California.

Planning Department staff prepared a Mitigation Monitoring and Reporting Program (MMRP) setting forth mitigation measures that were identified in the Eastern Neighborhoods FEIR that are applicable to the Project. These mitigation measures are set forth in their entirety in the MMRP attached to the draft Motion as Exhibit C.

On June 13, 2024, the San Francisco Planning Commission (hereinafter "Commission") conducted a duly noticed public hearing at a regularly scheduled meeting on Large Project Authorization Application No. 2023-001074ENX and Shadow Analysis Application No. 2023-001074SHD.

The Planning Department Commission Secretary is the Custodian of Records; the File for Record No. 2023-001074ENX is located at 49 South Van Ness Avenue, Suite 1400, San Francisco, California.

The Commission has heard and considered the testimony presented to it at the public hearing and has further considered written materials and oral testimony presented on behalf of the applicant, Department staff, and other interested parties.

**MOVED,** that the Commission hereby authorizes the Large Project Authorization as requested in Application No. 2023-001074ENX, subject to the conditions contained in "EXHIBIT A" of this motion, based on the following findings:

## FINDINGS

Having reviewed the materials identified in the preamble above, and having heard all testimony and arguments, this Commission finds, concludes, and determines as follows:

- 1. The above recitals are accurate and constitute findings of this Commission.
- 2. Project Description. The Project includes demolition of the one-story vacant industrial warehouse building and new construction of a three-story, 48-foot tall, non-life science laboratory building containing 51 off-street parking spaces and two car-share spaces below grade, one off-street loading space, 15 bicycle parking spaces consisting of six Class One bicycle spaces, five Class One bicycle fleet spaces, four Class Two bicycle spaces; four showers, private bike repair station, 24 lockers, and approximately 8,000 square feet of non-residential open space at rooftop level.



- **3. Site Description and Present Use.** The Project is located on one lot (with a lot area of approximately 31,090 square feet), which has approximately 400 feet of frontage along Indiana Street, 76 feet of frontage adjacent to the Dogpatch Arts Plaza and 78 feet adjacent to the Avalon Dog Park. The Project Site contains one existing building: a one-story vacant industrial warehouse building approximately 15,060 square feet in size and a storage yard.
- 4. Surrounding Properties and Neighborhood. The Project site is abutted by the Dogpatch Arts Plaza to the north, 20<sup>th</sup> Street overpass to the south, and Interstate 280 to the west. Esprit Park confronts the project site across Indiana Street to the east. The immediate context is mixed in character with mixed-use, public, and residential uses. The immediate neighborhood includes two-to-five-story buildings with the west and south sides of Esprit Park consisting of five-story residential and mixed-use buildings. The Project Site is located within the UMU Zoning District in the Central Waterfront Plan Area. Other zoning districts in the vicinity of the project site include: Residential House (Two-Family) (RH-2), Residential House (Three-Family) (RH-3), Neighborhood Commercial Transit-2 (NCT-2) and Production, Distribution & Repair-1-General (PDR-1-G) zoning districts also exist in the project vicinity
- **5. Public Outreach and Comments.** The Department has received 49 letters in support of the project and correspondence in opposition of the Project from the Dogpatch Neighborhood Association (DNA) neighborhood group. The opposition to the Project is centered on the project's shadow on Esprit Park; the project sponsor's notification being inconsistent with DNA's Development Review Process and Guidelines; proposed Arts Plaza improvements being incorrectly attributed as a DNA request; shadowing of Esprit Park; and neighborhood incompatibility with life science use. The support to the Project is centered on MBC BioLabs offering local incubator facilities and equipment for start-up businesses in the biotech field that would otherwise be cost prohibitive to create as individual businesses.

The Project Sponsor hosted a community meeting in December 2023, invited residents and property owners within 300 feet of the project site. Attendees at the December meeting indicated support for the project. In January 2024, the Project Sponsor met with DNA and the Potrero Boosters Development Committee. Attendees indicated opposition to the project and offered design suggestions. In response, the Project Sponsor adjusted the project by incorporating 15 additional bike parking spaces and a dog wash shower at the south-abutting Avalon Dogpatch Dog Park. In March 2024, the Project Sponsor engaged neighbors and landscape architectural firm, Fletcher Studios, who is the designer of the Esprit Park renovation project. They discussed Arts Plaza improvements that would address neighbor suggestions. Any improvements to the plaza are not part of the subject Large Project Authorization request and would require Department of Public Works approval. In June 2024, the Project Sponsor held a second community meeting. Attendees discussed whether there is ability to better engage pedestrians at the street level and adjacent to the Dogpatch Artz Plaza, have some creative seating in front of the building, and potential for a crosswalk from the center of the building to Esprit Park. The Project Sponsor team is in conversation with Fletcher Studios and the community about these additional streetscape improvements.

- **6. Planning Code Compliance.** The Commission finds that the Project is consistent with the relevant provisions of the Planning Code in the following manner:
  - A. Use. Planning Code Section 838 permits non-life science laboratory use, within the UMU District.



The project proposes a new three-story non-life science laboratory building (non-retail sales and service) which is principally permitted in the District.

B. Front Setback. Planning Code Section 132 states there is no front setback for non-residential uses.

The Project's zero front setback complies with this requirement.

C. Rear Yard. Planning Code Section 134 requires a minimum rear yard depth equal to 25% at the lowest story containing a dwelling unit.

The Project is limited to a commercial use (laboratory) and does not include dwelling units. There is no rear yard requirement for commercial uses in the UMU. Therefore, the project complies with this requirement.

D. Useable Open Space. In the UMU Zoning District, Planning Code Section 135.3 requires 1 square foot of useable open space for each 250 square feet of Occupied Floor Area (OFA).

The Project includes 64,793 sq. ft. of proposed laboratory OFA; thus, the Project requires 259 square feet of usable open space. The Project provides approximately 8,000 square feet of usable open space via second floor roof deck, therefore complies with this requirement.

E. Off-Street Freight Loading. Planning Section 152.1 of the Planning Code requires 0.1 off-street freight loading space for every 10,000 sq. ft. of Occupied Floor Area.

The Project includes 64,793 sq. ft. of proposed laboratory OFA; thus, the Project requires one off-street freight loading space. The Project is proposing one off-street loading space along Indiana Street. Therefore, the Project complies with this requirement.

F. Street Frontage in Mixed Use Districts. Planning Code Section 145.1 requires that within Mixed Use Districts space for active uses shall be provided within the first 25 feet of building depth on the ground floor and 15 feet on floors above from any facade facing a street at least 30 feet in width. In addition, the floors of street-fronting interior spaces housing non-residential active uses and lobbies shall be as close as possible to the level of the adjacent sidewalk at the principal entrance to these spaces. Frontages with active uses that must be fenestrated with transparent windows and doorways for no less than 60 percent of the street frontage at the ground level and allow visibility to the inside of the building. The use of dark or mirrored glass shall not count towards the required transparent area. Any decorative railings or grillwork, other than wire mesh, which is placed in front of or behind ground floor windows, shall be at least 75 percent open to perpendicular view. Rolling or sliding security gates shall consist of open grillwork rather than solid material, so as to provide visual interest to pedestrians when the gates are closed, and to permit light to pass through mostly unobstructed. Gates, when both open and folded or rolled as well as the gate mechanism, shall be recessed within, or laid flush with, the building facade.

The ground floor laboratory space has approximately 387 feet of frontage with approximately 302 feet devoted to either window space or lobby windows. All laboratory use at the upper floors consist of building depths at least 15 with architectural window screens at least 75% open to perpendicular view.



G. Off-Street Freight Off-Street Parking. Planning Code Section 151 does not require a minimum number of off-street parking spaces and permits a maximum of 50% greater than the indicated use. Laboratory Use (Non-Retail Sales and Service) permits up to one car per 1,500 square feet of Occupied Floor Area.

The 64,793 sq. ft. of proposed laboratory OFA may provide a maximum of 65 off-street parking spaces. The Project will provide 51 off-street parking spaces below grade. Therefore, the project complies with this requirement.

H. Bicycle Parking. Planning Code Section 155.2 requires Laboratory use (non-retail sales and service) to provide one Class 1 space for every 12,000 square feet of Occupied Floor Area and minimum Four Class 2 spaces for any use larger than 50,000 gross square feet.

The 64,793 sq. ft. of proposed laboratory OFA is subject to five Class 1 spaces and four Class 2 spaces. The Project proposes 15 bicycle parking spaces consisting of: six Class One bicycle spaces, five Class One bicycle fleet spaces, and four Class 2 bicycle spaces, therefore complies with this requirement.

I. Height. Planning Code Section 260 requires that all structures be no taller than the height prescribed in the subject height and bulk district. The proposed Project is located in a 58-X Height and Bulk District, with a 58-foot height limit.

The building has a proposed ultimate height of 48 feet where 58 feet is permitted. Therefore, the Project complies with the maximum height permitted.

J. Transportation Demand Management (TDM) Plan. Pursuant to Planning Code Section 169 and the TDM Program Standards, the Project shall finalize a TDM Plan prior Planning Department approval of the first Building Permit or Site Permit. As currently proposed, the Project must achieve a target of 16 points.

As currently proposed, the Project will achieve its required 16 points through the following TDM measures:

- Improve Walking Conditions (Option B) —1 point
- Bicycle Parking (Option A) —1 point
- Showers and Lockers—1 point
- Bike Share Membership (Location B) 2 points
- Bicycle Repair Station—1 point
- Bicycle Maintenance Services—1 point
- Fleet of Bicycles—1 point
- Car-share Parking and Membership (Option A) -1 point
- Delivery Supportive Amenities—1 point
- Multimodal Wayfinding Signage—1 point
- Real Time Transportation Information Displays—1 point
- Tailored Transportation Marketing Services (Option B)—2 points
- Parking Pricing—2 points
- K. Horizontal Mass Reduction. Planning Code Section 270.1 outlines the requirements for horizontal



mass reduction on large lots within the Eastern Neighborhoods Mixed Use Districts. For projects with street frontage greater than 200 feet in length, one or more mass reduction breaks must be incorporated to reduce the horizontal scale of the building into discrete sections not more than 200 feet in length. Specifically, the mass reduction must 1) be not less than 30 feet in width; 2) be not less than 60 feet in depth from the street-facing building façade; 3) extend up to the sky from a level not higher than 25 feet above grade or the third story, whichever is lower; and, 4) result in discrete building sections with a maximum plan length along the street frontage not greater than 200-ft.

Since the overall building frontage is 387 feet along Indiana Street, the Project is required to provide a single horizontal mass break along Indiana Street, which is not less than 30 feet wide by 60 feet deep, and extends from the third story up to the sky. Per the Planning Code, this mass break must result in discrete building sections along the street frontage of not greater than 200 feet.

The Project incorporates a mass break, which measures between 30 and 34 feet wide by 18 feet deep at the ground floor and extending upward on all levels. Since the provided horizontal mass reduction does not meet the dimensional requirements of the Planning Code, the Project is seeking an exception to the horizontal mass reduction requirements as part of the Large Project Authorization which is discussed below in Section 8.

- **7.** Large Project Authorization Design Review in Eastern Neighborhoods Mixed Use District. Planning Code Section 329(c) lists nine aspects of design review in which a project must comply; the Planning Commission finds that the project is compliant with these nine aspects as follows:
  - A. Overall building mass and scale. The Project is designed as a three-story, 48-foot tall, laboratory development, which incorporates a recessed horizontal break at the main entry, lower height massing at the southern half of the building (33 feet). This massing is appropriate given the larger neighborhood context, which includes two- to five-story commercial, residential, and mixed-use buildings surrounding Esprit Park. The Project's overall mass and scale are further refined by the building modulation, which incorporates projecting floor plates and stairwell transparency. Thus, the Project is appropriate and consistent with the mass and scale of the surrounding neighborhood.
  - B. Architectural treatments, facade design and building materials. The Project's architectural treatments, façade design and building materials include smooth concrete, textured concrete, white aluminum composite siding, perforated bronze aluminum panel window screens; roll-up loading and parking doors with 75% transparency, and transformer room gates matching aluminum screens. Overall, the Project offers a high-quality architectural treatment, which provides for unique and expressive architectural design that is consistent and compatible with the surrounding neighborhood.
  - C. The design of lower floors, including building setback areas, commercial space, townhouses, entries, utilities, and the design and siting of rear yards, parking and loading access. Along the lower floors, the Project provides a prominent recessed entry lobby 18 feet in depth and up to 37 feet wide. The Project minimizes the impact to pedestrians by providing off-street parking below grade with only one screened off-street loading space at grade level. The aluminum window screens to the laboratory use and meeting rooms, as well as roll-up loading and parking doors, have a 75% transparency as to allow visibility into the building and a visual connection with the street. The transformer room adjacent to



Indiana Street provides the same aluminum screening as provided throughout the windows for a cohesive ground floor design.

- D. The provision of required open space, both on- and off-site. In the case of off-site publicly accessible open space, the design, location, access, size, and equivalence in quality with that otherwise required on-site. The Project exceeds the open space requirement by constructing a rooftop deck approximately 8,000 square feet in size.
- E. The provision of mid-block alleys and pathways on frontages between 200 and 300 linear feet per the criteria of Section 270, and the design of mid-block alleys and pathways as required by and pursuant to the criteria set forth in Section 270.2. *The Project is not subject to the mid-block alley requirement of Planning Code Section 270.2.*
- F. Streetscape and other public improvements, including tree planting, street furniture, and lighting. In compliance with Planning Code Section 138.1, the Project includes new streetscape elements, such as new concrete sidewalks, linear planters along the street edge, and new street trees. These improvements would vastly improve the public realm and surrounding streetscape.
- G. Circulation, including streets, alleys and mid-block pedestrian pathways. The Project provides ample circulation in and around the project site through the streetscape improvements and planters adjacent to the front property line. Off-street parking access is limited to the one entry/exit on Indiana Street, near 20<sup>th</sup> Street. One off-street loading space is also accessed from Indiana Street, near 20<sup>th</sup> Street.
- H. Bulk limits. The Project is within an 'X' Bulk District, which does not restrict bulk. However, Planning Code Section 270.1 also requires special bulk limitations for horizontal mass reduction when located on frontages exceeding 200 feet in eastern neighborhood mixed use districts. The required mass reduction break shall be (1) be not less than 30 feet in width; (2) be not less than 60 feet in depth from the street-facing building facade; (3) extend up to the sky from a level not higher than 25 feet above grade or the third story, whichever is lower; and (4) result in discrete building sections with a maximum plan length along the street frontage not greater than 200 feet. The Project seeks a break between 26 feet 6 inches and 37 feet with a depth of 18 feet with discrete building sections not exceeding 200 feet.
- I. Other changes necessary to bring a project into conformance with any relevant design guidelines, Area Plan or Element of the General Plan. *The Project, on balance, meets the Objectives and Policies of the General Plan. See Below.*
- 8. Large Project Authorization Exceptions. Planning Code Section 329 allows exceptions for Large Projects in the Eastern Neighborhoods Mixed Use Districts:
  - A. Special Bulk Limitations. The special bulk limitations in Eastern Neighborhoods Mixed Use Districts may be modified or waived by the Planning Commission, provided that:
    - (1) No more than 50% of the required mass is reduced unless special circumstances are evident;

The Project provides for a horizontal mass reduction of 18 feet where the Planning Commission



may typically reduce the required depth of 60 feet by 50 percent (30 feet). While the proposed reduction of mass is greater than 50%, the Project overall does not maximize building mass as the proposed building is 10 feet lower than the UMU district's 58 height limit. A horizontal mass reduction no less than 30 feet would require loss of covered corridor area at the ground floor and the laboratory floor area at the second floor. Therefore, the increase of mass reduction would result in taller building heights at the northern and/or southern halves of the building. The Project's proximity to Esprit Park is a special circumstance, where strict application of Planning Code may result in additional shading to Esprit Park. For this reason, the Project seeks a 70% reduction (42 feet) to the special bulk control depth requirement.

(2) The depth of any mass reduction breaks provided is not less than 15 feet from the front facade, unless special circumstances are evident; and

The depth of the proposed mass reduction is 18 feet which exceeds 15 feet from the front face.

(3) The proposed building envelope can be demonstrated to achieve a distinctly superior effect of reducing the apparent horizontal dimension of the building;

The project currently results in two distinct building volumes on either side of the recessed entry/mass reduction break, with approximately 176 feet for the building's southern half and 188 feet at the building's northern half, by differentiating the facade treatment and height of the two potions of the proposed building and improving the streetscape experience for pedestrians and users of Esprit Park.

(4) The proposed building achieves unique and superior architectural design

Given the overall quality of the Project design, the Commission supports the exception to the special bulk limitations requirement. The project minimizes its massing through a lower twostory portion (25 feet below the height limit) and taller three-story portion (10 feet below the height limit) near Esprit Park. The Project also features architectural treatments, façade design and building materials such as smooth concrete, textured concrete, white aluminum composite siding, perforated bronze aluminum panel window screens; roll-up loading and parking doors with 75% transparency, and transformer room gates matching aluminum screens.

**9. General Plan Compliance.** The Project is, on balance, consistent with the following Objectives and Policies of the General Plan:

#### **HOUSING ELEMENT**

**Objectives and Policies** 

#### **OBJECTIVE 5.A**

CONNECT PEOPLE TO JOBS AND THEIR NEIGHBORHOOD WITH NUMEROUS, EQUITABLE, AND HEALTHY TRANSPORTATION AND MOBILITY OPTIONS.



#### Policy 37

Facilitate neighborhoods where proximity to daily needs and high-quality community services and amenities promotes social connections, supports caregivers, reduces the need for private auto travel, and advances healthy activities.

#### **URBAN DESIGN ELEMENT**

**Objectives and Policies** 

#### **OBJECTIVE 1**

EMPHASIS OF THE CHARACTERISTIC PATTERN WHICH GIVES TO THE CITY AND ITS NEIGHBORHOODS AN IMAGE, A SENSE OF PURPOSE, AND A MEANS OF ORIENTATION.

Policy 1.3

Recognize that buildings, when seen together, produce a total effect that characterizes the city and its districts.

#### **OBJECTIVE 3**

MODERATION OF MAJOR NEW DEVELOPMENT TO COMPLEMENT THE CITY PATTERN, THE RESOURCES TO BE CONSERVED, AND THE NEIGHBORHOOD ENVIRONMENT.

Policy 3.4

Promote building forms that will respect and improve the integrity of open spaces and other public areas.

Policy 3.6

Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction.

#### **CENTRAL WATERFRONT AREA PLAN**

Land Use Objectives and Policies

#### **OBJECTIVE 1.4**

SUPPORT A ROLE FOR "KNOWLEDGE SECTOR" BUSINESSES IN APPROPRIATE PORTIONS OF THE CENTRAL WATERFRONT

Policy 1.4.2 Allow other Knowledge Sector office uses in portions of the Central Waterfront where it is appropriate.

#### **OBJECTIVE 3.1**

PROMOTE AN URBAN FORM THAT REINFORCES THE CENTRAL WATERFRONT'S DISTINCTIVE PLACE IN THE CITY'S LARGER FORM AND STRENGTHENS ITS PHYSICAL FABRIC AND CHARACTER



#### Policy 3.1.8

Where an existing pattern of rear yard open space does not exist, new development on mixed-use-zoned parcels should have greater flexibility as to where open space can be located.

#### **OBJECTIVE 5.1**

#### ENSURE THAT NEW DEVELOPMENT INCLUDES HIGH QUALITY PRIVATE OPEN SPACE

#### Policy 5.2.1

Require new residential and mixed-use residential development to provide on-site private open space designed to meet the needs of residents.

#### Policy 5.2.5

New development will respect existing patterns of rear yard open space. Where an existing pattern of rear yard open space does not exist, new development on mixed-use-zoned parcels has flexibility as to where open space can be located.

The Project will replace a vacant industrial warehouse with a three-story laboratory (non-life science) development that is compatible with the mix of uses within the Urban Mixed Use Zoning District as well as the Central Waterfront Area Plan, as it is likely to fulfill a "Knowledge Sector" that consists of businesses that create economic value through the knowledge they generate and provide for their customers. This includes, but is not limited to, environmental technologies and research and development. The Project introduces a contemporary architectural vocabulary that is sensitive to the prevailing scale and neighborhood fabric. The Project provides ample outdoor space and full lot coverage where the building abuts the freeway to create a lower scale building. Notably, the Project will be 10 feet lower than the permitted zoning district height limit, two stories lower than the mixed-use development at 660 Indiana Street (to the north) and two stories lower than the housing development at 800 Indiana Street (to the south). The Project provides a high-quality exterior, which features a variety of materials, colors, and textures, including smooth concrete, textured concrete, white aluminum composite siding, and perforated bronze aluminum panel window screens. The Project is also in proximity to ample public transportation located nearby on 20<sup>th</sup> Street as well as 3<sup>rd</sup> Street. On balance, the Project is consistent with the Objectives and Policies of the General Plan and the Central Waterfront Area Plan.

- **10. Planning Code Section 101.1(b)** establishes eight priority-planning policies and requires review of permits for consistency with said policies. On balance, the project complies with said policies in that:
  - A. That existing neighborhood-serving retail uses be preserved and enhanced and future opportunities for resident employment in and ownership of such businesses be enhanced.

The project site does not possess any neighborhood-serving retail uses. The Project provides a threestory laboratory building which will not provide any neighborhood-serving retail uses, however, would enhance the nearby retail uses by providing new workers, who may patronize these businesses.

B. That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods.



The subject site does not possess any existing housing. The Project will demolish an existing vacant industrial building and construct a new laboratory (nonlife-science) building. The Project is consistent with the Urban Design Element and Central Area Waterfront Plan. For these reasons, the Project would protect and preserve the economic and cultural diversity of the neighborhood.

C. That the City's supply of affordable housing be preserved and enhanced,

The Project does not currently possess any existing affordable housing nor are dwelling units proposed as part of the new laboratory building. Therefore, the Project will have no impact to affordable housing units in the City.

D. That commuter traffic not impede MUNI transit service or overburden our streets or neighborhood parking.

The Project Site is served by nearby public transportation options. The Project is located three blocks from the Muni bus line (55-20<sup>th</sup> Street/3<sup>rd</sup> Street) and three blocks from the 20<sup>th</sup> Street Muni rail line. Future residents would be afforded proximity to a bus line and light rail line. The Project also provides off-street parking at the principally permitted amounts and sufficient bicycle parking for their employees.

E. That a diverse economic base be maintained by protecting our industrial and service sectors from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these sectors be enhanced.

The Project does not include commercial office development. The last registered industrial business for storage yard use vacated the subject property in 2020. Although the Project would replace an industrial property, the property is presently underutilized and vacant. The Project incorporates new laboratory use (non-life science), thus assisting in diversifying the mix of permitted district uses and allowing for employment in these sectors.

F. That the City achieve the greatest possible preparedness to protect against injury and loss of life in an earthquake.

The Project will be designed and constructed to conform to the structural and seismic safety requirements of the Building Code. As such, this Project will improve the property's ability to withstand an earthquake.

G. That landmarks and historic buildings be preserved.

Currently, the Project Site does not contain any City Landmarks or historic buildings.

*H.* That our parks and open space and their access to sunlight and vistas be protected from development.

The Project will cast new shadow on the adjacent Esprit Park under the jurisdiction of Recreation and Park Department. However, the amount of net new shadow cast onto Esprit Park as a result of



the Project will not be significant or adverse to the enjoyment of this park.

**11. First Source Hiring.** The Project is subject to the requirements of the First Source Hiring Program as they apply to permits for residential development (Administrative Code Section 83.11), and the Project Sponsor shall comply with the requirements of this Program as to all construction work and on-going employment required for the Project. Prior to the issuance of any building permit to construct or a First Addendum to the Site Permit, the Project Sponsor shall have a First Source Hiring Construction and Employment Program approved by the First Source Hiring Administrator, and evidenced in writing. In the event that both the Director of Planning and the First Source Hiring Administrator agree, the approval of the Employment Program may be delayed as needed.

The Project Sponsor submitted a First Source Hiring Affidavit and prior to issuance of a building permit will execute a First Source Hiring Memorandum of Understanding and a First Source Hiring Agreement with the City's First Source Hiring Administration.

- **12.** The Project is consistent with and would promote the general and specific purposes of the Code provided under Section 101.1(b) in that, as designed, the Project would constitute a beneficial development.
- **13.** The Commission hereby finds that approval of the Large Project Authorization would promote the health, safety and welfare of the City.



## DECISION

That based upon the Record, the submissions by the Applicant, the staff of the Department and other interested parties, the oral testimony presented to this Commission at the public hearings, and all other written materials submitted by all parties, the Commission hereby **APPROVES Large Project Authorization Application No. 2023-001074ENX** subject to the following conditions attached hereto as "EXHIBIT A" in general conformance with plans on file, dated August 30, 2023, and stamped "EXHIBIT B", which is incorporated herein by reference as though fully set forth.

The Project is consistent with the development density and adopted zoning controls for the project site located in the Eastern Neighborhoods – Central Waterfront Plan area, a programmatic community plan for which there is a certified EIR (PEIR). On April 5, 2024, the Department determined that the Project qualified for streamlined environmental review under Public Resources Code Section 21083.3 and Section 15183 of the CEQA Guidelines. Accordingly, the Department issued a community plan evaluation (GPE) for the project. The GPE identified the mitigation measures from the PEIR that are applicable to the Project. With the applicable mitigation measures are provided in a project specific mitigation monitoring and reporting program (MMRP) that has been agreed to by the project sponsor. The GPE is attached as Exhibit K and MMRP is attached in Exhibit C.

**APPEAL AND EFFECTIVE DATE OF MOTION:** Any aggrieved person may appeal this Section 329/309 Large/Downtown Project Authorization to the Board of Appeals within fifteen (15) days after the date of this Motion. The effective date of this Motion shall be the date of adoption of this Motion if not appealed (after the 15-day period has expired) OR the date of the decision of the Board of Appeals if appealed to the Board of Appeals. Any appeal shall be made to the Board of Appeals, unless an associated entitlement is appealed to the Board of Supervisors, in which case the appeal of this Motion shall also be made to the Board of Supervisors (see Charter Section 4.135). For further information, please contact the Board of Appeals at (628) 652-1150, 49 South Van Ness Avenue, Suite 1475, San Francisco, CA 94103, or the Board of Supervisors at (415) 554-5184, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

**Protest of Fee or Exaction:** You may protest any fee or exaction subject to Government Code Section 66000 that is imposed as a condition of approval by following the procedures set forth in Government Code Section 66020. The protest must satisfy the requirements of Government Code Section 66020(a) and must be filed within 90 days of the date of the first approval or conditional approval of the development referencing the challenged fee or exaction. For purposes of Government Code Section 66020, the date of imposition of the fee shall be the date of the earliest discretionary approval by the City of the subject development.

If the City has not previously given Notice of an earlier discretionary approval of the project, the Planning Commission's adoption of this Motion, Resolution, Discretionary Review Action or the Zoning Administrator's Variance Decision Letter constitutes the approval or conditional approval of the development and the City hereby gives **NOTICE** that the 90-day protest period under Government Code Section 66020 has begun. If the City has already given Notice that the 90-day approval period has begun for the subject development, then this document does not re-commence the 90-day approval period.



I hereby certify that the Planning Commission ADOPTED the foregoing Motion on June 13, 2024. Jonas P. Ionin Commission Secretary

- AYES: So, Williams, Braun, Imperial, Koppel, Moore, Diamond
- NAYS: None

ABSENT: None

ADOPTED: June 13, 2024



# **EXHIBIT A**

#### Authorization

This authorization is for a Large Project Authorization to allow construction of a three-story commercial building for non-life science laboratory building (d.b.a. **MBC Bio Labs**) containing 51 off-street parking spaces and 2 carshare spaces below grade, one off-street loading space, 15 bicycle parking spaces consisting of 6 Class One bicycle spaces, 5 Class One bicycle fleet spaces, 4 Class Two bicycle spaces; 4 showers, private bike repair station, 24 lockers, and approximately 8,000 sq. ft. of non-residential open space at rooftop level located at 700 Indiana Street Block 4062, and Lot 007 pursuant to Planning Code Section(s) **329 and 838** within the **UMU (Urban Mixed Use)** Zoning District and a **58-X** Height and Bulk District; in general conformance with plans, dated **August 30, 2023**, and stamped "EXHIBIT B" included in the docket for Record No. **2023-001074ENX** and subject to conditions of approval reviewed and approved by the Commission on **June 13, 2024** under Motion No. **21576**. This authorization and the conditions contained herein run with the property and not with a particular Project Sponsor, business, or operator.

#### **Recordation of Conditions Of Approval**

Prior to the Planning approval of the building permit or commencement of use for the Project, the property owner must record a Notice of Special Restrictions prepared by the Planning Department with the Recorder of the City and County of San Francisco for the subject property. This Notice shall state that the project is subject to the conditions of approval contained herein and reviewed and approved by the Planning Commission on **June 13**, **2024** under Motion No. **21576**.

#### Severability

The Project shall comply with all applicable City codes and requirements. If any clause, sentence, section or any part of these conditions of approval is for any reason held to be invalid, such invalidity shall not affect or impair other remaining clauses, sentences, or sections of these conditions. This decision conveys no right to construct, or to receive a building permit. "Project Sponsor" shall include any subsequent responsible party.

#### **Changes and Modifications**

Changes to the approved plans may be approved administratively by the Zoning Administrator. Significant changes and modifications of conditions shall require Planning Commission approval of a new Large Project Authorization.



## CONDITIONS OF APPROVAL, COMPLIANCE, Monitoring, and reporting

## Performance

1. **Validity.** The authorization and right vested by virtue of this action is valid for three (3) years from the effective date of the Motion. The Department of Building Inspection shall have issued a Building Permit or Site Permit to construct the project and/or commence the approved use within this three-year period.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, <u>www.sfplanning.org</u>

2. **Expiration and Renewal.** Should a Building or Site Permit be sought after the three (3) year period has lapsed, the project sponsor must seek a renewal of this Authorization by filing an application for an amendment to the original Authorization or a new application for Authorization. Should the project sponsor decline to so file, and decline to withdraw the permit application, the Commission shall conduct a public hearing in order to consider the revocation of the Authorization. Should the Commission not revoke the Authorization following the closure of the public hearing, the Commission shall determine the extension of time for the continued validity of the Authorization.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, <u>www.sfplanning.org</u>

3. **Diligent Pursuit.** Once a site or Building Permit has been issued, construction must commence within the timeframe required by the Department of Building Inspection and be continued diligently to completion. Failure to do so shall be grounds for the Commission to consider revoking the approval if more than three (3) years have passed since this Authorization was approved.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, <u>www.sfplanning.org</u>

4. **Extension.** All time limits in the preceding three paragraphs may be extended at the discretion of the Zoning Administrator where implementation of the project is delayed by a public agency, an appeal or a legal challenge and only by the length of time for which such public agency, appeal or challenge has caused delay.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, <u>www.sfplanning.org</u>

5. **Conformity with Current Law.** No application for Building Permit, Site Permit, or other entitlement shall be approved unless it complies with all applicable provisions of City Codes in effect at the time of such approval.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, <u>www.sfplanning.org</u>



6. Additional Project Authorization. The Project Sponsor must obtain a Project authorization under Sections 329 to allow construction of more than 25,000 square feet and findings for shadow effects to properties protected by Section 295, and satisfy all the conditions thereof. The conditions set forth below are additional conditions required in connection with the Project. If these conditions overlap with any other requirement imposed on the Project, the more restrictive or protective condition or requirement, as determined by the Zoning Administrator, shall apply.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, <u>www.sfplanning.org</u>

7. **Mitigation Measures.** Feasible mitigation measures from the programmatic EIR for the Eastern Neighborhoods Area Plan where the project site is located that are applicable to the project will be undertaken. These mitigation measures are necessary to avoid potential significant effects of the proposed project and are described in the project specific MMRP attached as Exhibit C. The measures have been agreed to by the project sponsor. Their implementation are conditions of project approval.

*For information about compliance, contact Code Enforcement, Planning Department at 628-652-7463, www.sf-planning.org* 

## **Design – Compliance at Plan Stage**

8. **Final Materials.** The Project Sponsor shall continue to work with Planning Department on the building design. Final materials, glazing, color, texture, landscaping, and detailing shall be subject to Department staff review and approval. The architectural addenda shall be reviewed and approved by the Planning Department prior to issuance. Bike parking – including for e-bikes and cargo bikes, will continue to be refined during the building permit application stage.

For information about compliance, contact the Case Planner, Planning Department at 628.652.7551, <u>www.sfplanning.org</u>

9. **Garbage, Composting and Recycling Storage.** Space for the collection and storage of garbage, composting, and recycling shall be provided within enclosed areas on the property and clearly labeled and illustrated on the building permit plans. Space for the collection and storage of recyclable and compostable materials that meets the size, location, accessibility and other standards specified by the San Francisco Recycling Program shall be provided at the ground level of the buildings.

For information about compliance, contact the Case Planner, Planning Department at 628.652.7551, <u>www.sfplanning.org</u>

10. **Rooftop Mechanical Equipment.** Pursuant to Planning Code 141, the Project Sponsor shall submit a roof plan to the Planning Department prior to Planning approval of the building permit application. Rooftop mechanical equipment, if any is proposed as part of the Project, is required to be screened so as not to be visible from any point at or below the roof level of the subject building.

*For information about compliance, contact the Case Planner, Planning Department at 628.652.7551,* <u>www.sfplanning.org</u>



11. **Lighting Plan.** The Project Sponsor shall submit an exterior lighting plan to the Planning Department prior to Planning Department approval of the building / site permit application.

For information about compliance, contact the Case Planner, Planning Department at 628.652.7551, <u>www.sfplanning.org</u>

12. **Streetscape Plan.** Pursuant to Planning Code Section 138.1, the Project Sponsor shall continue to work with Planning Department staff, in consultation with other City agencies, to refine the design and programming of the Streetscape Plan so that the plan generally meets the standards of the Better Streets Plan and all applicable City standards. The Project Sponsor shall complete final design of all required street improvements, including procurement of relevant City permits, prior to issuance of first architectural addenda, and shall complete construction of all required street improvements prior to issuance of first temporary certificate of occupancy.

For information about compliance, contact the Case Planner, Planning Department at 628.652.7551, <u>www.sfplanning.org</u>

13. **Transformer Vault Location.** The location of individual project PG&E Transformer Vault installations has significant effects to San Francisco streetscapes when improperly located. However, they may not have any impact if they are installed in preferred locations. Therefore, the Planning Department in consultation with Public Works shall require the following location(s) for transformer vault(s) for this project: building frontage or private site area at the Indiana Street frontage. The above requirement shall adhere to the Memorandum of Understanding regarding Electrical Transformer Locations for Private Development Projects between Public Works and the Planning Department dated January 2, 2019.

For information about compliance, contact Bureau of Street Use and Mapping, Department of Public Works at 628.271.2000, <u>www.sfpublicworks.org</u>

14. **Overhead Wiring.** The Property owner will allow MUNI to install eyebolts in the building adjacent to its electric streetcar line to support its overhead wire system if requested by MUNI or MTA.

For information about compliance, contact San Francisco Municipal Railway (Muni), San Francisco Municipal Transit Agency (SFMTA), at 415.701.4500, <u>www.sfmta.org</u>

15. **Odor Control Unit.** In order to ensure any significant noxious or offensive odors are prevented from escaping the premises once the project is operational, the building permit application to implement the project shall include air cleaning or odor control equipment details and manufacturer specifications on the plans if applicable as determined by the project planner. Odor control ducting shall not be applied to the primary façade of the building.

For information about compliance, contact the Case Planner, Planning Department at 628.652.7551, <u>www.sfplanning.org</u>

## **Parking and Traffic**

16. Transportation Demand Management (TDM) Program. Pursuant to Planning Code Section 169, the Project



shall finalize a TDM Plan prior to the issuance of the first Building Permit or Site Permit to construct the project and/or commence the approved uses. The Property Owner, and all successors, shall ensure ongoing compliance with the TDM Program for the life of the Project, which may include providing a TDM Coordinator, providing access to City staff for site inspections, submitting appropriate documentation, paying application fees associated with required monitoring and reporting, and other actions.

Prior to the issuance of the first Building Permit or Site Permit, the Zoning Administrator shall approve and order the recordation of a Notice in the Official Records of the Recorder of the City and County of San Francisco for the subject property to document compliance with the TDM Program. This Notice shall provide the finalized TDM Plan for the Project, including the relevant details associated with each TDM measure included in the Plan, as well as associated monitoring, reporting, and compliance requirements.

For information about compliance, contact the TDM Performance Manager at <u>tdm@sfgov.org</u> or 628.652.7340, <u>www.sfplanning.org</u>

17. **Car Share.** Pursuant to Planning Code Section 166, no fewer than **two (2)** car share space shall be made available, at no cost, to a certified car share organization for the purposes of providing car share services for its service subscribers.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, <u>www.sfplanning.org</u>

18. Bicycle Parking. Pursuant to Planning Code Sections 155.1 and 155.4, the Project shall provide no fewer than 5 Class 1 and 4 Class 2 bicycle parking spaces. SFMTA has final authority on the type, placement and number of Class 2 bicycle racks within the public ROW. Prior to issuance of first architectural addenda, the project sponsor shall contact the SFMTA Bike Parking Program at <u>bikeparking@sfmta.com</u> to coordinate the installation of on-street bicycle racks and ensure that the proposed bicycle racks meet the SFMTA's bicycle parking guidelines. Depending on local site conditions and anticipated demand, SFMTA may request the project sponsor pay an in-lieu fee for Class II bike racks required by the Planning Code.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, <u>www.sfplanning.org</u>

19. **Showers and Clothes Lockers.** Pursuant to Planning Code Section 155.4, the Project shall provide no fewer than **4** showers and **24** clothes lockers.

*For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463,* <u>www.sfplanning.org</u>

20. **Parking Maximum.** Pursuant to Planning Code Section 151.1, the Project shall provide no more than **fifty**-three (53) off-street parking spaces.

*For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463,* <u>www.sfplanning.org</u>

21. Off-Street Loading. Pursuant to Planning Code Section 152, the Project will provide one (1) off-street loading



space.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, <u>www.sfplanning.org</u>

22. **Managing Traffic During Construction.** The Project Sponsor and construction contractor(s) shall coordinate with the Traffic Engineering and Transit Divisions of the San Francisco Municipal Transportation Agency (SFMTA), the Police Department, the Fire Department, the Planning Department, and other construction contractor(s) for any concurrent nearby Projects to manage traffic congestion and pedestrian circulation effects during construction of the Project.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, <u>www.sfplanning.org</u>

## **Provisions**

23. **First Source Hiring.** The Project shall adhere to the requirements of the First Source Hiring Construction and End-Use Employment Program approved by the First Source Hiring Administrator, pursuant to Section 83.4(m) of the Administrative Code. The Project Sponsor shall comply with the requirements of this Program regarding construction work and on-going employment required for the Project.

For information about compliance, contact the First Source Hiring Manager at 415.581.2335, <u>www.onestopSF.org</u>

24. **Transportation Sustainability Fee.** The Project is subject to the Transportation Sustainability Fee (TSF), as applicable, pursuant to Planning Code Section 411A.

For information about compliance, contact the Case Planner, Planning Department at 628.652.7551, <u>www.sfplanning.org</u>

25. **Jobs-Housing Linkage.** The Project is subject to the Jobs Housing Linkage Fee, as applicable, pursuant to Planning Code Section 413.

For information about compliance, contact the Case Planner, Planning Department at 628.652.7551, <u>www.sfplanning.org</u>

26. **Eastern Neighborhoods Infrastructure Impact Fee.** The Project is subject to the Eastern Neighborhoods Infrastructure Impact Fee, as applicable, pursuant to Planning Code Section 423.

For information about compliance, contact the Case Planner, Planning Department at 628.652.7551, <u>www.sfplanning.org</u>

27. Art Fee. The Project is subject to the Public Art Fee, as applicable, pursuant to Planning Code Section 429.

For information about compliance, contact the Case Planner, Planning Department at 628.652.7551, <u>www.sfplanning.org</u>



## **Monitoring - After Entitlement**

28. **Enforcement.** Violation of any of the Planning Department conditions of approval contained in this Motion or of any other provisions of Planning Code applicable to this Project shall be subject to the enforcement procedures and administrative penalties set forth under Planning Code Section 176 or Section 176.1. The Planning Department may also refer the violation complaints to other city departments and agencies for appropriate enforcement action under their jurisdiction.

*For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463,* <u>www.sfplanning.org</u>

29. **Monitoring.** The Project requires monitoring of the conditions of approval in this Motion. The Project Sponsor or the subsequent responsible parties for the Project shall pay fees as established under Planning Code Section 350 and work with the Planning Department for information about compliance.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, <u>www.sfplanning.org</u>

30. **Revocation due to Violation of Conditions.** Should implementation of this Project result in complaints from interested property owners, residents, or commercial lessees which are not resolved by the Project Sponsor and found to be in violation of the Planning Code and/or the specific conditions of approval for the Project as set forth in Exhibit A of this Motion, the Zoning Administrator shall refer such complaints to the Commission, after which it may hold a public hearing on the matter to consider revocation of this authorization.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, <u>www.sfplanning.org</u>

## Operation

31. **Sidewalk Maintenance.** The Project Sponsor shall maintain the main entrance to the building and all sidewalks abutting the subject property in a clean and sanitary condition in compliance with the Department of Public Works Streets and Sidewalk Maintenance Standards.

For information about compliance, contact Bureau of Street Use and Mapping, Department of Public Works, 628.271.2000, <u>www.sfpublicworks.org</u>

32. **Community Liaison.** Prior to issuance of a building permit to construct the project and implement the approved use, the Project Sponsor shall appoint a community liaison officer to deal with the issues of concern to owners and occupants of nearby properties. The Project Sponsor shall provide the Zoning Administrator and all registered neighborhood groups for the area with written notice of the name, business address, and telephone number of the community liaison. Should the contact information change, the Zoning Administrator and registered neighborhood groups shall be made aware of such change. The community liaison shall report to the Zoning Administrator what issues, if any, are of concern to the community and what issues have not been resolved by the Project Sponsor.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463,



#### www.sfplanning.org

**33.** Laboratory Use. Any future occupant must comply with the definition of laboratory as currently defined through the Zoning Administrator's Letter of Determination dated November 6, 2020, at the following link:

https://citypln-m-

extnl.sfgov.org/SharedLinks.aspx?accesskey=c91ac44292c0a5619398a5fdbb01f86fd3fe7a3913dff349b3a3924 76c12ef6d&VaultGUID=A4A7DACD-B0DC-4322-BD29-F6F07103C6E0





MBC biolabs




















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MEETING

ILNO

STAIR



700 INDIANA STREET SAN FRANCISCO, CA 94107



















# AGREEMENT TO IMPLEMENT MITIGATION MONITORING AND REPORTING PROGRAM

Record No.:	2023-001074ENV	Block/Lot:	~
Project Title:	700 Indiana Street	Lot Size:	(.)
BPA Nos:	n/a	Project Sponsor:	
Zoning:	UMU-Urban Mixed Use District	Lead Agency:	• /
	58-X Height and Bulk District	Staff Contact:	

3 kyan Shum, ryan.shum@sfgov.org, 628-652-7542 Ryan Guibara, rguibara@mbcbiolabs.com San Francisco Planning Department 31,090 square feet 1062/007

The table below indicates when compliance with each mitigation measure must occur. Some mitigation measures span multiple phases. Substantive descriptions of each mitigation measure's requirements are provided on the following pages in the Mitigation Monitoring and Reporting Program.

	Period of Complian	ce		Compliance with
Adopted Mitigation Measure	Prior to the Start of Construction*	During Construction**	Post-construction or Operational	Mitigation Measure Completed?
Project Mitigation Measure 1: Accidental Discovery	×	Х		
Project Mitigation Measure 2: Construction Noise	×	×		
Project Mitigation Measure 3: Construction Air Quality	×	×		
Project Mitigation Measure 4: Siting of Uses that Emit Other TACs			×	
NOTES:				

\* Prior to any ground disturbing activities at the project site.
\*\* Construction is broadly defined to include any physical activities associated with construction of a development project including, but not limited to: site preparation, clearing, demolition, excavation, shoring, foundation installation, and building construction.

I agree to implement the attached mitigation measure( $m{k}$ ) as a condition of project approval.

5/17/24 Date Property Owner or Legal Agent Printed Name Signature Property Owner or Legal Agent Printed Name Ryan Guibara, Agent for Owner

Note to sponsor: Please contact CPC.EnvironmentalMonitoring@sfgov.org to begin the environmental monitoring process prior to the submittal of your building permits to the San Francisco Department Building Inspection.

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## Plan Francisco

## MITIGATION MONITORING AND REPORTING PROGRAM

	Monitoring and Reporting P	rogram <sup>a</sup>		
Adopted Mitigation Measure	Imple mentation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
MITIGATION MEASU	JRES AGREED TO BY PROJI	ECT SPONSOR		
HISTORICARCH	IITECTURAL/CULTURAL RE	SOURCES		
<b>Project Mitigation Measure 1: Accidental Discovery</b> The following mitigation measure is required to avoid any potential adverse effect from the proposed project on accidentally discovered buried or submerged historical resources as defined in CEQA Guidelines Section 15064.5(a) and (c).				
<u>Alert Sheet.</u> The project sponsor shall distribute the Planning Department archeological resource "ALERT" sheet to the project prime contractor; to any project subcontractor (including demolition, excavation, grading, foundation, pile driving, etc. firms); or utilities firm involved in soils-disturbing activities within the project site. Prior to any soils-disturbing activities being undertaken, each contractor is responsible for ensuring that the "ALERT" sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, supervisory personnel, etc. The project sponsor shall provide the Environmental Review Officer (ERO) with a signed affidavit from the responsible parties (prime contractor, subcontractor(s), and utilities firm) confirming that all field personnel have received copies of the Alert Sheet.	Project sponsor	Prior to any soils- disturbing activities	Project sponsor shall distribute Alert sheet and shall submit a signed affidavit confirming the distribution to the ERO.	Considered complete when ERO receives signed affidavit.
Stop Work and Notification Upon Discovery. Should any indication of an archeological resource be encountered during any soils-disturbing activity of the project, the project Head Foreman and/or project sponsor shall immediately notify the ERO and shall immediately suspend any soils-disturbing activities in the vicinity of the discovery until the ERO has determined what additional measures should be undertaken.	Project Head Foreman and/or project sponsor	During soils disturbing activity	Project Head Foreman or sponsor shall contact the ERO.	Considered complete when ERO has been notified and resource is protected

	Monitoring and Reporting P	rogram <sup>a</sup>		
Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
Discovery Identification. Evaluation, and Treatment Determination. If the ERO determines that an archeological resource may be present within the project site, the project sponsor shall retain the services of an archeological consultant from the Qualified Archeological Consultant List maintained by the Planning Department. The archeological consultant shall advise the ERO as to whether the discovery is an archeological resource as well as if it retains sufficient integrity and is of potential scientific/historical/cultural significance. If an archeological resource is present, the archeological consultant shall identify, document, and evaluate the archeological resource. The archeological consultant shall indentify, document, and evaluate the archeological resource. The archeological consultant shall make a recommendation as to what action, if any, is warranted. Based on this information, the ERO may require, if warranted, specific additional measures to be implemented by the project sponsor. Measures might include preservation <i>in situ</i> of the archeological resource; an archeological monitoring program; an archeological interpretive, monitoring, and/or testing program is required, it shall be consistent with the Environmental Planning Division guidelines for such program s and shall be implemented immediately. The ERO may also require that the project sponsor immediately implement a site security program if the archeological resource is at its from vandalism, looting, or other damaging actions.	Archaeological consultant and ERO	After discovery of possible resource	The sponsor shall retain a qualified archeological consultant at the direction of the ERO. The archeological consultant shall identify and evaluate the archeological resources and recommend actions for review and approval by the ERO. The archeological consultant shall undertake additional treatment if needed.	Considered complete when treatment determination has been approved by the ERO.

	Monitoring and Reporting P	rogram <sup>a</sup>		
	Implementation		Monitoring/Reporting	Monitoring Actions/
Adopted Mitigation Measure	Responsibility	Mitigation Schedule	Responsibility	<b>Completion Criteria</b>
Consultation with Descendant Communities. On discovery of an archeological site	Archaeological	After discovery of	Archaeological	Considered completed
associated with descendant Native Americans, the Overseas Chinese, or other	consultant, descendant	significant resource	consultant contacts	after descendant group
potentially interested descendant group an appropriate representative of the	group, project sponsor,	associated with a	descendant group(s).	has received ARR and
descendant group and the ERO shall be contacted. The representative of the	and ERO	descendant group	Archaeological	been compensated for
descendant group shall be given the opportunity to monitor archeological field		)	consultant, ERO, and	work on deliverables.
investigations of the site and to offer recommendations to the ERO regarding			project sponsor, and	
appropriate archeological treatment of the site, of recovered data from the site,			representative(s)	
and, if applicable, any interpretative treatment of the associated archeological site.			determine scope of	
The ERO and project sponsor shall work with the tribal representative or other			work for deliverables.	
representatives of descendant communities to identify the scope of work to fulfill			Project sponsor is	
the requirements of this mitigation measure, which may include participation in			responsible for	
preparation and review of deliverables (e.g., plans, interpretive materials, artwork).			compensating	
Representatives shall be compensated for their work as identified in the agreed			descendant(s) for work	
upon scope of work. A copy of the Archeological Resources Report (ARR) shall be			in preparation and	
provided to the representative of the descendant group.			review of deliverables.	
			Archaeological	
			consultant sends ARR to	
			descendant(s).	

Mitigation Monitoring and Reporting Program May 15, 2024

<u>Archeo</u> be conc all threa preserv archeol consult ADRP. T submitt	logical Data Recovery Plan. An archeological data recovery program shall ducted in accordance with an Archeological Data Recovery Plan (ADRP) if e of the following apply: 1) a resource has potential to be significant, 2) ation in place is not feasible, and 3) the ERO determines that an logical data recovery program is warranted. The project archeological ant, project sponsor, and ERO shall meet and consult on the scope of the "he archeological consultant shall prepare a draft ADRP that shall be ted to the ERO for review and approval.	ERO, archeological consultant, and Project Sponsor.	After determination by ERO that an archeological data recovery program is required	Archeological consultant to prepare an ADRP in consultation with ERO	Considered complete upon approval of ADRP by ERO.
The AD. signific. the ADF the exp how the Data rei propert recover recover nondes	RP shall identify how the proposed data recovery program will preserve the ant information the archeological resource is expected to contain. That is, RP will identify what scientific/historical research questions are applicable to ected resource, what data classes the resource is expected to possess, and e expected data classes would address the applicable research questions. covery, in general, should be limited to the portions of the historical by that could be adversely affected by the proposed project. Destructive data y methods shall not be applied to portions of the archeological resources if tructive methods are practical.				
The sco	ope of the ADRP shall include the following elements: <i>Field Methods and Procedures</i> . Descriptions of proposed field strategies, procedures, and operations. <i>Cataloguing and Laboratory Analysis</i> . Description of selected cataloguing system and artifact analysis procedures.				
• •	Discard and Deaccession Policy. Description of and rationale for field and post-field discard and deaccession policies. Security Measures. Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally				
•	damaging activities. <i>Final Report</i> . Description of proposed report format and distribution of results.				
•	<i>Curation</i> . Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.				

Case No. 2023-001074ENV 700 Indiana Street

<u>Human Remains and Funerary Objects</u> . The treatment of human remains and	Archeological	Discovery of human	Notification of	Considered complete
funerary objects discovered during any soil-disturbing activity shall comply with	consultant or medical	remains	County/City Coroner	on finding by ERO that
applicable State and federal laws. This shall include immediate notification of the	examiner		and, as warranted,	all State laws regarding
Medical Examiner of the City and County of San Francisco. The ERO also shall be			notification of NAHC.	human remains/burial
notified immediately upon the discovery of human remains. In the event of the				objects have been
Medical Examiner's determination that the human remains are Native American				adhered to,
remains, the Medical Examiner shall notify the California State Native American				consultation with MLD
Heritage Commission, which will appoint a Most Likely Descendant (MLD). The MLD				is completed as
will complete his or her inspection of the remains and make recommendations or				warranted, approval of
preferences for treatment within 48 hours of being granted access to the site				Archeological Results
(Public Resources Code section 5097.98(a)).				Report, and disposition
				of human remains has
The landowner may consult with the project archeologist and project sponsor and chall consult with the MI D and CEOA load according to proservation in place or				occurred as specified in
recovery of the remains and any scientific treatment alternatives. The landowner				31121122190
shall then make all reasonable efforts to develop an Agreement with the MLD, as				
expeditiously as possible, for the treatment and disposition, with appropriate				
dignity, of human remains and funerary objects (as detailed in CEQA Guidelines				
section 15064.5(d)). Per PRC 5097.98 (b)(1), the Agreement shall address and take				
into consideration, as applicable and to the degree consistent with the wishes of				
the MLD, the appropriate excavation, removal, recordation, scientific analysis,				
custodianship prior to reinterment or curation, and final disposition of the human				
remains and funerary objects. If the MLD agrees to scientific analyses of the				
remains and/or funerary objects, the archeological consultant shall retain				
possession of the remains and funerary objects until completion of any such				
analyses, after which the remains and funerary objects shall be reinterred or				
curated as specified in the Agreement.				
Both parties are expected to make a concerted and good faith effort to arrive at an				
Agreement, consistent with the provisions of PRC 5097.98. However, if the				
landowner and the MLD are unable to reach an Agreement, the landowner, ERO,				
and project sponsor shall ensure that the remains and/or mortuary materials are				
stored securely and respectfully until they can be reinterred on the property, with				
appropriate dignity, in a location not subject to further or future subsurface disturbance consistent with state law				
מוסנמו המוורבל כמוסוסנבוור גאונו סנמנב ומאי.				
Treatment of historic-period human remains and of associated or unassociated				
follow protocols laid out in the project's Archeological treatment documents, and				
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	Monitoring and Reporting P	rogram <sup>a</sup>		
Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
in any related agreement established between the project sponsor, Medical Examiner and the ERO.				
Cultural Resources Public Interpretation Plan. The project archeological consultant	Archeological	Following completion	Archeological	CRPIP is complete on
shall submit a Cultural Resources Public Interpretation Plan (CRPIP) if a significant	consultant at the	of treatment and	consultant submits	review and approval of
archeological resource is discovered during a project. As directed by the ERO, a	direction of the ERO will	analysis of significant	draft CRPIP	ERO. Interpretive
qualified design professional with demonstrated experience in displaying	prepare CRPIP. Measure	archeological resource	to ERO for review and	program is complete on
information and graphics to the public in a visually interesting manner, local artists,	laid out in CRPIP are	by archeological	approval.	notification to ERO from
or community group may also be required to assist the project archeological	implemented by	consultant.		the project sponsor that
consultant in preparation of the CRPIP. If the resource to be interpreted is a tribal	sponsor and consultant.			program has been
cultural resource, the CRPIP shall be prepared in consultation with and developed				implemented.
with the participation of Ohlone tribal representatives. The CRPIP shall describe the				
interpretive product(s), locations or distribution of interpretive materials or				
displays, the proposed content and materials, the producers or artists of the				
displays or installation, and a long-term maintenance program. The CRPIP shall be				
sent to the ERO for review and approval. The CRPIP shall be implemented prior to				
occupancy of the project.				

	Monitoring and Reporting P	'rogram <sup>a</sup>		
Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
<u>Archeological Resources Report.</u> The project archeological consultant shall submit a confidential draft Archeological Resources Report (ARR) to the ERO that evaluates the historical significance of any discovered archeological resource, describes the archeological and historical research methods employed in the archeological monitoring/data recovery program(s) undertaken, and discusses curation arrangements.	Archeological consultant at the direction of the ERO.	Following completion of treatment by archeological consultant as determined by the ERO.	Planning Department / project sponsor	Complete on certification to ERO that copies of the approved ARR have been distributed
Once approved by the ERO, copies of the approved ARR shall be distributed as follows: California Archeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy, and the ERO shall receive a copy of the transmittal of the ARR to the NWIC. The environmental planning division of the planning department shall receive one (1) bound hardcopy of the ARR. Digital files that shall be usubmitted to the environmental division include an unlocked, searchable PDF version of the ARR, GIS shapefiles of the site and feature locations, any formal site recordation forms (CA DPR 523 series), and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. The PDF ARR, GIS files, recordation forms, and/or nomination documentation should be submitted via USB or other stable storage device. If a descendant group was consulted during archeological treatment, a PDF of the ARR shall be provided to the representative of the descendant group.				
<u>Curation</u> . Significant archeological collections and paleoenvironmental samples of future research value shall be permanently curated at an established curatorial facility. The facility shall be selected in consultation with the ERO. Upon submittal of the collection for curation the sponsor or archeologist shall provide a copy of the signed curatorial agreement to the ERO.	Project archeologist prepares collection for curation and project sponsor pays for curation costs.	In the event a significant archeological resource is discovered and upon acceptance by the ERO of the ARR	Planning Department / project sponsor	Considered complete upon acceptance of the collection by the curatorial facility

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	Monitoring and Reporting P	rogram		
Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
	NOISE			
Project Mitigation Measure 2: Construction Noise	Project sponsor's	Prior to the issuance of	Planning Department	Considered complete
The project sponsor shall develop a set of site-specific noise attenuation measures under the supervision of a qualified acoustical consultant. Prior to commencing	qualified acoustical consultant and	construction permits		after approval construction noise
construction, a plan for such measures shall be submitted to the Planning Department to ensure that maximum feasible construction noise attenuation is achieved. Attenuation measures shall include as many of the following control	construction contractor			control plan and construction activities
strategies as follows, or other equivalent strategies that reduce construction noise:				completed.
<ul> <li>Erect temporary plywood noise barriers around a construction site, particularly where a site adjoins noise-sensitive uses;</li> </ul>				
<ul> <li>Use noise control blankets on a building structure as the building is being erected to reduce noise emission from the site:</li> </ul>				
Evaluate the feasibility of noise control at the receivers by temporarily				
improving the noise reduction capability of adjacent buildings housing sensitive uses;				
<ul> <li>Monitor the effectiveness of noise attenuation measures by taking noise</li> </ul>				
measurements; and				
Post signs on-site pertaining to permitted construction days and hours and				
complaint procedures and who to notify in the event of a problem, with telephone numbers listed.				

	Monitoring and Reporting P	rogram <sup>a</sup>		
Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
	AIR QUALITY			
Project Mitigation Measure 3: Construction Air Quality	Project sponsor and	Prior to issuance of	Planning Department	Considered complete
The project sponsor shall comply with the following:	construction contractor	project sponsor to submit-		upon planning departm ent review and
A. Engine Requirements		1. Construction		acceptance
<ol> <li>All off-road equipment greater than 25 hp and operating for more than 20 total hours over the entire duration of construction activities shall have engines that meet or exceed either U.S. Environmental Protection Agency</li> </ol>		emissions minimization plan for		or construction emissions minimization plan, implementation of
(EPA) or California Air Resources Board (air board) Tier 4 Interim or Tier 4 Final off-road emission standards.		and		the plan, and submittal of final report
2. Where access to alternative sources of power are available, portable diesel		Signed certification		summarizing use of
engines (e.g., generators) shall be prohibited. 3 Diesel angines whetherfor off-road or on-road equinment shall not he left		statement		construction equipment
idling for more than two minutes, at any location, except as provided in				pursuant to the plan.
exceptions to the applicable state regulations regarding idling for off-road				
and on-road equipment (e.g., traine conductors) safe operating conductors). The contractor shall post legible and visible signs in English, Spanish, and				
Chinese, in designated queuing areas and at the construction site to remind operators of the two-minute idline limit				
4. The project sponsor shall instruct construction workers and equipment				
operators on the maintenance and tuning of construction equipment and require that such workers and operators properly maintain and tune equipment in accordance with manufacturer specifications.				
B. Waivers				
The Planning Department's environmental review officer or designee (ERO) may waive the alternative source of power requirement of Subsection (A)(2) if an alternative source of power is limited or infeasible at the project site. If the ERO grants the waiver, the contractor must use the next cleanest piece of off-road equipment, or another alternative that results in comparable reductions of diesel particulate matter.				

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Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
C. Construction Emissions Minimization Plan: Before starting on-site construction activities, the contractor shall submit a construction emissions minimization plan (plan) to the ERO for review and approval. The plan shall state, in reasonable detail, how the contractor will meet the engine requirements of Section A.				
<ol> <li>The Plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, but is not limited to: equipment type, equipment manufacturer, equipment identification number, engine model vear. engine certification (Tier rating). horsepower, engine serial number, and</li> </ol>				
expected fuel use and hours of operation. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used.				
<ol><li>The project sponsor shall ensure that all applicable requirements of the plan have been incorporated into the contract specifications. The plan shall include a certification statement that the project sponsor agrees to comply fully with the plan.</li></ol>				
3. The project sponsor shall make the plan available to the public for review on- site during working hours. The project sponsor shall post at the construction site a legible and visible sign summarizing the plan. The sign shall also state that the public may ask to inspect the plan for the project at any time during				
working hours and shall explain how to request to inspect the plan. The project sponsor shall post at least one copy of the sign in a visible location on each side of the construction site facing a public right-of-way.				
<i>D. Monitoring:</i> After start of construction activities, the contractor shall submit reports every six months to the ERO documenting compliance with the plan. After completion of construction activities and prior to receiving a final certificate of occupancy, the project sponsor shall submit to the ERO a final report summarizing construction activities, including the start and end dates and duration of each construction phase, and the specific information required in the plan.				

	Monitoring and Reporting F	Program <sup>a</sup>		
Adopted Mitigation Measure	Imple mentation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
Project Mitigation Measure 4: Siting of Uses that Emit Other TACs	Project sponsor	Prior to the beginning of	Project sponsor to	Considered complete
Prior to the beginning of operations, the project sponsor shall ensure that all laboratory uses prepare an analysis that includes, at a minimum, a site survey identifying all residential or other sensitive receptors within 1,000 feet of the project site, as well as all potential toxic air contaminants (TACs) emissions from equipment associated with the laboratory operations. The sponsor must demonstrate efforts taken to reduce TAC emissions including incorporating best available control technology and that all relevant regulations, such as from the Bay Area Air Quality Management District (Air District) are met.		operations for each building operator or manager, provided that the building operator can demonstrate that tenants would not have the potential to emit TACs from laboratory operations. If building tenants have the potential to emit TACs, then this mitigation would apply prior to the beginning of operations for each laboratory use.	submit TAC emissions analysis to planning department	upon planning department approval of analysis

## NOTES:

<sup>a</sup> Definitions of MMRP Column Headings:

Adopted Mitigation and Improvements Measures: Full text of the mitigation measure(s) copied verbatim from the final CEQA document. Implementation Responsibility: Entity who is responsible for implementing the mitigation measure. In most cases this is the project sponsor and/or project's sponsor's contractor/consultant and at times under the direction of the planning department.

*Mitigation Schedule:* Identifies milestones for when the actions in the mitigation measure need to be implemented.

Monitoring/Reporting Responsibility: Identifies who is responsible for monitoring compliance with the mitigation measure and any reporting responsibilities. In most cases it is the Planning Department who is responsible for monitoring, there should be an exponsible for monitoring compliance with the mitigation measure. If a department or agency other than the planning department is identified as responsible for monitoring, there should be an expressed agreement between the planning department/agency. In most cases the project sponsor, their contractor, or consultant are responsible for any reporting

Monitoring Actions/Completion Criteria: Identifies the milestone at which the mitigation measure is considered complete. This may also identify requirements for verifying compliance. requirements.

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## Exhibit B

General Plan Evaluation for Projects Consistent with Eastern Neighborhoods Area Plan Case No.: 2023-001074ENV, 700 Indiana Street, dated April 5, 2024



## **GENERAL PLAN EVALUATION** For projects consistent with eastern neighborhoods area plan

Case No.:	2023-001074ENV, 700 Indiana Street
Zoning:	UMU- Urban Mixed Use
	58-X Height and Bulk Districts
Plan Area:	Central Waterfront
Block/Lot:	4062/007
Lot Size:	31,090 square feet
Project Sponsor:	Ryan Guibara, rguibara@mbcbiolabs.com
Staff Contact:	Ryan Shum, ryan.shum@sfgov.org, 628-652-7542

## A. Project Description

The proposed project at 700 Indiana Street, Assessor's Block and Lot, 4062/007, is located on Indiana Street within the Dogpatch neighborhood of San Francisco between 19th Street to the north, 20th street to the south, Indiana Street to the east, and Highway 280 to the west (see Figure 1, Project Location). The lot size is 31,090 square feet and rectangular in shape. The site has an existing 15,000 square-foot, commercial storage building on the northern portion of the site and a paved yard containing a fence enclosure on the southern portion. The existing structure is currently vacant.

The proposed project would demolish the existing building and construct a new three-story over basement laboratory use building with 72,349 gross square feet of laboratory use. The proposed building would have two varying heights based on the location along Indiana Street, to provide open space for building users on the third floor. The north side of the proposed building would be 48 feet in height (54 feet including rooftop mechanical equipment and elevator penthouse), and the south side of the building would be 33 feet in height (39 feet including rooftop mechanical equipment). The proposed building would include laboratory space and meeting rooms on each floor. The ground floor would also include space for a transformer room that would be obscured behind a hinged gate. The third-floor roof top would contain a roof terrace and a break area. In total, the project would provide 8,440 square feet of common outdoor space.

A 29, 336 square-foot basement would provide 53 vehicle parking spaces (includes two EV charging spaces), two ride share spaces, 11 class 1 bicycle parking spaces, four class 2 bicycle parking spaces, four showers, a bicycle repair station, and 24 clothes lockers.

The project would remove the two existing curb cuts on Indiana Street and would provide one off street loading and delivery space, as well as a vehicular parking entrance near the corner of Indiana and 20<sup>th</sup> streets. One 30-foot wide curb cut leading to two 12-foot wide vehicular entrances for the loading area and parking

garage would be provided. The project would install 13 new street trees along Indiana street and would not remove any trees as there are no existing trees fronting the project site. Three planter boxes would also be installed along Indiana Street.

The project site also abuts Dogpatch Arts Plaza to the north and Avalon Dogpatch Dog Park to the south. The Dogpatch Arts Plaza currently contains stadium-type seating, art installation space and tables and chairs. Additionally, the project intends to include improvements to the Dogpatch Arts Plaza space such as a shade canopy over the stadium seating, adding planter boxes and landscaping, elevate the plaza to align it with the proposed building face, adding an art installation space and a rock garden with furniture. Avalon Dogpatch Dog Park is a private park that abuts the project site's southern boundary and associated with the apartment building to the south.

The estimated construction duration of the proposed project is 30 months. The maximum depth of excavation would be 15 feet below grade with a total of 16,500 cubic yards of excavation. The proposed foundation would consist of mat foundation bearing on improved soils. See Table 1, Proposed Project and Existing Building Characteristics Comparison.

Project Components	Existing	Proposed	Net Change
Building Stories	1	3 (over basement)	3 (over basement)
Building Height	Approx. 38 feet	54 feet including rooftop mechanical equipment and elevator penthouse	+15 feet
Commercial (Storage)	15,000 sf	0 sf	-15,000 sf
Laboratory	0	72,349 sf	+72,349 sf
Private Open Space	0	8,440 sf	+8,440 sf
Off Street Parking Spaces	0	53	+53
Class 1 Bicycle Parking Spaces	0	99	+99
Class 2 Bicycle Parking Spaces	0	4	+4

## Table 1: Proposed Project and Existing Building Characteristics Comparison

† gsf = gross square feet

\* One loading vehicle can fit into the existing on-site vehicle parking space.

The proposed 700 Indiana Street project would require the following approvals:

San Francisco Planning Commission Approval of Large Project Authorization (ENX)

San Francisco Planning Department Approval of a Transportation Demand Management Program (TDM)(PC169)

**San Francisco Municipal Transportation Agency** Approval of transportation-related project modifications

**San Francisco Bureau of Urban Forestry** Approval of the planting of new street trees.

**San Francisco Department of Building Inspection** Approval of building permits.

San Francisco Department of Public Health Review for compliance with the Maher Ordinance, article 22A of the Health Code.

**Approval Action:** The proposed project requires a Large Project Authorization (ENX). A Planning Commission approval at the public hearing would constitute the Approval Action for the project for the purposes of CEQA, pursuant to San Francisco Administrative Code Section 31.04(h). The approval action date establishes the start of the 30-day appeal period for this CEQA determination pursuant to section 31.04(h) of the San Francisco Administrative Code.

## **B.** General Plan Evaluation Overview and Summary of Project's Environmental Effects

California Environmental Quality Action (CEQA) section 21083.3 and CEQA Guidelines section 15183 mandate that projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an environmental impact report (EIR) was certified, *shall not* be subject to additional environmental review except as might be necessary to examine whether there are project-specific significant effects that are peculiar to the project or its site. Guidelines section 15183 specifies that examination of environmental effects shall be limited to those effects that:

- a) Are peculiar to the project or parcel on which the project would be located;
- b) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan or community plan with which the project is consistent;
- c) Are potentially significant off-site and cumulative impacts that were not discussed in the underlying EIR; or
- d) Are previously identified in the EIR, but which, as a result of substantial new information that was not known at the time that the EIR was certified, are determined to have a more severe adverse impact than that discussed in the underlying EIR.

Section 15183(c) specifies that if an impact is not peculiar to the parcel or to the proposed project, then an EIR need not be prepared for the project solely on the basis of that impact.

The proposed project is consistent with the development density established by the Eastern Neighborhoods Area Plan. This general plan evaluation assesses this project's potential environmental effects and incorporates by reference information contained in the programmatic EIR for the Eastern Neighborhoods Area Plan (Eastern Neighborhoods PEIR).<sup>1</sup>

## **Summary of Project's Environmental Effects**

The proposed project could significantly affect the environmental resource topic(s) checked below. However, the proposed project would not result in any new or substantially more severe impacts than were identified in the Eastern Neighborhoods PEIR. The following pages present a more detailed checklist and discussion of the resource topics listed below.<sup>2</sup>

Land Use	□ Transportation		Wind
☑ Cultural Resources	🛛 Noise	$\boxtimes$	Shadow
☑ Tribal Cultural Resources	🖾 Air Quality		Paleontological Resources

<sup>1</sup> Planning Department Case No. 2004.0160E and State Clearinghouse No. 2005032048. Available at <u>https://sfplanning.org/environmental-review\_documents?field\_environmental\_review\_categ\_target\_id=214&items\_per\_page=10</u>.

<sup>2</sup> The resource topics listed here reflect those topics evaluated further in this general plan evaluation. Refer to D. Evaluation of Environmental Effects for more details.

## **Project-Specific Studies**

Planning Department staff or consultants directed by Planning Department staff prepared the following project-specific studies:<sup>3</sup>

- oxtimes Historic Architectural Resources oxtimes Noise
- Archeology

- ⊠ Air Quality
- 🛛 Shadow
- ality 🛛 Transportation
- Tribal Cultural Resources
- $\boxtimes$  Wind
- □ Paleontology

## C. Project Setting

## **Existing Site Vicinity**

The project site is located at 700 Indiana Street on a lot approximately 31,000 square feet and rectangular in shape. The project site and surrounding parcels are within the Eastern Neighborhoods Plan Area and the UMU (Urban Mixed Use) Zoning District. The project site is located adjacent to Dogpatch Arts Plaza to the north, Espirit Park to the east, Avalon Dogpatch Park to the south, and Interstate 280 to the west. The project site is surrounded by residential development across 19<sup>th</sup> Street and 20<sup>th</sup>, and the University of California, San Francisco Police Department in the northwest corner. Surrounding development ranges from two to five stories in height and generally consists of mixed-use residential and commercial buildings.

The project site is within a 58-X height and bulk district. Other height and bulk districts in the area include 40-X to the west and 50-X to the east.

## **Cumulative Setting**

CEQA Guidelines section 15130(b)(1) provides two methods for cumulative impact analysis: the "projectionsbased approach" and "list-based approach." This general plan evaluation employs both approaches, depending on which approach best suits the resource topic being analyzed. In accordance with CEQA Guidelines section 15183(j), if a significant cumulative impact was adequately discussed in the Eastern Neighborhoods PEIR, further analysis of that cumulative impact is not required.

## Projections-Based Approach

In general, a projections-based approach uses projections contained in a general plan or related planning document to evaluate the potential for cumulative impacts. This general plan evaluation uses projections in the Eastern Neighborhoods Plan PEIR for certain resource topics (e.g., transit delay, regional air pollution) to evaluate the potential for cumulative impacts.

## List-Based Approach

In general, the list-based approach uses a list of projects producing closely-related impacts that could combine with those of a proposed project to evaluate whether the project would have a potential significant

<sup>&</sup>lt;sup>3</sup> Project-specific studies prepared for the 700 Indiana Street project are available for review on the San Francisco Property Information Map, which can be accessed at https://sfplanninggis.org/PIM/. Individual files can be viewed by clicking on the Planning Applications link, clicking the "More Details" link under the project's environmental case number 2023-001074ENV and then clicking on the "Related Documents" link.

cumulative impact. This general plan evaluation uses a list-based approach for certain resource topics (e.g., historical architectural resources) to evaluate the potential for cumulative impacts. The following is a list of reasonably foreseeable projects within the project vicinity (approximately one-quarter mile)<sup>4</sup> that are included:

- **Pier 70 Mixed-Use District Project (2014.0713E).** Development of a 28-acre site east of Illinois Street approximately between 18th and 20th streets. A master development agreement was approved in 2018, and construction is anticipated to occur in phases lasting until 2029.
- **Potrero Power Station Mixed-Use Development Project (2017-011878ENV).** Development of a 29-acre site with residential, commercial, parking, community facilities, and open space land uses. A master development agreement was approved in 2020. Construction is estimated to occur in multiple phases over a 16-year period, starting in the southeast portion of the site and ending in the northwest portion of the site. Blocks 1, 5, and 13, in the northwest portion of the site, are located within one quarter mile of the 600 20th Street project site; construction of these sites is anticipated to occur in 2027-2034.
- **600 20<sup>th</sup> Street (2021-010333ENV).** Demolition of a two-story commercial building with one unauthorized dwelling unit, and the construction of a five-story 68-foot-tall, approximately 24,691-square-foot (sf) building containing 12,040 sf of office use, 3,353 sf of non-life science laboratory use, 4,238 sf of arts activities, and one 4,707 sf residence. With one vehicle parking space for residential use and three class 1 bicycle parking spaces.
- **2230 3rd Street (2013.0531E).** Demolition of a 5,600-square-foot light industrial building and construction of a 68-foot-tall, six-story, 39,494-square-foot mixed-use building with medical services and life-science office and laboratory uses, ground-floor retail, and parking for 15 vehicles.

## D. Evaluation of Environmental Effects

This section has two parts. The first part is the Approach to Analysis, which describes the approach to analysis for evaluating this project's potential environmental effects, including explaining reasons for excluding certain resource topics from further evaluation. The second part is Resource Topics Evaluation, which provides the evaluation of this project's potential environmental effects for remaining resource topics.

## **Approach to Analysis**

This general plan evaluation assesses the proposed project's individual and cumulative environmental effects to determine if such effects are adequately addressed in the Eastern Neighborhoods PEIR or if additional environmental review is required in accordance with CEQA Guidelines section 15183. This general plan evaluation incorporates the Eastern Neighborhoods PEIR by reference and, to assist the reader, also summarizes the physical environmental effects identified in that PEIR. For each environmental topic, the corresponding PEIR section is provided for reference; please refer to the Eastern Neighborhoods PEIR for a detailed description of the methodology and analysis of each topic, including applicable regulations, screening criteria, significance criteria, and thresholds of significance.

<sup>4</sup> This is an approximate distance to assess cumulative impacts using the list-based approach. Some resource topics may not require assessing cumulative impacts at this distance.

Each environmental resource topic discussion below is separated into two main analysis sections: Existing Plus Project Impacts and Cumulative Impacts. Each section is further divided into two columns:

- Eastern Neighborhoods Plan PEIR (left column) summarizes the PEIR findings for the environmental effects of future development consistent with the Eastern Neighborhoods Plan; and
- Proposed Project (right column) is this general plan evaluation's analysis of the project-specific environmental effects of the 700 Indiana Street project. Where applicable, the evaluation cites project-specific studies where the reader can find more information.

For each resource topic that has impacts that are significant or less than significant with mitigation, the two sections and columns are further divided into subcategories that correspond with the CEQA checklist questions. In some sections, the lettering of the checklist questions is not sequential because some checklist questions associated with resource topics are not evaluated further for the reasons explained below.

Where applicable, mitigation measures from the Eastern Neighborhoods PEIR are identified under each environmental topic. Some mitigation measures from the PEIR were modified to reflect the specific characteristics of the project. The full text of applicable mitigation measures is provided in Attachment B, Mitigation Monitoring and Reporting Program (MMRP). The level of significance of the impact is identified in parentheses at the end of the analysis for each subcategory (e.g., *"Less than Significant with Mitigation"*).

Table 2 summarizes the Eastern Neighborhoods PEIR significance findings. The Eastern Neighborhoods PEIR identified significant impacts related to land use; historical architectural resources (plan level and cumulative); archeological resources; transportation and circulation (plan level and cumulative); noise; air quality; shadow; and hazardous materials.

The PEIR identified mitigation measures that would reduce the following impacts to less-than-significant levels: archeological resources, noise, air quality, and hazardous materials. The PEIR identified mitigation measures related to historic cultural resources (program level and cumulative), and transportation (program level and cumulative), but impacts would remain significant and unavoidable. The PEIR identified significant and unavoidable impacts related to land use and shadow.

Significance Determination	Resource Topic
Not Applicable or No Impact	Recreation; utilities and service systems; public services; biological resources; geology and soils; hydrology and water quality; and energy.
Less than Significant	Population and housing; greenhouse gas emissions; and wind.
Less than Significant with Mitigation	Cultural/archeological resources; noise; air quality; and hazardous materials.
Significant and Unavoidable with Mitigation	Cultural/historical architectural resources (program level and cumulative); tribal cultural resources; and transportation and circulation (program-level and cumulative traffic impacts at nine intersections, and program-level and cumulative transit

## Table 2: Summary of Eastern Neighborhoods PEIR Impact Determinations by Topic
Significance Determination	Resource Topic
	impacts on seven Muni lines).
Significant and Unavoidable	Shadow; and cumulative land use (loss of production, distribution, and repair [PDR] use).

# Table 2: Summary of Eastern Neighborhoods PEIR Impact Determinations by Topic

*Note*: Resource topics follow the current initial study checklist adopted by the San Francisco Planning Department, based on Appendix G in current CEQA Guidelines. The Eastern Neighborhoods PEIR addressed these topics under slightly different resource topic titles.

# **Resource Topics Not Evaluated Further**

This general plan evaluation does not evaluate resource topics (listed in the first two rows of Table 2) that the Eastern Neighborhoods PEIR identified are not applicable or topics that would have no impact or a less-thansignificant impact. This is because the PEIR analysis determined that future development consistent with the Eastern Neighborhoods Plan, such as the proposed project, would not have the potential to result in significant physical environmental impacts related to those topics.

The Eastern Neighborhoods PEIR did not evaluate impacts related to mineral resources, agriculture and forestry resources, or wildfire. San Francisco does not contain any mineral resources that are of value to the state, regional, or local level; does not have any prime farmland or other agricultural resources or forest resources; and is not located in a wildfire hazard zone.

Given these reasons, the proposed project would not have a peculiar impact, a significant impact not previously identified in the Eastern Neighborhoods PEIR, or a more severe adverse significant impact due to substantial new information on these resource topics, and they are not evaluated here.

# **Resource Topics Evaluation**

# Land Use Would the project:

a) Have a substantial adverse impact on the existing character of the vicinity?<sup>5</sup>

Cumulative Impacts	
Eastern Neighborhoods PEIR	Proposed Project
<b>Land Use</b> [PEIR pp. 35–82]. The PEIR identified cumulative land use impacts related to the loss of PDR uses due to rezoning. <i>(Significant and</i> <i>Unavoidable)</i>	The proposed project would not change the zoning of the project site ( <i>Less than Significant</i> )
Conclusion – Land Use	

<sup>&</sup>lt;sup>5</sup> This question is no longer on the initial study checklist but is presented here because the PEIR identified a significant and unavoidable impact.

The project would <u>not</u> have a peculiar impact, a significant impact not previously identified in the Eastern Neighborhoods PEIR, or a more severe adverse significant impact due to substantial new information. Therefore, no additional environmental review is required for this topic.

# **Cultural Resources**

Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource pursuant to \$15064.5, including those resources listed in article 10 or article 11 of the San Francisco Planning Code?
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to \$15064.5?
- c) Disturb any human remains, including those interred outside of formal cemeteries?

# **Existing Plus Project Impacts**

Eastern Neighborhoods PEIR Propo	osed Project
Historic Architectural Resources [PEIR pp. 441–The pr474]. The PEIR identifies areas of known historicand theimportance, and demolition of buildingsdesignidentified as historical resources was consideredcontria significant and unavoidable impact. Mitigationidentifiedmeasures (interim procedures for permit reviewno hisand Planning Code amendments regardingapplyhistoric districts) could in some cases reduce theImpactnature of the impact, but it was assumed thatdemolition of historical resources could not bemitigated to a less-than-significant level.(Significant and Unavoidable with Mitigation)	project site does not contain a historic resource the project site is not located within a gnated historic district. The project would not ribute to the significant historic resource impact tified in the Eastern Neighborhoods PEIR, and istoric resource mitigation measures would y to the proposed project. (Less than Significant act)

# **Archeological Resources and Human Remains**

[PEIR pp. 419–440]. Area plan development could cause a significant impact to archeological resources and human remains if they are encountered during construction activities. Implementation of Mitigation Measure J-2 requiring archeological review would reduce these impacts. *(Less than Significant with Mitigation)*  The project site is located in the Archeological Mitigation Zone J-2: Properties with No Previous Studies of the Eastern Neighborhoods PEIR. A Cultural Resources Review (CRR) Memo was prepared for the proposed project in conformance with Mitigation Measure J-2. The CRR determined that the project has a low potential to affect archeological resources and that adverse impacts to archeological resources would be reduced by accidental discovery measures. The proposed project would implement PEIR Mitigation Measure J-2 as Mitigation Measure 1 for accidental discovery of buried or subsurface archeological resources. *(Less than Significant with Mitigation)* 

# **Cumulative Impacts**

# Eastern Neighborhoods PEIR

**Historic Architectural Resources** [PEIR pp. 440– 474]. Demolition of buildings identified as historical resources was considered a significant and unavoidable impact on potential and known historic districts. Mitigation measures (interim procedures for permit review and Planning Code amendments regarding historic districts) could in some cases reduce the nature of the impact, but it was assumed that cumulative impacts to historical resources could not be mitigated to a less-than-significant level. (*Significant and Unavoidable with Mitigation*)

# **Proposed Project**

As discussed above, the project site does not contain a historic resource and is not within a designated historic district. As a result, the project would not result in a significant cumulative impact to historic resources, and no historic resource mitigation measures would apply to the proposed project. (Less than Significant Impact)

# **Conclusion - Cultural Resources**

The project would <u>not</u> have a peculiar impact, a significant impact not previously identified in the Eastern Neighborhoods PEIR, or a more severe adverse significant impact due to substantial new information. Therefore, no additional environmental review is required for this topic.

# **Tribal Cultural Resources**

Would the project:

- a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
  - ii) A resource determined by the lead agency in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in this subdivision, the lead agency shall consider the significance of the resource to a California Native American tribe.

# **Existing Plus Project Impacts**

# Eastern Neighborhoods PEIR

**Tribal Cultural Resources** [PEIR pp. 419–440]. All prehistoric archeological resources of Native American origin are presumed to be potential tribal cultural resources. The PEIR found that development could cause a substantial adverse

# **Proposed Project**

As previously discussed, and based on the CRR prepared by department staff, the project has a low potential to affect archeological resources and adverse impacts to archeological resources would be reduced by implementation of accidental discovery

# **Existing Plus Project Impacts**

# Eastern Neighborhoods PEIR

change to the significance of archeological resources because the entire plan area could be considered generally sensitive for archeological resources. On this basis, projects implemented under the PEIR have the potential to result in a substantial adverse change in tribal cultural resources, and PEIR Mitigation Measure J-2 would mitigate impacts to tribal cultural resources to a less-than-significant level as it includes avoidance, as feasible, and interpretation as requested by local Native American tribal representatives. *(Less than Significant with Mitigation)* 

# **Proposed Project**

measures through project Mitigation Measure 1. (Less than Significant with Mitigation)

# **Conclusion – Tribal and Cultural Resources**

The project would <u>not</u> have a peculiar impact, a significant impact not previously identified in the Eastern Neighborhoods PEIR, or a more severe adverse significant impact due to substantial new information. Therefore, no additional environmental review is required for this topic.

# **Transportation and Circulation**

Would the project:

- a) Involve construction that would require a substantially extended duration or intensive activity, and the effects would create potentially hazardous conditions for people walking, bicycling, or driving, or public transit operations; or interfere with emergency access or accessibility for people walking or bicycling; or substantially delay public transit?
- b) Substantially delay public transit?
- c) Result in a loading deficit, and the secondary effects would create potentially hazardous conditions for people walking, bicycling, or driving; or substantially delay public transit?

Existing Plus Project Impacts	
Eastern Neighborhoods PEIR	Proposed Project <sup>6</sup>
<b>Transportation/Circulation Construction</b> <b>Impacts</b> [PEIR p. 302]. The PEIR found that future	Project construction would last approximately 30 months. During construction, the project may result

<sup>6</sup> The project analysis was prepared in accordance with the San Francisco Planning Department's Transportation Impact Analysis Guidelines (February 2019). Upon review of the proposed project, department transportation staff determined that the project does not require Planning Department transportation planner coordination, a site circulation study, or a complex transportation study.

# **Existing Plus Project Impacts**

# Eastern Neighborhoods PEIR

development would result in traffic and circulation impacts at nine intersections. (*Significant and Unavoidable*)

**Public Transit Delay** [PEIR pp. 277–282]. The PEIR found that future development would result in significant transit impacts on seven Muni lines (*Significant and Unavoidable*)

**Loading** [PEIR pp. 301]. The PEIR did not assess loading impacts, as they are specific to individual development projects.

# **Proposed Project<sup>6</sup>**

in temporary closures of the public right-of-way, including parts of the sidewalk or roadway on Indiana or 19th streets. The project would be required to comply with SFMTA blue book and city regulations for construction activities. Given the project site context and construction duration and magnitude, the project would not result in significant construction-related transportation effects. *(Less than Significant)* 

The proposed project would generate approximately 41 p.m. peak hour trips.<sup>7</sup> This trip volume is below 300 p.m. peak hour vehicle trip screening criterion and therefore would not result in a significant transit delay effects. *(Less than Significant)* 

During the average and peak periods, the project's freight and delivery loading demand is approximately one space.<sup>8</sup> The project would provide one off-street loading space for freight and loading. Therefore, the project would meet the project's loading demands. *(Less than Significant)* 

# **Cumulative Impacts**

# Eastern Neighborhoods PEIR

**Transportation Impacts** [PEIR pp. 253–302]. The PEIR found that the program would result in cumulative traffic and circulation impacts at nine intersections and cumulative transit impacts on seven Muni lines (*Significant and Unavoidable*)

# **Proposed Project**

Cumulative projects within the project vicinity (listed in Section C of this document) could be constructed at the same time as the proposed project. However, construction of the proposed project in combination with these cumulative projects is unlikely to result in significant construction-related cumulative transportation impacts because city regulations and requirements that apply to construction activities within the public right-of-way (e.g., SFMTA blue book regulations and Public Works code and construction work requirements) would ensure that construction work is done safely and with the least possible interference to pedestrian, bicycle, transit, and

 <sup>7</sup> San Francisco Planning Department, Transportation Determination or Travel Demand calculations, March 13, 2024
 8 Ibid.

vehicular traffic. Additionally, the proposed project would not involve a high number of truck trips because minimal ground disturbance and soil import and export is required. Therefore, no significant cumulative impact would occur. (Less than Significant)

# **Conclusion – Transportation**

The project would <u>not</u> have a peculiar impact, a significant impact not previously identified in the Eastern Neighborhoods PEIR, or a more severe adverse significant impact due to substantial new information. Therefore, no additional environmental review is required for this topic.

# **Noise and Vibration**

Would the project:

- a) Generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Generate excessive groundborne vibration or groundborne noise levels?

Existing Plus Project Impacts	
Eastern Neighborhoods PEIR	Proposed Project
<b>Construction Noise and Vibration from Pile</b> <b>Driving</b> [PEIR pp. 302–322]. Construction of future development could generate excessive noise and vibration from pile driving equipment. Mitigation Measure F-1 would reduce impacts. <i>(Less than Significant with Mitigation)</i>	Construction of the proposed project would not involve pile driving. ( <i>Not applicable</i> )
<b>Construction Noise and Vibration</b> [PEIR pp. 301– 322]. Construction of future development could generate excessive groundborne vibration and noise from the use of noise- and vibration- generating equipment in proximity to adjacent buildings and structures. Mitigation Measure E-5	Construction of the proposed project would not require the use of equipment that could generate excessive vibration levels. However, construction of the proposed project would use noise-generating equipment, such as air compressors,

concrete/industrial saws, and generators that would affect nearby sensitive receptors. The project would be required to implement PEIR Mitigation Measure F-5 as Project Mitigation Measure 2 to reduce impacts *(Less than Significant with Mitigation)* 

would reduce construction noise and vibration

impacts. (Less than Significant with Mitigation)

**Siting of Noise-Generating Uses** [PEIR Impact F-5, pp. 303–322]. Eastern Neighborhoods PEIR Mitigation Measure F-5 addresses impacts related to individual projects that include uses that would be expected to generate noise levels in excess of ambient noise in the project vicinity. (Less than Significant with Mitigation) An environmental noise assessment was prepared for the proposed project.<sup>9</sup> The assessment found that the proposed project would meet the Noise Ordinance criteria at every property plane except for the western plane. However, the western property plane is adjacent to an unoccupied right-of-way that serves as a buffer area from Interstate-280. In the event that a variance is not obtained for the project and the project is required to meet Noise Ordinance criteria at the western property plane, the project would implement additional noise reduction features at the western property plane to further reduce noise levels. *(Less than Significant)* 

# **Conclusion - Noise and Vibration**

The project would <u>not</u> have a peculiar impact, a significant impact not previously identified in the Eastern Neighborhoods PEIR, or a more severe adverse significant impact due to substantial new information. Therefore, no additional environmental review is required for this topic.

# Air Quality

Would the project:

- a) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard?
- b) Expose sensitive receptors to substantial pollutant concentrations?

# **Existing Plus Project Impacts**

# Eastern Neighborhoods PEIR

**Construction Air Quality** [PEIR pp. 323–362]. The PEIR identified potentially significant air quality impacts resulting from construction activities. Mitigation Measure G-1 would ensure that construction-related emissions would be less than significant. *(Less than Significant with Mitigation)* 

# **Proposed Project**

The proposed project is in the air pollutant exposure zone. Department staff conducted an air quality screening review of the project and determined that the project would have the potential to result in significant air quality impacts.<sup>10</sup> The project would be required to implement PEIR Mitigation Measure G-1, Clean Construction Equipment as Project Mitigation Measure 3 to reduce impacts. *(Less than Significant with Mitigation)* 

9 Charles M. Salter Associates, Inc. 700 Indiana Street Environmental Noise Assessment. 4 March 2024.

10 Planning Department. Air Quality Screening: 700 Indiana Street. March 6, 2024.

# Siting of Uses that Emit Toxic Air Contaminants

[PEIR pp. 323–362]. The PEIR identified potentially significant air quality impacts resulting from operational activities that could result in elevated levels of diesel particulate matter and other toxic air contaminants. PEIR Mitigation Measure G-4 would reduce these impacts. (Less than Significant with Mitigation)

# **Conclusion – Air Quality**

Emissions from project operation, including laboratory uses, could result in significant air pollutant impacts. The project proposes to use the Bloom Energy System, which would use natural gas instead of diesel as its primary source of power. As a result, the project would not result in substantial particulate matter exhaust from stationary sources. *(Less than Significant)* 

The project would <u>not</u> have a peculiar impact, a significant impact not previously identified in the Eastern Neighborhoods PEIR, or a more severe adverse significant impact due to substantial new information. Therefore, no additional environmental review is required for this topic.

# Shadow

Would the project:

Existing Dlus Project Impacts

a) Create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces?

Existing r tus r roject inipacts	
Eastern Neighborhoods PEIR	Proposed Project
<b>Shadow</b> [PEIR pp. 380–418]. Implementation of the project could result in significant shadow impacts on project area parks. <i>(Significant and Unavoidable)</i>	The proposed project would be 48 feet in height (54 feet including rooftop mechanical equipment and elevator penthouse. A shadow analysis prepared for the proposed project found that the project would cast net new shadow on Esprit Park, which is a public park under the jurisdiction of San Francisco Recreation and Parks Commission. <sup>11</sup> The project would add approximately 2.17% of annual net new shadow to Esprit Park.
	As detailed in the shadow study, new shadow cast by the proposed project on public open spaces would not be of an extended duration (ranging from 1 hour 43 minutes up to 2 hours and 17 minutes depending upon the time of year), occurring exclusively in the afternoon and late afternoon (after 1:30 p.m.) and covering a maximum area of 34.37 percent of park area. While net new shadow would

11 Prevision Design. Shadow Analysis for the Proposed 700 Indiana Street Project. January 22, 2024.

Existing Plus Project Impacts	
Eastern Neighborhoods PEIR	Proposed Project
	fall on certain areas and features anticipated to have greater sensitivity to shadow impact due to their fixed locations (fixed seating; exercise areas; picnic tables), the duration and area of net additional shadow would be limited. Therefore, the new shadow cast by the proposed project would not substantially and adversely affect the use and enjoyment of public open spaces. <i>(Less than</i> <i>Significant)</i>

# **Conclusion – Shadow**

The project would <u>not</u> have a peculiar impact, a significant impact not previously identified in the Eastern Neighborhoods PEIR, or a more severe adverse significant impact due to substantial new information. Therefore, no additional environmental review is required for this topic.

# **Paleontological Resources**

Would the project:

f) Directly or indirectly destroy a unique paleontological resource or site?

Existing Plus Project Impacts	
Eastern Neighborhoods PEIR	Proposed Project
<b>Paleontological Resources</b> [PEIR pp. 419–440]. The PEIR addressed paleontological resources as archeological resources, and determined that development could result in significant impacts on archeological resources and identified three mitigation measures that would reduce these potential impacts to a less-than-significant level <i>(Less than Significant with Mitigation).</i>	There are no known unique paleontological resources at the project site. Construction activities would involve excavation up to 15 feet within artificial fill. Therefore, the project would have no impact on project-level or cumulative paleontological resources. (Less than Significant)

# **Conclusion – Paleontological Resources**

The project would <u>not</u> have a peculiar impact, a significant impact not previously identified in the Eastern Neighborhoods PEIR, or a more severe adverse significant impact due to substantial new information. Therefore, no additional environmental review is required for this topic.

# E. Public Notice and Comment

A "Notification of Project Receiving Environmental Review" was mailed on January 26, 2024 to adjacent occupants and owners of properties within 300 feet of the project site and city-wide neighborhood group lists.

appropriate for CEQA analysis. response to the notice were taken into consideration and incorporated in the environmental review as No comments in response to the notice were received. Overall, concerns and issues raised by the public in

# F. Determination

As discussed in this general plan evaluation:

- <u>-</u> Neighborhoods Area Plan; The proposed project is consistent with the development density established by the Eastern
- $^{\rm N}$ the project site that were not identified as significant effects in the Eastern Neighborhoods PEIR; The proposed project would not result in effects on the environment that are peculiar to the project or
- ω were not identified in the Eastern Neighborhoods PEIR; The proposed project would not result in potentially significant off-site or cumulative impacts that
- 4 more severe than were already analyzed and disclosed in the PEIR; and information that was not known at the time the Eastern Neighborhoods PEIR was certified, would be The proposed project would not result in significant effects, which, as a result of substantial new
- ъ Monitoring and Reporting Program (Attachment B) for the full text of required mitigation measures. Neighborhoods PEIR to mitigate project-related significant impacts. See the attached Mitigation The project sponsor will undertake feasible mitigation measures specified in the Eastern

CEQA Guidelines and CEQA section 21083.3. I do hereby certify that the project is eligible for streamlined environmental review per section 15183 of the

Devyani

April 5, 2024

Date

Attachments

- A. Figures
- B. Mitigation Monitoring and Reporting Program



# 700 Indiana St - Location Map



Printed: 4/4/2024

# **ATTACHMENT B**



# AGREEMENT TO IMPLEMENT MITIGATION MONITORING AND REPORTING PROGRAM

Record No.:	2023-001074ENV	Block/Lot:	4062/007
Project Title:	700 Indiana Street	Lot Size:	31,090 square feet
BPA Nos:	n/a	Project Sponsor:	Ryan Guibara, rguibara@mbcbiolabs.com
Zoning:	UMU-Urban Mixed Use District	Lead Agency:	San Francisco Planning Department
	58-X Height and Bulk District	Staff Contact:	Ryan Shum, ryan.shum@sfgov.org, 628-652-7542

The table below indicates when compliance with each mitigation measure must occur. Some mitigation measures span multiple phases. Substantive descriptions of each mitigation measure's requirements are provided on the following pages in the Mitigation Monitoring and Reporting Program. <u>Please note</u> that the City will not accept the building permit application for this project until a Pre-Construction Environmental Compliance Letter has been issued. If you have questions about the monitoring status of your project, please contact the staff listed above, or email CPC.EnvironmentalMonitoring@sfgov.org. Generally, if the mitigation measure has prior to the start of construction requirements (see the Period of Compliance Table below), these measures will require compliance prior to the issuance of the Pre-Construction Environmental Compliance Letter.

	Period of Compliance			Compliance with	
Adopted Mitigation Measure		During Construction**	Post-construction or Operational	Mitigation Measure Completed?	
Project Mitigation Measure 1: Accidental Discovery	Х	Х			
Project Mitigation Measure 2: Construction Noise	Х	Х			
Project Mitigation Measure 3: Construction Air Quality	Х	Х			

NOTES:

\* Prior to any ground disturbing activities at the project site. Prior to the Pre-Construction Environmental Compliance letter issuance and any ground disturbing activities at the project site

\*\* Construction is broadly defined to include any physical activities associated with construction of a development project including, but not limited to: site preparation, clearing, demolition, excavation, shoring, foundation installation, and building construction.

+agree to implement the attached mitigation measure(s) as a condition of project approval.

Property Owner or Legal Agent Signature

4/4/24

Date



Note to sponsor: Please contact <u>CPC.EnvironmentalMonitoring@sfgov.org</u> to begin the environmental monitoring process prior to the submittal of your building permits to the San Francisco Department Building Inspection. Note: A building permit application cannot be submitted for this project until a Pre-Construction Environmental Compliance letter has been received.

# ATTACHMENT B

# **MITIGATION MONITORING AND REPORTING PROGRAM**

	Aonitoring and Reporting Program <sup>a</sup>				
Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria	
MITIGATION MEASURES AGREED TO BY PROJECT SPONSOR					
HISTORIC ARCH	ITECTURAL/CULTURAL R	ESOURCES			
Project Mitigation Measure 1: Accidental Discovery The following mitigation measure is required to avoid any potential adverse effect from the proposed project on accidentally discovered buried or submerged historical resources as defined in CEQA Guidelines Section 15064.5(a) and (c). <u>Alert Sheet.</u> The project sponsor shall distribute the Planning Department archeological resource "ALERT" sheet to the project prime contractor; to any project subcontractor (including demolition, excavation, grading, foundation, pile driving, etc. firms); or utilities firm involved in soils-disturbing activities within the project site. Prior to any soils-disturbing activities being undertaken, each contractor is responsible for ensuring that the "ALERT" sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, supervisory personnel, etc. The project sponsor shall provide the Environmental Review Officer (ERO) with a signed affidavit from the responsible parties (prime contractor(s), and utilities firm) confirming that all field personnel have received copies of the Alert Sheet.	Project sponsor	Prior to any soils- disturbing activities	Project sponsor shall distribute Alert sheet and shall submit a signed affidavit confirming the distribution to the ERO.	Considered complete when ERO receives signed affidavit.	

	Monitoring and Reporting Program <sup>a</sup>			
Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
<u>Stop Work and Notification Upon Discovery</u> . Should any indication of an archeological resource be encountered during any soils-disturbing activity of the project, the project Head Foreman and/or project sponsor shall immediately notify the ERO and shall immediately suspend any soils-disturbing activities in the vicinity of the discovery until the ERO has determined what additional measures should be undertaken.	Project Head Foreman and/or project sponsor	During soils disturbing activity	Project Head Foreman or sponsor shall contact the ERO.	Considered complete when ERO has been notified and resource is protected
Discovery Identification, Evaluation, and Treatment Determination. If the ERO determines that an archeological resource may be present within the project site, the project sponsor shall retain the services of an archeological consultant from the Qualified Archeological Consultant List maintained by the Planning Department. The archeological consultant shall advise the ERO as to whether the discovery is an archeological resource as well as if it retains sufficient integrity and is of potential scientific/historical/cultural significance. If an archeological resource is present, the archeological consultant shall identify, document, and evaluate the archeological resource. The archeological consultant shall make a recommendation as to what action, if any, is warranted. Based on this information, the ERO may require, if warranted, specific additional measures to be implemented by the project sponsor.	Archaeological consultant and ERO	After discovery of possible resource	The sponsor shall retain a qualified archeological consultant at the direction of the ERO. The archeological consultant shall identify and evaluate the archeological resources and recommend actions for review and approval by the ERO. The archeological consultant shall undertake additional treatment if needed.	Considered complete when treatment determination has been approved by the ERO.

	Monitoring and Reporting Program <sup>a</sup>			
Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
<u>Consultation with Descendant Communities</u> . On discovery of an archeological site associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant group an appropriate representative of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to offer recommendations to the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. The ERO and project sponsor shall work with the tribal representative or other representatives of descendant communities to identify the scope of work to fulfill the requirements of this mitigation measure, which may include participation in preparation and review of deliverables (e.g., plans, interpretive materials, artwork). Representatives shall be compensated for their work as identified in the agreed upon scope of work. A copy of the Archeological Resources Report (ARR) shall be provided to the representative of the descendant group.	Archaeological consultant, descendant group, project sponsor, and ERO	After discovery of significant resource associated with a descendant group	Archaeological consultant contacts descendant group(s). Archaeological consultant, ERO, and project sponsor, and representative(s) determine scope of work for deliverables. Project sponsor is responsible for compensating descendant(s) for work in preparation and review of deliverables. Archaeological consultant sends ARR to descendant(s).	Considered completed after descendant group has received ARR and been compensated for work on deliverables.

<u>Archeological Data Recovery Plan.</u> An archeological data recovery program shall be conducted in accordance with an Archeological Data Recovery Plan (ADRP) if all three of the following apply: 1) a resource has potential to be significant, 2) preservation in place is not feasible, and 3) the ERO determines that an archeological data recovery program is warranted. The project archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP. The archeological consultant shall prepare a draft ADRP that shall be submitted to the ERO for review and approval.	ERO, archeological consultant, and Project Sponsor.	After determination by ERO that an archeological data recovery program is required	Archeological consultant to prepare an ADRP in consultation with ERO	Considered complete upon approval of ADRP by ERO.
The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.				
<ul> <li>The scope of the ADRP shall include the following elements:</li> <li><i>Field Methods and Procedures.</i> Descriptions of proposed field strategies, procedures, and operations.</li> <li><i>Cataloguing and Laboratory Analysis.</i> Description of selected cataloguing system and artifact analysis procedures.</li> <li><i>Discard and Deaccession Policy.</i> Description of and rationale for field and post-field discard and deaccession policies.</li> <li><i>Security Measures.</i> Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities.</li> <li><i>Final Report.</i> Description of proposed report format and distribution of results.</li> <li><i>Curation.</i> Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.</li> </ul>				

Human Remains and Funerary Objects. The treatment of human remains and	Archeological	Discovery of human	Notification of	Considered complete
funerary objects discovered during any soil-disturbing activity shall comply with	consultant or medical	remains	County/City Coroner	on finding by ERO that
applicable State and federal laws. This shall include immediate notification of the	examiner		and, as warranted,	all State laws regarding
Medical Examiner of the City and County of San Francisco. The ERO also shall be			notification of NAHC.	human remains/burial
notified immediately upon the discovery of human remains. In the event of the				objects have been
Medical Examiner's determination that the human remains are Native American				adhered to,
remains, the Medical Examiner shall notify the California State Native American				consultation with MLD
Heritage Commission, which will appoint a Most Likely Descendant (MLD). The MLD				is completed as
will complete his or her inspection of the remains and make recommendations or				warranted, approval of
preferences for treatment within 48 hours of being granted access to the site				Archeological Results
(Public Resources Code section 5097.98(a)).				Report, and disposition
				of human remains has
The landowner may consult with the project archeologist and project sponsor and				occurred as specified in
shall consult with the MLD and CEQA lead agency on preservation in place or				Agreement.
recovery of the remains and any scientific treatment alternatives. The landowner				
shall then make all reasonable efforts to develop an Agreement with the MLD, as				
expeditiously as possible, for the treatment and disposition, with appropriate				
dignity, of human remains and funerary objects (as detailed in CEQA Guidelines				
section 15064.5(d)). Per PRC 5097.98 (b)(1), the Agreement shall address and take				
into consideration, as applicable and to the degree consistent with the wishes of				
the MLD, the appropriate excavation, removal, recordation, scientific analysis,				
custodianship prior to reinterment or curation, and final disposition of the human				
remains and funerary objects. If the MLD agrees to scientific analyses of the				
remains and/or funerary objects, the archeological consultant shall retain				
possession of the remains and funerary objects until completion of any such				
analyses, after which the remains and funerary objects shall be reinterred or				
curated as specified in the Agreement.				
Both parties are expected to make a concerted and good faith effort to arrive at an				
Agreement, consistent with the provisions of PRC 5097.98. However, if the				
landowner and the MLD are unable to reach an Agreement, the landowner, ERO,				
and project sponsor shall ensure that the remains and/or mortuary materials are				
stored securely and respectfully until they can be reinterred on the property, with				
appropriate dignity, in a location not subject to further or future subsurface				
disturbance, consistent with state law.				
Treatment of historic-period human remains and of associated or unassociated				
funerary objects discovered during any soil-disturbing activity, additionally, shall				
follow protocols laid out in the project's Archeological treatment documents, and				

	Monitoring and Reporting Program <sup>a</sup>			
Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
in any related agreement established between the project sponsor, Medical				
Examiner and the ERO.				
Cultural Resources Public Interpretation Plan. The project archeological consultant	Archeological	Following completion	Archeological	CRPIP is complete on
shall submit a Cultural Resources Public Interpretation Plan (CRPIP) if a significant	consultant at the	of treatment and	consultant submits	review and approval of
archeological resource is discovered during a project. As directed by the ERO, a	direction of the ERO will	analysis of significant	draft CRPIP	ERO. Interpretive
qualified design professional with demonstrated experience in displaying	prepare CRPIP. Measure	archeological resource	to ERO for review and	program is complete on
information and graphics to the public in a visually interesting manner, local artists,	laid out in CRPIP are	by archeological	approval.	notification to ERO from
or community group may also be required to assist the project archeological	implemented by	consultant.		the project sponsor that
consultant in preparation of the CRPIP. If the resource to be interpreted is a tribal	sponsor and consultant.			program has been
cultural resource, the CRPIP shall be prepared in consultation with and developed				implemented.
with the participation of Ohlone tribal representatives. The CRPIP shall describe the				
interpretive product(s), locations or distribution of interpretive materials or				
displays, the proposed content and materials, the producers or artists of the				
displays or installation, and a long-term maintenance program. The CRPIP shall be				
sent to the ERO for review and approval. The CRPIP shall be implemented prior to				
occupancy of the project.				

	Monitoring and Reporting Program <sup>a</sup>			
Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
Archeological Resources Report. The project archeological consultant shall submit a confidential draft Archeological Resources Report (ARR) to the ERO that evaluates the historical significance of any discovered archeological resource, describes the archeological and historical research methods employed in the archeological monitoring/data recovery program(s) undertaken, and discusses curation arrangements. Once approved by the ERO, copies of the approved ARR shall be distributed as follows: California Archeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy, and the ERO shall receive a copy of the transmittal of the ARR to the NWIC. The environmental planning division of the planning department shall receive one (1) bound hardcopy of the ARR. Digital files that shall be submitted to the environmental division include an unlocked, searchable PDF version of the ARR, GIS shapefiles of the site and feature locations, any formal site recordation forms (CA DPR 523 series), and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. The PDF ARR, GIS files, recordation forms, and/or nomination documentation should be submitted via USB or other stable storage device. If a descendant group was consulted during archeological treatment, a PDF of the ARR shall be provided to the representative of the descendant group.	Archeological consultant at the direction of the ERO.	Following completion of treatment by archeological consultant as determined by the ERO.	Planning Department / project sponsor	Complete on certification to ERO that copies of the approved ARR have been distributed
<u>Curation</u> . Significant archeological collections and paleoenvironmental samples of future research value shall be permanently curated at an established curatorial facility. The facility shall be selected in consultation with the ERO. Upon submittal of the collection for curation the sponsor or archeologist shall provide a copy of the signed curatorial agreement to the ERO.	Project archeologist prepares collection for curation and project sponsor pays for curation costs.	In the event a significant archeological resource is discovered and upon acceptance by the ERO of the ARR	Planning Department / project sponsor	Considered complete upon acceptance of the collection by the curatorial facility

	Monitoring and Reporting	Program <sup>a</sup>		
Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
	NOISE			
<ul> <li>Project Mitigation Measure 2: Construction Noise</li> <li>The project sponsor shall develop a set of site-specific noise attenuation measures under the supervision of a qualified acoustical consultant. Prior to commencing issuance of the Pre-Construction Environmental Compliance Letter, a plan for such measures shall be submitted to the Planning Department to ensure that maximum feasible construction noise attenuation is achieved. Attenuation measures shall include as many of the following control strategies as follows, or other equivalent strategies that reduce construction noise: <ul> <li>Erect temporary plywood noise barriers around a construction site, particularly where a site adjoins noise-sensitive uses;</li> <li>Use noise control blankets on a building structure as the building is being erected to reduce noise emission from the site;</li> <li>Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings housing sensitive uses;</li> <li>Monitor the effectiveness of noise attenuation measures by taking noise measurements; and</li> </ul> </li> </ul>	Project sponsor's qualified acoustical consultant and construction contractor	Prior to issuance of the Pre-Construction Environmental Compliance Letter	Planning Department	Considered complete after approval construction noise control plan and construction activities completed.
Post signs on-site pertaining to permitted construction days and hours and complaint procedures and who to notify in the event of a problem, with telephone numbers listed.				

	Monitoring and Reporting	Program <sup>a</sup>		
Adopted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
	AIR QUALITY			
<ul> <li>Project Mitigation Measure 3: Construction Air Quality</li> <li>The project sponsor shall comply with the following: <ol> <li>A. Engine Requirements</li> <li>All off-road equipment greater than 25 hp and operating for more than 20 total hours over the entire duration of construction activities shall have engines that meet or exceed either U.S. Environmental Protection Agency (EPA) or California Air Resources Board (air board) Tier 4 Interim or Tier 4 Final off-road emission standards.</li> <li>Where access to alternative sources of power are available, portable diesel engines (e.g., generators) shall be prohibited.</li> <li>Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than two minutes, at any location, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions). The contractor shall post legible and visible signs in English, Spanish, and Chinese, in designated queuing areas and at the construction site to remind operators of the two-minute idling for construction equipment operators on the maintenance and tuning of construction equipment and require that such workers and operators properly maintain and tune equipment in accordance with manufacturer specifications.</li> </ol> </li> <li>B. Waivers The Planning Department's environmental review officer or designee (ERO) may waive the alternative source of power requirement of Subsection (A)(2) if an alternative source of power is limited or infeasible at the project site. If the ERO grants the waiver, the contractor must use the next cleanest piece of off-road equipment, or another alternative that results in comparable reductions of diesel particulate matter. </li> </ul>	Project sponsor and construction contractor	<ul> <li>Prior to issuance of the Pre-Construction</li> <li>Environmental</li> <li>Compliance Letter</li> <li>project sponsor to submit:</li> <li>1. Construction emissions minimization plan for review and approval, and</li> <li>Signed certification statement</li> </ul>	Planning Department	Considered complete upon planning departm ent review and acceptance of construction emissions minimization plan, implementation of the plan, and submittal of final report summarizing use of construction equipment pursuant to the plan.

		Monitoring and Reporting Program <sup>a</sup>			
Ado	pted Mitigation Measure	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
<i>C. Construction Emissions Minimization Plan:</i> Before starting on-site construction activities, the contractor shall submit a construction emissions minimization plan (plan) to the ERO for review and approval. The plan shall state, in reasonable detail, how the contractor will meet the engine requirements of Section A.					
1.	The Plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, but is not limited to: equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel use and hours of operation. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used.				
2.	The project sponsor shall ensure that all applicable requirements of the plan have been incorporated into the contract specifications. The plan shall include a certification statement that the project sponsor agrees to comply fully with the plan.				
3.	The project sponsor shall make the plan available to the public for review on- site during working hours. The project sponsor shall post at the construction site a legible and visible sign summarizing the plan. The sign shall also state that the public may ask to inspect the plan for the project at any time during working hours and shall explain how to request to inspect the plan. The project sponsor shall post at least one copy of the sign in a visible location on each side of the construction site facing a public right-of-way.				
D. M Afte mo cor pro act pha	<i>Aonitoring:</i> er start of construction activities, the contractor shall submit reports every six nths to the ERO documenting compliance with the plan. After completion of astruction activities and prior to receiving a final certificate of occupancy, the ject sponsor shall submit to the ERO a final report summarizing construction ivities, including the start and end dates and duration of each construction ase, and the specific information required in the plan.				

Monitoring a	Monitoring and Reporting Program <sup>a</sup>		
Adopted Mitigation Measure Implementat	ion Mitigation Schedule	Monitoring/Reporting	Monitoring Actions/
Responsibilit		Responsibility	Completion Criteria

# NOTES:

<sup>a</sup> Definitions of MMRP Column Headings:

Adopted Mitigation and Improvements Measures: Full text of the mitigation measure(s) copied verbatim from the final CEQA document.

Implementation Responsibility: Entity who is responsible for implementing the mitigation measure. In most cases this is the project sponsor and/or project's sponsor's contractor/consultant and at times under the direction of the planning department.

Mitigation Schedule: Identifies milestones for when the actions in the mitigation measure need to be implemented.

Monitoring/Reporting Responsibility: Identifies who is responsible for monitoring compliance with the mitigation measure and any reporting responsibilities. In most cases it is the Planning Department who is responsible for monitoring compliance with the mitigation measure. If a department or agency other than the planning department is identified as responsible for monitoring, there should be an expressed agreement between the planning department and that other department/agency. In most cases the project sponsor, their contractor, or consultant are responsible for any reporting requirements.

Monitoring Actions/Completion Criteria: Identifies the milestone at which the mitigation measure is considered complete. This may also identify requirements for verifying compliance.

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FAX 510.865.1611



![](_page_98_Figure_0.jpeg)

MBC biolabs

![](_page_99_Figure_0.jpeg)

![](_page_99_Figure_1.jpeg)

![](_page_99_Picture_2.jpeg)

SAN FRANCISCO, CA 94107

# OVERALL MEZZANINE AND SECOND FLOOR PLANS

3/32" = 1'-0"

![](_page_99_Figure_6.jpeg)

![](_page_99_Figure_7.jpeg)

ABC biolabs

![](_page_99_Figure_11.jpeg)

![](_page_100_Figure_0.jpeg)

![](_page_100_Figure_1.jpeg)

![](_page_100_Picture_2.jpeg)

SAN FRANCISCO, CA 94107

08/09/2023 PROJECT NUMBER: 56504 © MBH ARCHITECTS - 2023

> 960 ATLANTIC AVE ALAMEDA, CA 94501 TEL 510.865.8663 FAX 510.865.1611

![](_page_100_Picture_9.jpeg)

![](_page_101_Figure_0.jpeg)

![](_page_101_Figure_6.jpeg)

![](_page_101_Figure_7.jpeg)

TEL 510.865.8663 FAX 510.865.1611

MBH arch

![](_page_102_Picture_0.jpeg)

![](_page_102_Figure_1.jpeg)

# **GLAZING AREA AT ACTIVE USE CALCULATIONS**

BUILDING FACADE AT STREET FRONTAGE EXCLUDING LOADING AND EGRESS AREAS = 4,073 SF REQUIRED GLAZING AT STREET FRONTAGE = 2,444 SF (CALCULATION: 4,073 SF \* 0.6) PROVIDED GLAZING AT STREET FRONTAGE = 2,501 SF

![](_page_102_Picture_4.jpeg)

SAN FRANCISCO, CA 94107

![](_page_102_Figure_6.jpeg)

![](_page_102_Picture_9.jpeg)

FAX 510.865.1611

![](_page_103_Picture_0.jpeg)

![](_page_103_Figure_1.jpeg)

![](_page_103_Picture_2.jpeg)

SAN FRANCISCO, CA 94107

FREEWAY ELEVATION 1

# **BUILDING ELEVATIONS**

![](_page_103_Picture_9.jpeg)

![](_page_103_Picture_10.jpeg)

![](_page_103_Picture_11.jpeg)

08/09/2023 PROJECT NUMBER: 56504 © MBH ARCHITECTS - 2023

> 960 ATLANTIC AVE ALAMEDA, CA 94501 TEL 510.865.8663 FAX 510.865.1611

![](_page_103_Picture_14.jpeg)

# Exhibit C

Environmental Noise Assessment dated March 21, 2024

# 700 Indiana Street

700 Indiana St (Block 4062/007)

# **ENVIRONMENTAL NOISE ASSESSMENT**

21 March 2024

![](_page_105_Picture_4.jpeg)

Prepared for:	Ryan Shum
	San Francisco Planning Department
	49 South Van Ness Avenue, Suite 1400
	San Francisco, CA 94103
	ryan.shum@sfgov.org

# Prepared by: Salter Ben Gold – Consultant Ben Piper – Senior Associate Jeremy Decker, PE – Vice President

bgold@salter-inc.com bpiper@salter-inc.com jdecker@salter-inc.com

Salter Project 23-0453

![](_page_105_Picture_9.jpeg)

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Acoustics Audiovisual Telecommunications Security

# 1.0 INTRODUCTION

This Environmental Noise Assessment for the proposed 700 Indiana Project has been prepared to satisfy the San Francisco Planning Department requirement for a project-specific noise impact analysis to comply with Mitigation Measure F-5: Siting of Noise-Generating Uses from the Eastern Neighborhoods EIR. The report examines the noise impacts of the proposed project and evaluates the potential need for noise control measures required for the project. This report has been prepared in accordance with the Planning Department approved Noise Technical Study Scope of Work and Noise Methodology and Assumptions Memorandum. **Appendix A** and **Figure A1** provide more information about the fundamental concepts of environmental noise.

# 2.0 PROJECT DESCRIPTION

The proposed project at 700 Indiana Street Assessor's Block and Lot 4062/007, is located on Indiana Street within the Potrero Hill neighborhood between I-280 to the west, 19th Street to the north, and 20th Street to the south. The lot size is 31,090 square feet and rectangular in shape. The site currently houses a 15,000-square-foot commercial storage warehouse.

The project proposes demolition of the existing structure and the construction of a new laboratory building. The proposed Type 1-A building would have three stories over one basement parking level. The building would consist of a new above grade structure, envelope, and interiors and include new elevators, stairs, Level 3 outdoor terrace, and rooftop equipment platforms. The building would accommodate 72,349 gross square feet of laboratory space and 29,336 square feet of basement parking (51 parking spaces). The proposed building would be 57 feet tall. The building would be constructed in the following phases:

- Excavation and shoring
- Grading
- Building foundation and erection
- Sitework, hardscape, and landscaping
- Site lighting improvements

The project would provide 11 Class 1 bicycle parking spaces within the proposed building and four Class 2 bicycle parking spaces on Indiana Street. A utility transformer would be located in the interior of the building accessible via Indiana Street. The project would install 13 new street trees along Indiana Street and keep approximately 8 existing trees in the Caltrans right of way west of the site.

The estimated proposed construction duration is 30 months. The maximum depth of excavation would be 15 feet below grade with a total of 16,500 cubic yards of excavation. The proposed foundation would consist of mat foundation with retaining walls at the basement level.

![](_page_106_Picture_14.jpeg)

# 3.0 REGULATORY CONTEXT

This subsection describes the applicable state and local laws and regulations that pertain to the identification and regulation of noise and vibration impacts.

# San Francisco Noise Ordinance

Article 29 of the San Francisco Police Code provides restrictions on the noise levels a project can produce. The following sections apply to this project.

# Section 2909(b), Commercial and Industrial Property Noise Limits

No person shall produce or allow to be produced by any machine, or device, music or entertainment or any combination of same, on commercial or industrial property over which the person has ownership or control, a noise level more than 8 dBA above the local ambient at any point outside of the property plane. With respect to noise generated from a licensed Place of Entertainment, licensed Limited Live Performance Locale, or other location subject to regulation by the Entertainment Commission or its Director, in addition to the above dBA criteria a secondary low frequency dBC criteria shall apply to the definition above. No noise or music associated with a licensed Place of Entertainment, licensed Limited Live Performance Locale, or other location subject to regulation by the Entertainment Commission or its Director, shall exceed the low frequency ambient noise level defined in Section 2901(f) by more than 8 dBC.

# Section 2909(d), Fixed Residential Interior Noise Limits

In order to prevent sleep disturbance, protect public health and prevent the acoustical environment from progressive deterioration due to the increasing use and influence of mechanical equipment, no fixed noise source may cause the noise level measured inside any sleeping or living room in any dwelling unit located on residential property to exceed 45 dBA between the hours of 10 pm to 7 am or 55 dBA between the hours of 7 am to 10 pm with windows open except where building ventilation is achieved through mechanical systems that allow windows to remain closed.

# Definitions:

"Ambient" is defined in Section 2901.a as the lowest sound level repeating itself during a minimum ten-minute period in the same location as the measurement of the noise level of the source at issue. It shall be measured with a sound level meter using slow response and "A" weighting. In addition, for the purposes of the Ordinance, it states that the exterior ambient shall not be considered to be less than 45 dBA.

"Noise level" is defined as the maximum continuous sound level or repetitive peak sound level, produced by a source or group of sources as measured with a sound level meter.

"Fixed source" means a machine or device capable of creating a noise level at the property upon which it is regularly located, including but not limited to: industrial and commercial process machinery and equipment, pumps, fans, air-conditioning apparatus or refrigeration machines.

![](_page_107_Picture_14.jpeg)
#### San Francisco General Plan (for informational purposes only)

Policy 11.1 provides Land Use Compatibility Guidelines for new development, as shown below.



#### LAND USE COMPATIBILITY CHART FOR COMMUNITY NOISE

#### **Eastern Neighborhood EIR Mitigation Measures**

Mitigation Measure F-5: Siting of Noise-Generating Uses: To reduce potential conflicts between existing sensitive receptors and new noise-generating uses, for new development including commercial, industrial or other uses that would be expected to generate noise levels in excess of ambient noise, either short-term, at nighttime, or as 24-hour average, in the proposed project site vicinity, the Planning Department shall require the preparation of an analysis that includes, at a minimum, a site survey to identify potential noise-sensitive uses within 900 feet of, and that have a direct line-of-sight to, the project site, and including at least one 24-hour noise measurement (with maximum noise level readings taken at least every 15 minutes), prior to the first project approval action. The analysis shall be prepared by persons qualified in acoustical analysis and/or engineering and shall demonstrate with reasonable certainty that the proposed use would comply with the use compatibility requirements in the General Plan and in Police Code Sections 2909(b) and (d), would not adversely affect nearby noise-sensitive uses, and that there are no particular circumstances about the proposed project site that appear to warrant heightened concern about noise levels that would be generated by the proposed use. Should such concerns be present, the Department may require the completion of a detailed noise assessment by person(s) qualified in acoustical analysis and/or engineering prior to the first project approval action.



#### 4.0 NOISE IMPACTS

#### **Existing Noise Environment**

To quantify the ambient noise environment at the project site, noise measurements were performed at the site between 11 and 18 December 2023. The noise monitors used for these measurements were RION Model NL-52 Type 1 integrating sound level meters. Noise monitors were placed at two long-term locations (L1 and L2) and five short-term locations (S1 to S5), which were chosen to determine the noise levels generated by vehicular traffic on the surrounding roads. The primary source of noise in the area is vehicular traffic on I-280, Indiana Street, 19th Street, and 20th Street.

A summary of the acoustical measurement locations is listed below in **Table 1** and shown in the attached **Figure 1**. Long-term noise metrics (including nighttime noise levels) at the short-term measurement locations are estimated based on both the short-term and related long-term measurements.

Measurement Location <sup>1</sup>		Primary Noise Source	Daytime <sup>2</sup> Hourly Noise Level (L <sub>eq</sub> )	24-Hour Noise Level <sup>3</sup> (L <sub>dn</sub> )	Lowest Ambient Noise Level (min L <sub>90</sub> ) <sup>4</sup>
L1	Along the west side of the project (nearest to I-280), approximately 100 feet from Indiana Street and 150 feet from I-280, 12 feet above grade	Vehicular traffic on I-280	59 to 67 dBA	70 dBA	40 dBA
L2	Along the west side of Indiana Street, approximately 120 feet from 20th Street and 580 feet from 19th Street, 12 feet above grade	Vehicular traffic on Indiana and 20th Streets	55 to 73 dBA	67 dBA	43 dBA
S1	Near Location L1, but 25 feet above grade	Vehicular traffic on I-280	64 to 72 dBA	75 dBA	45 dBA

#### Table 1: Existing Noise Measurements

<sup>4</sup>  $L_n$  – The sound level exceeded for a stated percentage (n) of a specified measurement period as described in ASTM E1686. L<sub>10</sub>, L<sub>50</sub>, and L<sub>90</sub> are the levels exceeded 10, 50, and 90 percent of the time, respectively.



<sup>&</sup>lt;sup>1</sup> Each lateral distance listed in this table is the distance between the sound meter and the roadway centerline.

<sup>&</sup>lt;sup>2</sup> Daytime hourly noise levels listed in this table are the range of values measured between 7am and 10pm.

<sup>&</sup>lt;sup>3</sup> L<sub>dn</sub> (Day-Night Average Sound Level) – A descriptor for a 24-hour A-weighted average noise level. DNL accounts for the increased acoustical sensitivity of people to noise during the nighttime hours. DNL penalizes sound levels by 10 dB during the hours from 10 PM to 7 AM. For practical purposes, the DNL and CNEL are usually interchangeable. DNL is sometimes written as L<sub>dn</sub>.

Measurement Location <sup>1</sup>		Primary Noise Source	Daytime <sup>2</sup> Hourly Noise Level (L <sub>eq</sub> )	24-Hour Noise Level <sup>3</sup> (L <sub>dn</sub> )	Lowest Ambient Noise Level (min L <sub>90</sub> ) <sup>4</sup>
S2	Near Location L1, but 40 feet above grade	Vehicular traffic on I-280	66 to 74 dBA	77 dBA	47 dBA
S3	At the south end of the project site in Avalon Dogpatch Dog Park, underneath the 20th Street overpass, 5 feet above grade	Vehicular traffic on Indiana and 20th Streets	64 to 72 dBA	75 dBA	45 dBA
S4	On the 20th Street overpass and approximately 160 feet from I-280, 5 feet above the sidewalk	Vehicular traffic on I-280	66 to 74 dBA	77 dBA	47 dBA
S5	At the north end of the project site in Dogpatch Arts Plaza, approximately 60 feet from Indiana and 19th Streets, 5 feet above grade	Vehicular traffic on Indiana and 19th Streets	58 to 66 dBA	69 dBA	39 dBA

The lowest nighttime ambient noise levels at the surrounding streets are between 40 and 47 dBA. However, the Noise Ordinance defines the minimum prescribed "ambient" as no less than 45 dBA outdoors. Therefore, where noise levels are lower, 45 dBA will be used as the baseline ambient sound levels for our analysis.

#### **Existing Sensitive Receptors**

Some land uses are more sensitive to noise levels than others due to the types of activities typically associated with the uses. Residences, hotels, schools, senior care facilities, and hospitals are generally more sensitive to noise than commercial and industrial land uses. There are no existing hospitals or senior care facilities within 900 feet of the project site<sup>5</sup>.

To determine nearby sensitive receptors, an in-person survey was conducted surrounding the site, in addition to a Google Maps review and information provided by the San Francisco Planning Department, to identify potential noise-sensitive uses within 900 feet of the project site. Our survey yielded the following sensitive receptors within line-of-sight to the project, as shown in **Figure 2**. Additionally, the nearest sensitive receptors in each category along with their exact distance from the property line are shown in **Table 2**.

- Five Mixed-Use Residences
- Approximately 135 Residences
- One School

<sup>5</sup> San Francisco Planning. San Francisco Property Information Map – 700 Indiana. Accessed 18 December 2023.



Table 2: Nearest Sensitive Receptors						
Land Use Type	Nearest Sensitive Receptor*	Address	Distance from Project Property Line			
Mixed-Use	O&M Apartments	680-690 Indiana St, San	65 foot			
Residences	(to the north)	Francisco, CA 94107	os leet			
Residences	Avalon Dogpatch Apartments (to the south)	800 Indiana St, San Francisco, CA 94107	60 feet			
School	La Scuola International School (two blocks to the east)	728 20th St, San Francisco, CA 94107	630 feet			

\* Other receptors within the 900 foot radius are at a further distance than these and are not included in this table

#### **Operational Noise**

#### Mechanical Equipment – Outdoor Noise

The project plans include outdoor mechanical equipment at the upper rooftop (northern half of the building), and the lower rooftop (southern half of the building). These could contribute to the exterior noise environment in the nearby community. The upper rooftop includes one air handler, and two exhaust fans. The lower rooftop includes one air handler, three exhaust fans, a chiller, and backup/supplemental power system. Between 10 pm and 5 am, the chiller is not expected to operate at greater than 50% capacity, according to the project mechanical engineer. We understand that the chiller will only be supporting the HVAC systems for the laboratory areas of the building at night (and the office systems will be reduced or turned off). Other small equipment would be located indoors. Plans showing the equipment and their cutsheets are included in **Appendix B**.

The rooftop equipment areas include a perimeter mechanical screen wall, as well as a raised parapet at the edge roof. The upper roof equipment screening wall is designed to be 8.5 feet above the roof deck. The lower roof screen is designed to be 9.5 feet above the roof deck. These screen walls would also function as noise barriers, constructed using solid panels with no cracks or gaps.

Police Code Section 2909(b) requires noise levels to be evaluated at the property plane. According to the Department of Public Health, in the event of a complaint, noise measurements would be conducted at the edge of the roof nearest the property plane at a height approximately 5 feet above the roof level. Therefore, this location was chosen for analysis with respect to Police Code Section 2909(b).



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The building mechanical systems have not yet been fully designed. Therefore, the project engineer provided data sheets for "example" equipment selections that align with the expected types and sizes. These example units have the following sound ratings:

- The air handlers have a sound power<sup>6</sup> rating of 81 dBA
- The exhaust fans have sound power rating of 89 dBA
- The chiller at 100% operation has a sound power rating of 94 dBA
- The chiller at 50% operation has a sound power rating of 90 dBA
- The Bloom energy system is rated to generate a maximum sound pressure level<sup>7</sup> of 65 dBA at 10 feet. We understand it would only be used to provide backup/emergency power.

Combined noise levels from all equipment at the property planes are calculated to be as shown in **Table 3**. Reported daytime noise levels are from 5 am to 10 pm when the chiller could be operating at 100% capacity. Nighttime noise levels are from 10 pm to 5 am when the chiller is expected to operate at no greater than 50% capacity. The nighttime noise levels were used to show compliance with the noise ordinance because the noise ordinance limits apply 24 hours a day.

Property Plane/Location	Nighttime Ambient (as defined above)	Applicable Noise Ordinance Limit (8 dBA above ambient)	Calculated Nighttime Noise Levels with Project	Calculated Daytime Noise Levels with Project (for Reference)			
North	45	53	49	49			
East	45	53	51	53			
South	45	53	50	51			
West (Property Plane)	47	55	58	59			
West (east edge of I-280)	n/a	n/a	47	49			

# Table 3: Mechanical Equipment Noise at the Project Property Planes

Since there are no immediate receptors immediately west of the site, we also calculated noise transfer beyond the property plane, across the Caltrans right-of-way, to the eastern edge of I-280. At that location, our analysis indicates that mechanical equipment noise will be below the strictest Noise Ordinance limit of 53 dBA. Equipment noise levels would be even quieter at the residences located even

<sup>7</sup> SPL (Sound Pressure Level) – A metric defined in ANSI S1.1, expressed in decibels (dB), that quantifies the sound level produced by a device, measured at a specific location some distance from the device. Sound pressure is analogous to the light output a specific distance from a lamp in foot-candles.



<sup>6</sup> PWL (Sound Power Level) – A metric defined in ANSI S1.1, expressed in decibels (dB), used to quantify the acoustic energy output of a device. Sound power is analogous to the total light output from a lamp in lumens.

farther away (i.e., to the north, south, and west – across the freeway). See the image below to reference the locations where we calculated equipment noise levels.



**Outdoor Noise Summary**: Calculated noise levels meet the Noise Ordinance criteria at every property plane except the west. Rooftop equipment noise would be 58 DBA and therefore would exceed the property plane noise limit of 55 dBA at the quietest hours of the night (between approximately 1:00 am and 3:00 am). The area of the property plane nearest the Level 3 rooftop chiller could reach 58 dBA. Cumulative noise near the chiller would exceed the 55 dBA limit to a distance approximately 10 feet beyond the property plane. The Level 3 area near the exhaust fans could reach 56 dBA. The western adjacency is an unoccupied right-of-way that sits between the site and I-280. To exceed the noise ordinance limits the sponsor would be required to request a variance from the noise ordinance. Therefore, the following two sections include a discussion regarding a possible variance request to the Department of Public Health; and, if that is denied or not pursued by the applicant, a possible measure to further reduce noise at the western property plane to meet the noise ordinance criteria.

#### Potential Variance Request – Outdoor Noise at Western Property Plane

Calculated outdoor equipment noise levels at the west property plane are up to 58 dBA at night. Based on our site measurements, we estimate that the nighttime (10:00 pm to 7:00 am) ambient noise levels at the western property plane nearest the equipment range between 47 dBA and 66 dBA (largely due to I-280 traffic). These ambient noise levels would correspond to City Noise Ordinance Limits (ambient + 8dB) of 55 dBA and 74 dBA. The calculated equipment noise level of 58 dBA could exceed the City Noise Ordinance Limit between approximately 1:00 am and 3:00 am. Since the scope of this potential "exceedance" is minor and there are no receptors at or near this western property plane, we understand that a variance request could be requested to the Department of Public Health (DPH). For the DPH's variance evaluation process, we are providing commentary aligned with the consideration factors found in the *San Francisco Guidance for Noise Management and Enforcement* document (found at www.sfdph.org) in Table 4 below.



SFD	OPH Consideration Factors in iance Decisions	
•	Age and repair history of noise-emitting equipment (if equipment is the source of the violation)	Not applicable
•	Previous mitigation work specifically for noise reduction	The building equipment has been selected to reduce noise and provided with a perimeter noise barrier screen wall to reduce noise.
•	Relative length of time the source of the alleged violation has existed in its current location as compared to the length of time the complainant has been in the area	Not applicable
•	The proximity of the complainant's residence or place of work to the noise source	No residences will be located in the area at the western edge of the project site, where noise could exceed the City Noise Ordinance limits.
•	Time, location, and health vulnerability of potential human receptors	The area at the western edge of the project site would be unoccupied. It is the land adjacent to I-280. Furthermore, the equipment noise is calculated to meet the City Noise Ordinance limits at this location during the majority of the day, between approximately 3:00 am and 1:00 am. The limits might only be exceeded at the quietest nighttime hours, and by a maximum exceedance of 3 dB (58 dBA noise near the chiller, with a City Noise Ordinance limit of 55 dBA). At the western edge of the site, equipment noise near the chiller would exceed 55 dBA only to a distance of 10 feet beyond the property plane.
•	Third-party analysis of noise mitigation alternatives	Additional noise mitigation is possible (see section below), but may not be warranted since there are no sensitive receptors in the subject area. The additional mitigation is likely to have drawbacks. If the noise barrier screen height were increased, the visual impact of the project would be notably different. If a noise attenuating "chiller stack" were added around the chiller and duct silencers added to the exhaust fans, the restriction on airflow could reduce the equipment operating efficiency and/or capacity. In addition, the costs of either of these approaches may also outweigh any benefit, as expected equipment noise levels at all nearby sensitive receptors are already expected to meet the Noise Ordinance limits.
•	Evidence that a complaint is generated as a form of harassment or unfair business practice	Not applicable
•	Disclosures	There are no sensitive receptors at the western edge of the project site to which disclosures could be provided.
•	Financial considerations	The possible additional noise reduction measures listed in the section below would need to be priced by a suitable contractor or cost estimator.
•	Disability or vulnerability	Not applicable
•	Public health risks vs benefits	We foresee virtually no risk to public health at the western property plane of the project, as there are no sensitive receptors in that area where noise could exceed the City Noise Ordinance limits.

# Table 4: Possible Variance Request Considerations and Comments ideration Factors in



#### Possible Further Outdoor Noise Reduction at Western Property Plane

If the aforementioned variance is not pursued by the client or if the variance request is denied by the City and if the Noise Ordinance limit must be achieved at the western property plane, one of the two additional noise reduction options listed below could reduce the noise to 55 dBA.

- Option 1: If the noise barrier screen at the western side of the Level 3 rooftop equipment would be increased from 8.5 feet high to 12.5 feet high (an increase of four feet), the equipment noise should be reduced to 55 dBA. The structural, wind load, and visual impacts of such a change would need to be reviewed by the project team.
- Option 2: A noise attenuating "chiller stack," such as NoiseBlock from Kinetics

   (https://kineticsnoise.com/noiseblock/chiller-stacks-pergolas), could be installed around the chiller. In addition, a short duct silencer would just barely be needed to reduce the exhaust fan noise by 1 dB to reach 55 dBA. Virtually any commercial duct silencer would be adequate. The mechanical engineer would need to determine if these measures were feasible and that the effect on equipment operation is acceptable (e.g., from the additional pressure drop imposed on the fans).

#### Mechanical Equipment – Noise Transmitted Indoors

Noise levels were also calculated at the nearest indoor receivers with respect to Police Code Section 2909(d) as listed in **Table 5**:

	Noise Levels (dBA)				
Direction	Noise Ordinance Limit	Calculated Noise Level			
680 Indiana Street, O&M Apartments (north)	Daytime: 55 dBA	Windows closed: 19 Windows open: 29			
800 Indiana Street, Avalon Dogpatch Apartments (south)	Nighttime: 45 dBA	Windows closed: 35 Windows open: 45			

# Table 5: Mechanical Equipment Noise at Nearest Indoor Receivers

**Summary:** Our calculations indicate that equipment noise levels will meet the daytime and nighttime noise limits of Police Code Section 2909(d) at nearby residential receivers with windows open or closed. Therefore, no further noise reduction is needed to meet the indoor noise criteria at adjacent residences.

#### **Backup/Emergency Power System**

The project does not include a standard diesel emergency generator. Instead, the Bloom Energy Server will provide backup power in the event that utility power is not available. This is a solid oxide fuel cell that converts natural gas, blended hydrogen, biogas, and hydrogen into electricity (see equipment information in **Appendix B**).



Since emergency generators are tested in non-emergency conditions (e.g., once per month), the Department of Public Health has a targeted performance standard of maximum of 75 dBA for generator noise at the adjacent property planes. Additionally, generators must be tested between 7 am and 8 pm.

Based on manufacturer's noise data, the Bloom Energy Server operates at a sound pressure level of less than 65 dBA at 10 feet. The system is proposed to be installed approximately 25 feet from the nearest property plane (to the west). Therefore, noise would be well below the 75 dBA criterion at all property planes. Additionally, we have calculated expected system noise levels to the nearest indoor receivers with respect to Police Code Section 2909(d) to be less than 30 dBA with the windows open, well below the criteria.

**Summary**: Backup/emergency power systems are expected to meet the City property-plane noise limits and indoor noise limits at the nearest residences. Testing would occur between 7 am and 8 pm. No further noise reduction measures are needed.

#### **Noise Impacts – Overall Summary**

The proposed project would meet the criteria of the noise ordinance except at the western property plane by 3 dBA between the hours of 1:00 am and 3:00 am. This exceedance is limited and minor and would not effect any nearby sensitive receptors. Additionally, the project meets section 2909(d) requirements for interior sleeping rooms of nearby sensitive receptors.

#### 5.0 CUMULATIVE NOISE IMPACTS

#### **Fixed Mechanical Equipment Noise**

\*

Noise from the proposed stationary sources, such as from HVAC equipment or backup power, could increase ambient noise levels at locations near the project site.

While conducting our survey of the area, we observed temporary street work along Minnesota Street. However, we did not observe (nor are we aware of) any other new construction projects within 900 feet of the site. We understand there is new construction at Pier 70, but this is approximately 1,100 feet away from the project. Therefore, we do not expect there to be cumulative noise impacts that could occur with the addition of multiple new uses in the same local area of the project.

This concludes our noise assessment for the 700 Indiana project. Should you have any questions, please give us a call.

\*



\*





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Security



900-Foot Radius From Project Site

= School

= Residential

= Mixed Use / Residential

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12.22.23

FIGURE

Salter # 23-0453 Environmental Noise Assessment

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#### **APPENDIX A**

#### **Fundamental Concepts of Environmental Noise**

This section provides background information to aid in understanding the technical aspects of this report.

Three dimensions of environmental noise are important in determining subjective response. These are:

- The intensity or level of the sound
- The frequency spectrum of the sound
- The time-varying character of the sound

Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing.

The "frequency" of a sound refers to the number of complete pressure fluctuations per second in the sound. The unit of measurement is the cycle per second (cps) or hertz (Hz). Most of the sounds, which we hear in the environment, do not consist of a single frequency, but of a broad band of frequencies, differing in level. The name of the frequency and level content of a sound is its sound spectrum. A sound spectrum for engineering purposes is typically described in terms of octave bands, which separate the audible frequency range (for human beings, from about 20 to 20,000 Hz) into ten segments.

Many rating methods have been devised to permit comparisons of sounds having quite different spectra. Surprisingly, the simplest method correlates with human response practically as well as the more complex methods. This method consists of evaluating all of the frequencies of a sound in accordance with a weighting that progressively de-emphasizes the importance of frequency components below 1000 Hz and above 5000 Hz. This frequency weighting reflects the fact that human hearing is less sensitive at low frequencies and at extreme high frequencies relative to the mid-range.

The weighting system described above is called "A"-weighting, and the level so measured is called the "A-weighted sound level" or "A-weighted noise level." The unit of A-weighted sound level is sometimes abbreviated "dBA." In practice, the sound level is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighting characteristic. All U.S. and international standard sound level meters include such a filter. Typical sound levels found in the environment and in industry are shown in **Figure A1**.

Although a single sound level value may adequately describe environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise is a conglomeration of distant noise sources, which results in a relatively steady background noise having no identifiable source. These distant sources may include traffic, wind in trees, industrial activities, etc. and are relatively constant from moment to moment. As natural forces change or as human activity follows its daily cycle, the sound level may vary slowly from hour to hour. Superimposed on this slowly varying background is a succession of



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identifiable noisy events of brief duration. These may include nearby activities such as single vehicle pass-bys, aircraft flyovers, etc. which cause the environmental noise level to vary from instant to instant.

To describe the time-varying character of environmental noise, statistical noise descriptors were developed. "L10" is the A-weighted sound level equaled or exceeded during 10 percent of a stated time period. The L10 is considered a good measure of the maximum sound levels caused by discrete noise events. "L50" is the A-weighted sound level that is equaled or exceeded 50 percent of a stated time period; it represents the median sound level. The "L90" is the A-weighted sound level equaled or exceeded during 90 percent of a stated time period and is used to describe the background noise.

As it is often cumbersome to quantify the noise environment with a set of statistical descriptors, a single number called the average sound level or "Leq" is now widely used. The term "Leq" originated from the concept of a so-called equivalent sound level which contains the same acoustical energy as a varying sound level during the same time period. In simple but accurate technical language, the Leq is the average A-weighted sound level in a stated time period. The Leq is particularly useful in describing the subjective change in an environment where the source of noise remains the same but there is change in the level of activity. Widening roads and/or increasing traffic are examples of this kind of situation.

In determining the daily measure of environmental noise, it is important to account for the different response of people to daytime and nighttime noise. During the nighttime, exterior background noise levels are generally lower than in the daytime; however, most household noise also decreases at night, thus exterior noise intrusions again become noticeable. Further, most people trying to sleep at night are more sensitive to noise. To account for human sensitivity to nighttime noise levels, a special descriptor was developed. The descriptor is called the  $L_{dn}$  (Day/Night Average Sound Level), which represents the 24-hour average sound level with a penalty for noise occurring at night. The  $L_{dn}$  computation divides the 24-hour day into two periods: daytime (7:00 am to 10:00 pm); and nighttime (10:00 pm to 7:00 am). The nighttime sound levels are assigned a 10 dB penalty prior to averaging with daytime hourly sound levels.

For highway noise environments, the average noise level during the peak hour traffic volume is approximately equal to the  $L_{dn}$ .

The effects of noise on people can be listed in three general categories:

- Subjective effects of annoyance, nuisance, dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as startle, hearing loss

The sound levels associated with environmental noise usually produce effects only in the first two categories. Unfortunately, there has never been a completely predictable measure for the subjective effects of noise nor of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and habituation to noise over time.



Thus, an important factor in assessing a person's subjective reaction is to compare the new noise environment to the existing noise environment. In general, the more a new noise exceeds the existing, the less acceptable the new noise will be judged.

With regard to increases in noise level, knowledge of the following relationships will be helpful in understanding the quantitative sections of this report:

Except in carefully controlled laboratory experiments, a change of only 1 dB in sound level cannot be perceived. Outside of the laboratory, a 3 dB change is considered a just-noticeable difference. A change in level of at least 5 dB is required before any noticeable change in community response would be expected. A 10 dB change is subjectively heard as approximately a doubling in loudness and would almost certainly cause an adverse community response.



A-1 SOUND P IN	WEIGHT RESSUI DECIBE	ED RE LEVEL, ELS
	140	
	130	THRESHOLD OF PAIN
JET TAKEOFF (200')	120	
RIVETING MACHINE	110	
DIESEL BUS (15')	100	PILEDRIVER (50')
BAY AREA RAPID TRANSIT TRAIN PASSBY (10')	90	BOILER ROOM
OFF HIGHWAY VEHICLE (50') PNEUMATIC DRILL (50')	80	PRINTING PRESS PLANT GARBAGE DISPOSAL IN THE HOME
SF MUNI LIGHT-RAIL VEHICLE (35') FREIGHT CARS (100')	AIL VEHICLE (35') EIGHT CARS (100') 70	INSIDE SPORTS CAR, 50 MPH
VACUUM CLEANER (10')	60	DATA PROCESSING CENTER
	50	DEPARTMENT STORE PRIVATE BUSINESS OFFICE
LARGE TRANSFORMER (200') AVERAGE RESIDENCE	40	
	30	LEVELS-RESIDENTIAL AREAS
SUPTING LEAVED	20	
	10	
THRESHOLD OF HEARING {	0	MOSQUITO (3')
× ×	L	1

(100') = DISTANCE IN FEET BETWEEN SOURCE AND LISTENER

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FIGURE A1

1107

C 11.25.03





700 Indiana Street 21 March 2024

APPENDIX B

Environmental Noise Assessment

Page 19

# **Mechanical Layout**

# Roof Plan



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Salter

#### **Rooftop Screen Elevations**





#### AHU

Unit Sound Power (dB)								
Туре	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Radiated:	83	89	83	74	77	66	48	51
Unit Discharge:	84	89	90	83	86	79	67	65
Unit Return:	83	89	83	74	77	66	48	51

#### **Exhaust Fans**



C:/Usersitstumppi/Dropbox (NSW)/Taylor Stumppi/NSW Projects/II/General Info!/I/CAPS Files/700 Indiana.gtcj Generated by: tstumpp@norman-wright.com





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CAPS 4.43.991

#### Chiller

#### DAYTIME (5 am to 10 pm) - 100% CAPACITY

ound (with	insulation)	and the second	and the second second					
			Sour	d Pressure (at 30	feet)			
63 Hz dB	125 Hz dB	250 Hz dB	500 Hz dB	1 kHz dB	2 kHz dB	4 kHz dB	8 kHz dB	Overall dBA
43	52	56	61	60	63	53	49	67
				Sound Power				
63 Hz dB	125 Hz dB	250 Hz dB	500 Hz dB	1 kHz dB	2 kHz dB	4 kHz dB	8 kHz dB	Overall dBA
70	79	83	88	87	90	80	76	94

Octave band is non 'A' weighted and overall readings are 'A' weighted. Sound data rated in accordance with AHRI Standard-370.

#### NIGHTTIME (10 pm to 5 am) - 50% CAPACITY

ind (with i	insulation)				100 B			
			Sour	d Pressure (at 30	feet)			
63 Hz dB	125 Hz dB	250 Hz dB	500 Hz dB	1 kHz dB	2 kHz dB	4 kHz dB	8 kHz dB	Overall dBA
43	51	55	58	60	57	51	46	63
				Sound Power				
63 Hz dB	125 Hz dB	250 Hz dB	500 Hz dB	1 kHz dB	2 kHz dB	4 kHz dB	8 kHz dB	Overall dBA
70	79	82	85	87	84	78	73	90

Octave band is non 'A' weighted and overall readings are 'A' weighted. Sound data rated in accordance with AHRI Standard-370.



#### Bloomenergy



# The Bloom Energy Server<sup>®</sup> 5.5

Bloom Energy's solid oxide fuel cell (SOFC) platform provides a non-combustion pathway to convert fuels directly to electricity. The Energy Server is fuel-flexible and can generate energy using natural gas, blended hydrogen, biogas, and hydrogen. A modular platform approach provides a pathway to upgrade existing systems to align with our customers' sustainability goals over time. With no water consumption during normal operation and a high operational efficiency, the Bloom Energy Server significantly reduces carbon emissions today, while providing a pathway to operate with cleaner fuels in the future.

The Bloom Energy Server provides reliable and resilient base power to facilities. It is designed in a modular concept ideal for on-site distributed power generation, operating 24x7, supporting the power demand in grid parallel or in a microgrid architecture. In addition, the heat from the flue gas can be captured from the Energy Server and integrated in a Combined Heat and Power (CHP) application.

Bloom Energy has over 1 GW of power generation installations deployed globally across six countries. The Energy Server is suitable to address power needs in any industry and has multimegawatt installations across industries such as retail, datacenters, hospitals, sporting arenas, manufacturing and warehousing.



#### Clean

Our systems produce near zero criteria pollutants (NOx, SOx, and particulate matter) and far fewer carbon emissions than legacy technologies.

#### Reliable

Bloom Energy Server is designed around a modular architecture of simple repeating elements. This enables us to generate power  $24 \times 7 \times 365$ .

#### Resilient

Our system operates at very high availability due to its fault-tolerant design and use of the robust natural gas pipeline system. The Bloom Energy Server has survived extreme weather events and other incidences and have continued providing power to our customers.

#### Simple Installation and Maintenance



The Energy Server is 'plug and play' and has been designed in compliance with a variety of safety standards. Bloom Energy manages all aspects of installation, operation and maintenance of the systems.



example only, final array size for 70 Indiana is TBD.

#### S

Specifications	
Outputs	En
Nameplate power output (net AC)	330 kW
Load output (net AC)	330 kW
Electrical connection	480X, 37phase, 50/60 Hz

#### Inputs

Nar Loa

Fuels	Natural gas, blended hydrogen
Input fuel pressure	12-18 psig (15 psig nominal)
Water	None during normal operation

#### Efficiency

Cumulative electrical efficiency (LHV net AC) <sup>2</sup>	65-53%	
Heat rate (HHV)	5.811-7.127 Btu/kW	

#### Emissions<sup>3</sup>

NOx	0.0017 lbs/MWh
SOx	Negligible
со	0.012 lbs/MWh
VOCs	0.01 lbs/MWh
CO <sub>2 @</sub> stated efficiency	679-833 lbs/MWh on natural gas; carbon neutral on directed

1 Namoplate power output and load output in the US is limited to 325 KW based on the most common utility requirement of operating at a power factor, PF 20.92. IPPF requirement is <0.92. Energy Server KW rating is [PF'35 KV4]. 2. 65% LHV efficiency verified by ASME PTC 50 Fuel Cell Power Systems Performance Test

biogas

3. NOx and CO measured per CARB Method 100, VOCs measured as hexane by SCAQMD Method 25.3



Bloom Energy Headquarters 4353 North First Street San Jose, CA 95134 USA

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#### **Physical Attributes and Environment**

Weight	15.8 tons (Energy Server)
	17.3 tons (Energy Server w/skid)
Dimensions	18'11"x 8'8"x 6'9" (back to back)
	32'10" x 4'4" x 6'9" (linear)
Dimensions w/Skid	33'6" x 4'4" x 7'3" (linear)
Temperature range	-20°C to 45°C
Humidity	0%-100%
Seismic vibration	IBC site class D
Location	Outdoor
Noise	<65 nBA € 10 tr
Noise	<65 dBA @ 10 h

#### Codes and Standards

Complies with Rule 21 interconnection, UL1741 SB and IEEE1 547 standards.

Exempt from CA Air District permitting: meets stringent CARB 2007 emissions standards.

An Energy Server is a Stationary Fuel Cell Power System. It is Listed by Underwriters Laboratories, Inc. (UL) as a 'Stationary Fuel Cell Power System' to ANSI/CSA FC1-2014 under UL Category IRGZ and UL File Number MH45102.

#### Additional Notes

Access to a secure website to monitor system performance & environmental benefits. Remotely managed and monitored by Bloom Energy. Capable of emergency stop based on input from the site.

#### Flexible. Future Proof.

Accelerate your path to a zero-carbon future.



#### Exhibit D

Shadow Analysis Report for the Proposed 700 Indiana Street Project per San Francisco Planning Section 295 & CEQA Standards, dated January 22, 2024



JANUARY 22, 2024 FINAL

# SHADOW ANALYSIS REPORT FOR THE PROPOSED 700 INDIANA STREET PROJECT PER SAN FRANCISCO PLANNING SECTION 295 & CEQA STANDARDS



FROM: ADAM PHILLIPS PRINCIPAL PREVISION DESIGN

FLORENTINA CRACIUN, SAN FRANCISCO PLANNING DEPT.

49 SOUTH VAN NESS AVENUE, SUITE 1400 SAN FRANCISCO, CA 94103

**TO:** 

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## I. INTRODUCTION AND OVERVIEW

This report details the results of an analysis conducted by Prevision Design to identify and characterize the shadow effects that would be caused by the construction of a threestory, 48-foot-tall (plus 7'-9" rooftop structures) laboratory building at 700 Indiana Street ("the proposed project"). The shadow analysis focuses specifically on:

- Esprit Park, a public open space under the jurisdiction of the Recreation and Parks Commission, protected under Section 295 of the San Francisco Planning Code, and subject to review for possible environmental impacts under the California Environmental Quality Act (CEQA).
- Avalon Dogpatch Dog Park, a privately owned public open space (POPOS) subject to review for possible environmental impacts under the California Environmental Quality Act (CEQA).

The analysis was conducted according to criteria and methodology as described in (1) the February 3, 1989 memorandum titled "Proposition K – The Sunlight Ordinance" ("the 1989 memorandum") prepared by the San Francisco Recreation and Parks Department ("RPD") and the San Francisco Planning Department ("Planning"), (2) the July 2014 memorandum titled "Shadow Analysis Procedures and Scope Requirements" ("the 2014 memorandum") prepared by Planning, and (3) direction from current Planning and RPD staff regarding the appropriate approach, deliverables, and scope of analysis based on consideration of the open spaces affected.

This report includes the results and discussion of all criteria factored into the analysis, including discussion of the analysis approach and methodology, the proposed project description, descriptions of the affected publicly accessible open spaces, and the results of the study, including quantitative and qualitative reporting of net new shadow generated by the proposed project, graphical simulations of the locations and extents of the proposed project's net new shadow relative to existing shadow conditions.

This report does not present conclusions on the part of Prevision Design about whether the shadow from the proposed project could or should be considered significant/ insignificant or acceptable/unacceptable. These determinations shall be made by the San Francisco Planning Commission with input and recommendations, where applicable, from the Recreation and Parks Commission.

## **II. REGULATORY FRAMEWORK AND SIGNIFICANCE CRITERIA**

There are no specific federal nor state regulations which regulate solar access nor set net new shadow limits on publicly accessible open spaces, but San Francisco has established provisions, policies, and procedures that provide a local framework by which shadow cast by proposed projects on publicly accessible open spaces is evaluated locally. These standards, along with their specific applicability to the proposed project, are detailed below.

#### San Francisco General Plan

STANDARD: The Recreation and Open Space Element of the City of San Francisco General Plan (2014) includes Policy 1.9 applicable to potential solar access or shading impacts of new development on public open spaces, excerpted below:

Solar access to public open space should be protected. In San Francisco, presence of the sun's warming rays is essential to enjoying open space. Climatic factors, including ambient temperature, humidity, and wind, generally combine to create a comfortable climate only when direct sunlight is present. Therefore, the shadows created by new development nearby can critically diminish the utility and comfort of the open space.

Shadows are particularly a problem in downtown districts and in neighborhoods immediately adjacent to the downtown core, where there is a limited amount of open space, where there is pressure for new development, and where zoning controls allow tall buildings. But the problem potentially exists wherever tall buildings near open space are permitted.

The City should support more specific protections elsewhere to maintain sunlight in these spaces during the hours of their most intensive use while balancing this with the need for new development to accommodate a growing population in the City.

APPLICABILITY: The project would be subject to evaluation of potential shadow effects on public spaces under the San Francisco General Plan.

#### San Francisco Planning Code Section 295

STANDARD: Planning Code Section 295, adopted in 1984 pursuant to voter approval of Proposition K (The Sunlight Ordinance), prohibits the issuance of building permits for structures over 40 feet in height that would cast net new shadow on property under the jurisdiction of, or designated to be acquired by, the Recreation and Park Commission between one hour after sunrise to one hour before sunset at any time of year, unless the Planning Commission determines that the adverse impact of net new shadow would be insignificant. Planning Code Section 295 provides that:

The City Planning Commission shall conduct a hearing and shall disapprove the issuance of any building permit governed by the provisions of this Section if it finds that the proposed project will have any adverse impact on the use of the property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission because of the shading or shadowing that it will cause, unless it is determined that the impact would be insignificant. The City Planning Commission shall not make the determination required by the provisions of this Subsection until the general manager of the Recreation and Park Department in consultation with the Recreation and Park Commission has had an opportunity to review and comment to the City Planning Commission upon the proposed project.

APPLICABILITY: Net new shadow cast by the project would affect Esprit Park, a public open space under the jurisdiction of the Recreation and Park Commission; therefore, the provisions of Section 295 apply for the review of Esprit Park only.

#### San Francisco Planning Code Section 146

STANDARD: Planning Code Sections 146 added in 1985, establishes additional design guidelines for buildings in C-3 Downtown Commercial district for the purpose of limiting shadow on public sidewalks.

APPLICABILITY: The project site is not within the C-3 Downtown Commercial district, so these regulations do not apply.

#### San Francisco Planning Code Section 147

STANDARD: Planning Code Sections 147, added in 1985, establishes additional design guidelines for buildings over 50-feet in height in the South of Market Mixed Use, and Eastern Neighborhoods Mixed Use Districts for the purpose of limiting shadow on public plazas, and other publicly accessible spaces other than those protected under Section 295. APPLICABILITY: The project site is in an Urban Mixed Use (UMU) zoning district within an area covered by the Eastern Neighborhoods Area Plan; however, the proposed building height of 48-feet is below the height threshold of Section 147 so these regulations would not apply.

#### Environmental Impacts under CEQA

STANDARD: It is generally considered that implementation of a project would have significant impacts under CEQA if that project were to create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces.

APPLICABILITY: Project is subject to environmental review under CEQA for both Esprit Park and Avalon Dogpatch Dog Park.

# **III. ANALYSIS METHODOLOGY**

#### **Technical Standards**

The technical standards for evaluation of shadow effects follow the criteria adopted by the Recreation and Park Commission and the Planning Commission adopted criteria in 1987 and 1989, as stated below:

Shadow is quantitatively measured by multiplying the area of the shadow by the amount of time the shadow is present on the open space, in units called square foot-hours (sfh). Determining the annual net new shadow load generated by a project begins with a calculation of the number of square foot-hours that would theoretically fall on a qualifying publicly accessible open space each day from an hour after sunrise to an hour before sunset summed over the course of a year, ignoring all shadow from any source. This total is referred to as the Theoretical Annual Available Sunlight (TAAS) for that park. The second step is the calculation of the baseline (or current) shading conditions, which factors in the square foothours of shadow cast by existing buildings and other structures on the open space. Lastly, the shadow effects of the project are calculated, with the difference between the baseline shadow. The amount of shadow is defined as the shadow in square foot-hours cast by the project divided by the TAAS, expressed as a percentage.

Further, in addition to quantitative criteria, the adopted criteria set forth qualitative criteria for evaluation of shadow. Those criteria for assessing net new shadow are based on existing shadow profiles [graphics], important times of day, important seasons in the year, location of the net new shadow, size, and duration of net new shadows and the public good served by buildings casting net new shadow.

#### 3D Modeling Assumptions

For the purposes of this analysis, Prevision Design built a 3D computer model reflecting representation of the local San Francisco urban context and landform surrounding the project generated by Light Intensity Distance and Ranging [or Laser Imaging Detection

and Ranging] (LIDAR). This model is reflective of actual building massing and articulation circa 2011. For new buildings built<sup>1</sup> after that date, Prevision Design has generated individual building models using aerial photography, available architectural plans and/or building records.

The precise location, boundary, and area of Esprit Park reflects GIS (Geographic Information System) data provided by Planning which has received input and boundary verification by RPD. The boundaries of the Avalon Dogpatch Dog Park reflect field observations and site plan drawings prepared by the project sponsor.

The model for the proposed project was provided to Prevision Design by the project architect on 8/15/2023 and reflects the project design as shown in the drawing set dated 8/9/2023 prepared by MBH Architects.

#### Qualitative Standards

As part of the qualitative analysis of shadow effects, the value of sunlight is discussed relative to the nature of features being shaded as well as their intensity of use. Benches, picnic tables, children's play areas, and other similar features which serve as destination points where which users more typically remain in a specific area for periods of time are usually considered more sensitive to the addition of net new shadow, whereas transitional spaces (such as park entries or walkways), or wooded areas where shade is already a defining condition are often considered less sensitive to the addition of shadow. Larger unprogrammed areas (grass fields, etc.) could also be considered less sensitive to the addition of new shadow if some nearby areas would remain unshaded.

<sup>1</sup> Where applicable, the final form of buildings currently under construction are included as if they are complete for the purposes of this study. However, no buildings are currently under construction within the study area and are therefore not included in this analysis.

# **IV. SCOPE OF WORK AND STUDIES PERFORMED**

#### Initial Scoping Study

To establish the scope of review and approach to analysis and deliverables, Prevision Design followed the guidelines as encoded in the 1989 and 2014 memoranda, as modified for project-specific considerations via input and direction from Planning and RPD staff.

To determine the areas and features that would be affected by net new project shadow, Prevision Design used the 3D context model to generate a full-year shadow fan diagram, which depicts all areas that would receive net new shadow from the proposed project (factoring in topography as well the presence of current, intervening shadow cast by existing buildings) between one hour after sunrise through one hour before sunset ("the Section 295 daily analysis period") throughout the year. A shadow fan diagram showing the extents of annual net new shadow was submitted to Planning on 8/21/2023 and identified that Esprit Park and Avalon Dogpatch Dog Park would receive net new shadow from the proposed project.

Prevision Design additionally conducted a records search for cumulative projects in the vicinity that would potentially also cast net new shadow on the open spaces affected by the proposed project and confirmed Planning on 8/30/2023 that there are no planned projects in the vicinity. As such, no cumulative condition analysis has been performed.

Prevision Design generated a draft scope of work and analysis methodology, which was submitted to Planning on 7/12/2023 Planning reviewed, commented, and approved a scope of work and deliverables for this analysis on 8/1/2023 which are detailed below:

#### Quantitative Calculations (Esprit Park Only)

Using the 3D project model and urban context model developed as part of the scoping study, Prevision Design performed snapshot shadow measurements of the areas existing shadow falling on Esprit Park at 15-minute intervals within the daily analysis period, repeating these daily measurements every seven days between the Summer Solstice (June 21) and Winter Solstice (December 20). Interim times and dates are extrapolated to approximate shadow conditions on other days and times. This half-year analysis period (between the Summer and Winter Solstices) is referred to by Planning as a

"solar year". As the path of the sun is roughly mirrored over the second half of the year (December 21 through June 20), analysis of this half-year period is mirrored to arrive at a full year estimated calculation of the areas and durations of existing shadow that currently falls on Esprit Park. In addition to the quantitative analysis of existing shadow conditions, calculations were generated to reflect the existing plus project condition, with the difference between the existing conditions and those with the project representing the net new shadow effect of the proposed project.

#### Shadow Profile Graphics

To provide a spatial and contextual understanding of the location, size, and features affected by net new shadow, Prevision Design prepared graphics showing "snapshot" shadow profiles at hourly intervals over the entire area affected by project shadow. These graphics differentiate between existing shadow and net new project shadow within the Section 295 daily analysis period on the Summer Solstice (June 21), the approximate equinoxes (March 22/September 20), and the Winter Solstice (December 20). These graphics appear as Exhibits B-D.

#### Field Observations and Qualitative Analysis

At the time this report was prepared, Esprit Park was in the construction phase of a renovation project and is not open to the public, therefore no park use observations were made. The qualitative analysis focuses instead on the size, location, timing, and duration of net new shadow and how such shadow might potentially affect planned programmed uses of the Esprit Park.

No field observations were performed for Avalon Dogpatch Dog Park. The qualitative analysis focuses on the approximate size, location, timing, and duration of net new shadow and how such shadow might potentially affect programmed uses.



FIGURE 1: Architect's Project Rendering

# **V. PROPOSED PROJECT**

The proposed project would be located at 700 Indiana Street on a 31,090-sf lot (Block 4062, Lot 007) in the Potrero Hill neighborhood of San Francisco. The project sponsor is MBC Biolabs at 700 and the project architect is MBH Architects.

The project involves the demolition of a one-story, approximately 38-foot-tall, 15,000sf commercial storage building and new construction of a new three-story, 48foot-tall (plus 7'-9" rooftop structures) Type I-A non-life science laboratory building.

Project will include onsite parking (below ground) and 72,349 gross sf of lab space classified as occupancy 'B' along with grading, sitework, hardscape, landscape, site lighting, & other improvements.

Figure 1 shows a rendering of the proposed project. Figure 2 shows the location of the proposed project in relationship to nearby public parks and open spaces. The project site plan and exterior building elevations which reflect the building design analyzed are included as Exhibit F.



700 Indiana Street
Parks/Open Spaces (Jurisdiction)
1 Esprit Park (RPD)
2 Avalon Dogpatch Dog Park (POPOS)
3 Pennsylvania Garden (POPOS)
4 Crane Cove Park (PORT)



FIGURE 2: Vicinity Map



FIGURE 3: Esprit Park Overview Rendering (from the east)



FIGURE 4: Rendering of paths on north side



FIGURE 5: Rendering of southwest entry

# **VI. AFFECTED PARKS AND OPEN SPACES**

#### Esprit Park

Esprit Park<sup>2</sup> is a public park under the jurisdiction of the San Francisco Recreation and Parks Commission. It is a 1.83-acre<sup>3</sup> (79,731-sf) urban park located in the Potrero Hill neighborhood of San Francisco on Assessor's Block 4061 / Lot 002. It is bounded by 19th Street to the north, 20th Street to the south, Minnesota Street to the east, and Indiana Street to the west. The entire park is unfenced and the official hours of operation of Esprit Park are from 5:00 a.m. to 11:45 p.m.

A full-park renovation of Esprit Park was initiated in the Fall of 2017 and is currently in the final stages of construction with an anticipated opening date in early 2024. Renderings of the final park design and features are included as Figures 3, 4, and 5 and is described on sfreepark.org as follows:

The park's central meadow will be bisected by an east/west path, allowing for more strolling and running in the park. Specific uses will be assigned to the two meadows. In the north meadow, a new off-leash dog play area will be created. The south meadow will be designated "dog-free" and dogs on-leash or off-leash will not be

<sup>&</sup>lt;sup>2</sup>Official Park website: https://sfrecpark.org/Facilities/Facility/Details/Esprit-Park-165

<sup>&</sup>lt;sup>3</sup>Park areas and boundary information are from the "San Francisco Open Space for Shadow Study Analysis" public dataset published and maintained by City and County of San Francisco Planning Department (<u>https://data.sfgov.org/Geographic-Locations-and-Boundaries/San-Francisco-Open-Space-for-Shadow-Study-Analysis/xk8z-bcqz</u>). Park sizes listed on the RPD website, the SF PIM, or other sources may reflect slightly different park areas.
#### **19TH STREET**





20TH STREET

FIGURE 6: Esprit Park Plan



permitted (service animals allowed). New plantings as well as exercise equipment, site furnishings, and signage will be added.

Figure 6 shows a site plan of Esprit Park upon completion.



FIGURE 7: Avalon Dogpatch Dog Park

#### Avalon Dogpatch Dog Park

The Avalon Dogpatch Dog Park<sup>4</sup> is a Privately-Owned Public Open Space (POPOS) which is approximately 7,500 square feet located between 700 and 800 Indiana Street underneath the elevated 20th street overpass on the site of the former 20th street roadway terminus. The park area is comprised of a large dirt area and smaller turf area designed for dog play, as well as a concrete area on the eastern edge with seven concrete block seating areas. In the central portion of the park are three post-mounted lights. The dog park is surrounded by chain link fence on the north, west and south sides and bounded a tall concrete retaining wall on the west end.

#### Other Nearby Parks and Open Spaces

Net new shadow from the proposed project does not have the potential to affect any other publicly accessible parks or plazas.

<sup>&</sup>lt;sup>4</sup> A building permit (#202204051620) was approved on 6/16/2022 which indicated the removal of the Avalon Dogpatch Dog Park, however at the time of this report the timing of such removal is unknown, so this space has been included and analyzed by this report.

#### **VII. ESPRIT PARK SHADOW ANALYSIS FINDINGS**

Table 1 summarizes the existing condition data and quantitative shadow effects of the proposed project on Esprit Park. The full quantitative calculations for shadow conditions on Esprit Park across all 27 analysis dates are included as Exhibit E.

#### **Existing Conditions**

Under current conditions, the 1.83-acre park experiences 22,711,504 annual square-foothours (sfh) of shadow. Compared to the theoretical annual available sunlight (TAAS)

ESPRIT PARK ANNUAL SHADOW LOADS / SQUARE FOOT HOURS (sfh)			
Existing / Current Shadow	Project Net New Shadow	Existing + Project Shadow	Remaining Sunlight
<b>7.65</b> %	<b>2.17</b> %	<b>9.82</b> %	<b>82.53</b> %
22,711,504 sfh	6,448,116 sfh	29,159,619 sfh	267,550,952 sfh

EXISTING SHADOW DETAILS		
Range in existing shadow area coverage throughout the year	Between 0% - 86%	
Time of year / time of day most affected by existing shadow	Fall / Early Morning (before 8:00 AM)	

PROJECT NET NEW SHADOW DETAILS		
Days net new shadow would occur (date range)	Year-round	
Date(s) with most sfh net new shadow	June 21	
Seasons / Time of day most affected by net new shadow	Spring & Summer / Late Afternoon (after 4:30 PM)	
Area of largest net new shadow (date and time)	27,406 sf (September 6 & April 5 @ 6:15 PM )	
Percentage of Esprit Park covered by largest shadow	34.37%	
Range in shadow coverage throughout the year (area range)	Between 0% - 34% (0 - 27,406 sf)	
Average shadow size across affected dates (percent coverage)	8,656 sf (10.86%)	
Date(s) with the longest duration of net new shadow (duration)	July 26 & May 17 (2 hr 17 min +/- 7 min)	
Range in daily net new shadow duration across affected dates	Between 1 hr 43 min up to 2 hr 17 min (+/- 7 min)	
Average daily net new shadow duration across affected dates	Approx. 2 hrs	

TABLE 1: Quantitative shadow breakdown for Esprit Park



#### EXISTING/PROJECT SHADOW VS SUN CHART

for this park of 296,710,571 sfh, this yields a current annual shadow load of 7.65 percent.<sup>5</sup>

Under existing conditions, large areas of shadow<sup>6</sup> are cast over large portions of the park during early morning and late afternoon hours from existing buildings and a hill located to the west of the park. Midday hours are substantially free of shadow year-round.

#### Quantitative Shadow Impacts from Proposed Project

The proposed project would result in areas of net new shadow falling on the park, resulting in a net addition of approximately 6,448,116 net new annual sfh of shadow, increasing the annual shadow load by 2.17 percent. This would result in a new annual total shadow load of 9.82 percent.

#### Timing and Location of Net New Shadow from Proposed Project

Net new shadow from the proposed project would affect Esprit Park throughout the year exclusively during mid-to late afternoon hours. Over spring

SPRING: Mar 21-Jun 20

**AFTERNOON:** 1:30 p.m. to 4 p.m. LATE AFTERNOON: After 4 p.m.

FIGURE 8: Sun and Shadow SFH by Time of Day and Season

<sup>&</sup>lt;sup>5</sup> Prior shadow analyses of Esprit Park reflect differing existing and cumulative condition shadow load percentages, which is attributable to new construction and/or suspension of previously contemplated (cumulative) projects since the time of such prior analyses.

<sup>&</sup>lt;sup>6</sup> Even though there are over 50 mature trees surrounding Esprit Park, shadow cast by these features is not taken under consideration by this analysis, per San Francisco shadow analysis methodology.



FIGURE 9: Largest area of new shadow (September 6 and April 5 at 6:15 pm)

and summer months project shadow would first reach the park around 5:30 p.m. or later, and over fall and winter would arrive around 2:15 p.m. or later. As shown by Figure 8, project shadow would not affect the park during morning or midday hours at any time.

Annually, the day of maximum net new sfh of shadow due to the proposed project would occur on June 21<sup>st</sup> when net new shadow would reach the western edge of Esprit Park around 5:30 p.m. and progressively encroach eastward across the central and southern areas of the park until 7:36 p.m. (the end of the Section 295 daily analysis period).

The largest single moment of shadow effect on the park would occur on September 6 and April 5 at 6:15 p.m. (Figure 9), where shadow would briefly cover 27,406 sf of park area (equal to 34 percent of the total park area) The average size of shadow across all affected dates/times would be 8,656 sf (equal to 10.86 percent of the total park area).

The duration of proposed project-generated net new shadow would vary throughout the year, ranging from between 1 hour and 43 minutes (Approximately 2:08 to 3:51 p.m. on December 13 and 28) up to 2 hours and 17 minutes (Approximately 5:08 to 7:25 p.m. on May 17 and July 26), with some amount of net new project shadow falling on the park for two hours per day on average.

Proposed Project Existing (current) Shadow Net New Shadow from Proposed Project

#### PARK LEGEND

1	Park Entries
2	Picnic Table
3	Lawn/Grass Areas
4	Dog Play Area
5	Excercise Areas
6	Tree Protection / Seating
7	Storage Building

#### Qualitative Summary of Shadow Impact

Over the course of the year, new shadow would fall on portions of the park at any given time (Exhibit A graphically shows the total aggregate areas affected), however the western and central portions of the park would be most frequently affected by net new project shadow. Project shadow would not wholly cover Esprit Park at any given time.

Throughout the year, net new shadow due to the proposed project would first encroach across the western edge of the park starting at the mid-to late afternoon, approximately 90 minutes earlier than shadows would reach the western edge of the park under existing conditions.

Overall, project shadow would primarily affect the western edge of the park along with central and southern areas of the park during the spring and summer months. Over the fall and winter months, project shadow would be cast further northward, affecting central to northern portions of the park.

As shown by Figure A1, only the southeastern corner of the park and a small portion of the central eastern edge of the park would receive no net new project shadow at any time during the year. All other areas of Esprit Parkwould receive some amount of net new shadow from the project at various times of the year.

Of the affected areas and features<sup>7</sup>, the exercise areas, fixed benches, and picnic tables would likely be more sensitive to net new shadow due to their fixed location as compared to park entries and pathways (typically used in a transitory fashion), and the open grass areas (where park users would typically have some equivalent nearby areas not affected by shadow). Four of the five park exercise areas would receive some net new shadow from the proposed project and are detailed below:

- The two exercise areas in the northwest corner and central west areas would be most frequently affected, receiving project shadow year-round starting between approximately 5:30-6:30 p.m. during spring/summer and 2:30-4:30 p.m. during fall/winter, and remain affected by net new project shadow for just over an hour (before it would have otherwise been cast in shadow under existing conditions).
- The exercise area in the southwest corner of Esprit Park would only be affected by project shadow between early March and Late October when shadows would encroach starting between approximately 5:00-6:30 p.m. and remain affected by net new project shadow for just over an hour.

<sup>&</sup>lt;sup>7</sup> All references to park features refer to the renovated Esprit Park (under construction as of December 2023).

- The exercise area in the northeast corner of Esprit Park would only be affected by project shadow for two short periods between mid-February and early March and mid-October and early November, when shadows would encroach starting just after 4 p.m. and remain affected by net new project shadow for less than 15 minutes (until the end of the daily analysis period).
- The exercise area in the southeast corner of the park would not be affected by net new project shadow at any time throughout the year.

Five of the park's seven picnic tables would receive some net new shadow from the proposed project at different times throughout the year.

- The two tables in the southwest corner of the park would only be affected by net new project shadow between mid-March and mid-September, when shadows would encroach starting between approximately 5:30-7:00 p.m. and remain affected by net new project shadow for between 15 to 30 minutes.
- The picnic table in the northwest corner of the park would only be affected by net new project shadow between mid-August through early May when shadows would encroach starting between approximately 3:00 to 6:00 p.m. and remain affected by net new project shadow for between 30 to 45 minutes.
- The two tables in the northeast corner of the park would only be affected by net new project shadow for about a week in mid-April and again in late August and mid-September, when shadows would encroach starting between approximately 6:30 p.m. and remain affected by net new project shadow for under 15 minutes.

The design of Esprit Park includes many fixed benches, seating walls, and natural log bench areas throughout the park. Many of these seating areas would receive net new shadow from the proposed project over the course of the year, with those located along the western half receiving up to 60 minutes of additional shaded time as compared to existing conditions. However, due to the large number of fixed seating areas in all parts of the park, many seating areas would remain unshaded throughout the times other benches would be affected by net new project shadow.

Both large grass areas would also receive net new shadow from the project, with the northern grass / dog play area receiving more shadow than the southern grass area. Net new shadow would affect the northern grass / dog play area starting at around 5:00 to 5:30 pm in the spring/summer and 2:00 to 4:30 p.m. in the fall/winter. Project shadows would affect the northern grass area through the remainder of the day (up to approximately 90 minutes). Aside from 1 to 2 weeks in mid-March and mid-September within the last 15-minutes of the analysis period where net new shadows would be

present, some portion of the northern grass area would remain unshaded. Net new shadow would affect the southern grass area starting at around 6:00 to 6:45 p.m. in the spring/summer and 2:00 to 3:30 p.m. in the fall/winter. Project shadows would affect the southern grass area for between 30 to 45 minutes. At all times affected by net new project shadow, some portion of the southern grass area would remain unshaded.

With the exception of areas in the southeast corner and a central area along the eastern edge of the park, park entries and pathways would also receive net new shadow from the project, with paths and entries affected on the western half of the park typically receiving net new project shadow in the early to mid-afternoon for up to 90 minutes and paths and entries on the eastern edge receiving shadow later in the afternoon for typically 30 minutes or less.

While not a quantitative consideration under San Francisco shadow analysis standards, a key part of design of Esprit Park includes the preservation of large mature trees as well the planting of many additional trees, in particular along the western edge of the park. While the preceding analysis has not taken into consideration any shadows cast by landscape elements, from a qualitative perspective, the nature of these areas being shaded areas under dense canopies by design would very likely affect park user's expectations of sunlight, and the real-world presence of tree-generated shadow on the western side of the park would also increase the areas of existing afternoon shadows on the central and eastern areas of the park, effectively reducing some of the effect of shadow that would be cast by the proposed project.

Exhibits B through D graphically illustrate shadow conditions at hourly intervals throughout the day between the Section 295 cutoff times at the Summer Solstice (June 21), approximate Vernal and Autumnal Equinoxes (March 22 / September 20), the Winter Solstice (December 20).



FIGURE 10: Largest morning new shadow (June 21 at 6:46 am)



FIGURE 11: Largest afternoon new shadow (June 21 at 5:45 pm)

#### **VIII. AVALON DOGPATCH DOG PARK ANALYSIS FINDINGS**

As shown in Figures 10 and 11, the Avalon Dogpatch Dog Park is located almost entirely beneath an overpass so under existing conditions the park is substantially shaded at most times. The park would receive some net new shadow from the proposed project between late April and mid-August during early mornings prior to 8 a.m. and again in the late afternoons after 5:30 p.m. Project shadow would be located in the northwestern corner of the dog park during the morning period and would retreat and move off of the northern edge of the park prior to 8:00 a.m. During late afternoons within the affected dates, shadow would begin to encroach after 5:30 p.m. on a small area in the northeast corner of the park until late in the day (around 7:00 p.m.) when existing shadows cast by the hillside to the west would shade the entire park. Project net new shadows would be largest on the Summer Solstice where they would cover about 15 percent of the total park area during the morning period (Figure 10) and about 5 percent of the park area during the late afternoon period (Figure 11).

Areas affected would include portions of the dirt and turf play areas as well as three of the concrete seating areas (during the late afternoon period only). During these affected dates times, while some features would receive shadow from the project, other similar areas and/or features would remain unshaded allowing park users to select sunny or shady areas of the park for their activities.

While net new shadow from the proposed project would marginally increase amount of shadow on the park at certain times, given the small areas affected, the availability of sunny areas during affected times, and the overall nature of the space as covered and typically shaded, net new shadow from the project would not be likely to substantially alter the use and enjoyment of the space for users.





PAGE 23

#### ANNUAL NET NEW SHADOW LOCATIONS FROM THE PROPOSED PROJECT



# EXTENTS OF NET NEW SHADOW CAST BETWEEN 1-HOUR FULL YEAR AFTER SUNRISE THROUGH 1-HOUR BEFORE SUNSET ANNUALLY



**A 1** 

Publicly Accessible Open Spaces (Jurisdiction)
Esprit Park (RPD)
Avalon Dogpatch Dog Park (POPOS)

frequent

shadow



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700 INDIANA STREET

























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Net New Shadow from Proposed Project

2 Avalon Dogpatch Dog Park (POPOS)



MINNESOTA

STREET



Proposed Project Existing (current) Shadow Net New Shadow from Proposed Project

Publicly Accessible Open Spaces (Jurisdiction) 1 Esprit Park (RPD)

2 Avalon Dogpatch Dog Park (POPOS)

Ν





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MINNESOTA

STREET



#### SUMMER SOLSTICE JUNE 21

20TH STREET OVERPASS



Proposed Project Existing (current) Shadow Net New Shadow from Proposed Project Publicly Accessible Open Spaces (Jurisdiction)
Esprit Park (RPD)

2 Avalon Dogpatch Dog Park (POPOS)

N





















## B1.18 700 INDIANA STREET Shadow diagrams on the Summer Solstice





## **B1.19 700 INDIANA STREET** Shadow diagrams on the Summer Solstice





#### **B1.20 700 INDIANA STREET**





## B1.21 700 INDIANA STREET Shadow diagrams on the Summer Solstice





## **B1.22**

## 700 INDIANA STREET











**700 INDIANA STREET** 

Shadow diagrams on the Fall Equinox (Spring sim)






































Publicly Accessible Open Spaces (Jurisdiction)
Esprit Park (RPD)















# C1.10

#### **700 INDIANA STREET**

Shadow diagrams on the Fall Equinox (Spring sim)



Existing (current) Shadow Net New Shadow from Proposed Project



## **C1.11 700 INDIANA STREET** Shadow diagrams on the Fall Equinox (Spring sim)





Publicly Accessible Open Spaces (Jurisdiction) Esprit Park (RPD)



#### **C1.12 700 INDIANA STREET** Shadow diagrams on the Fall Equinox (Spring sim)



#### FALL EQUINOX (SPRING SIM) **SEPTEMBER 20 & MARCH 22**



Proposed Project Existing (current) Shadow Net New Shadow from Proposed Project Publicly Accessible Open Spaces (Jurisdiction) 1 Esprit Park (RPD)



#### C1.13**700 INDIANA STREET** Shadow diagrams on the Fall Equinox (Spring sim)



#### FALL EQUINOX (SPRING SIM) **SEPTEMBER 20 & MARCH 22**



1 Esprit Park (RPD)

2 Avalon Dogpatch Dog Park (POPOS)

Proposed Project

Existing (current) Shadow

Net New Shadow from Proposed Project



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**700 INDIANA STREET** 

Shadow diagrams on the Winter Solstice



Proposed Project Existing (current) Shadow Net New Shadow from Proposed Project Publicly Accessible Open Spaces (Jurisdiction) Esprit Park (RPD)





#### Proposed Project Existing (current) Shadow

Existing (current) Shadow Net New Shadow from Proposed Project Publicly Accessible Open Spaces (Jurisdiction) Esprit Park (RPD)





Shadow diagrams on the Winter Solstice





Publicly Accessible Open Spaces (Jurisdiction)

Esprit Park (RPD)





Shadow diagrams on the Winter Solstice





Publicly Accessible Open Spaces (Jurisdiction) Esprit Park (RPD)

ESPIL PAIK (RPD)





Shadow diagrams on the Winter Solstice





Publicly Accessible Open Spaces (Jurisdiction)

Esprit Park (RPD)







DECEMBER 20 & DECEMBER 21

Publicly Accessible Open Spaces (Jurisdiction) Esprit Park (RPD)





Shadow diagrams on the Winter Solstice











**700 INDIANA STREET** 

Shadow diagrams on the Winter Solstice



Existing (current) Shadow Net New Shadow from Proposed Project 1 Esprit Park (RPD)





**700 INDIANA STREET** 

Shadow diagrams on the Winter Solstice





## **JUNE 21**

7:15 PM

7:36 PM

10,640 sf

56,418 sf

Summer solstice Analysis hours: 6:46 AM-7:36 PM (PDT)					Shadow / Sunlight Balance Key  Existing Shadow Project Shadow Sunlight Remaining
Analusia Tima	EXISTING SHADOW		PROJECT NET NEW SHADOW		SHADOW/SUNLIGHT BALANCE
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
6:46 AM	50,998 sf	63.96%	0 sf	0.00%	
7:00 AM	32,239 sf	40.44%	0 sf	0.00%	
7:15 AM	19,677 sf	24.68%	0 sf	0.00%	
7:30 AM	12,579 sf	15.78%	0 sf	0.00%	
7:45 AM	8,019 sf	10.06%	0 sf	0.00%	
8:00 AM	4,644 sf	5.82%	0 sf	0.00%	
8:15 AM	1,956 sf	2.45%	0 sf	0.00%	
8:30 AM	364 sf	0.46%	0 sf	0.00%	
8:45 AM	353 sf	0.44%	0 sf	0.00%	
9:00 AM	346 sf	0.43%	0 sf	0.00%	
9:15 AM	347 sf	0.44%	0 sf	0.00%	
9:30 AM	344 sf	0.43%	0 sf	0.00%	
9:45 AM	342 sf	0.43%	0 sf	0.00%	
10:00 AM	339 sf	0.43%	0 sf	0.00%	
10:15 AM	336 sf	0.42%	0 sf	0.00%	
10:30 AM	333 sf	0.42%	0 sf	0.00%	
10:45 AM	329 sf	0.41%	0 sf	0.00%	
11:00 AM	326 sf	0.41%	0 sf	0.00%	
11:15 AM	321 sf	0.40%	0 sf	0.00%	
11:30 AM	316 sf	0.40%	0 sf	0.00%	
11:45 AM	314 sf	0.39%	0 sf	0.00%	
12:00 PM	308 sf	0.39%	0 sf	0.00%	
12:15 PM	304 sf	0.38%	0 sf	0.00%	
12:30 PM	299 sf	0.37%	0 sf	0.00%	
12:45 PM	294 sf	0.37%	0 sf	0.00%	
1:00 PM	290 sf	0.36%	0 sf	0.00%	
1:15 PM	291 sf	0.37%	0 sf	0.00%	
1:30 PM	291 sf	0.37%	0 sf	0.00%	
1:45 PM	295 sf	0.37%	0 sf	0.00%	
2:00 PM	300 sf	0.38%	0 sf	0.00%	
2:15 PM	301 sf	0.38%	0 sf	0.00%	
2:30 PM	306 sf	0.38%	0 sf	0.00%	
2:45 PM	306 sf	0.38%	0 sf	0.00%	
3:00 PM	308 sf	0.39%	0 sf	0.00%	
3:15 PM	312 sf	0.39%	0 sf	0.00%	
3:30 PM	313 sf	0.39%	0 sf	0.00%	
3:45 PM	314 sf	0.39%	0 sf	0.00%	
4:00 PM	312 sf	0.39%	0 sf	0.00%	
4:15 PM	311 sf	0.39%	0 sf	0.00%	
4:30 PM	312 sf	0.39%	0 sf	0.00%	
4:45 PM	318 sf	0.40%	0 sf	0.00%	
5:00 PM	324 sf	0.41%	0 sf	0.00%	
5:15 PM	330 sf	0.41%	0 sf	0.00%	
5:30 PM	337 sf	0.42%	87 sf	0.11%	
5:45 PM	343 sf	0.43%	869 sf	1.09%	
6:00 PM	349 sf	0.44%	2,660 sf	3.34%	
6:15 PM	354 sf	0.44%	4,802 sf	6.02%	
6:30 PM	358 sf	0.45%	7,706 sf	9.66%	
6:45 PM	577 sf	0.72%	12,848 sf	16.11%	
7:00 PM	3 124 sf	3 92%	18 866 sf	23 66%	

23,452 sf

13,190 sf

29.41%

16.54%

13.35%

70.76%

## **JUNE 28**

7:15 PM

7:36 PM

9,650 sf

56,716 sf

Mirror date: June 14 Analysis hours: 6:48 AM-7:36 PM (PDT)					Shadow / Sunlight Balance Key Existing Shadow Project Shadow Sunlight Remaining
	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
6:48 AM	50.956 sf	63.91%	0 sf	0.00%	
7:00 AM	34,544 sf	43.33%	0 sf	0.00%	
7:15 AM	21.072 sf	26.43%	0 sf	0.00%	
7:30 AM	13.322 sf	16.71%	0 sf	0.00%	
7:45 AM	8.551 sf	10.73%	0 sf	0.00%	
8:00 AM	5.044 sf	6.33%	0 sf	0.00%	
8:15 AM	2,282 sf	2.86%	0 sf	0.00%	
8:30 AM	366 sf	0.46%	0 sf	0.00%	
8:45 AM	355 sf	0.45%	0 sf	0.00%	
9:00 AM	348 sf	0.44%	0 sf	0.00%	
9:15 AM	348 sf	0.44%	0 sf	0.00%	
9:30 AM	345 sf	0.43%	0 sf	0.00%	
9:45 AM	344 sf	0.43%	0 sf	0.00%	
10:00 AM	340 sf	0.43%	0 sf	0.00%	
10:15 AM	337 sf	0.42%	0 sf	0.00%	
10:30 AM	334 sf	0.42%	0 sf	0.00%	
10:45 AM	330 sf	0.41%	0 sf	0.00%	
11:00 AM	326 sf	0.41%	0 sf	0.00%	
11:15 AM	322 sf	0.40%	0 sf	0.00%	
11:30 AM	317 sf	0.40%	0 sf	0.00%	
11:45 AM	314 sf	0.39%	0 sf	0.00%	
12:00 PM	309 sf	0.39%	0 sf	0.00%	
12:15 PM	304 sf	0.38%	0 sf	0.00%	
12:30 PM	299 sf	0.38%	0 sf	0.00%	
12:45 PM	294 sf	0.37%	0 sf	0.00%	
1:00 PM	290 sf	0.36%	0 sf	0.00%	
1:15 PM	290 sf	0.36%	0 sf	0.00%	
1:30 PM	292 sf	0.37%	0 sf	0.00%	
1:45 PM	296 sf	0.37%	0 sf	0.00%	
2:00 PM	300 sf	0.38%	0 sf	0.00%	
2:15 PM	303 sf	0.38%	0 sf	0.00%	
2:30 PM	305 sf	0.38%	0 sf	0.00%	
2:45 PM	307 sf	0.38%	0 sf	0.00%	
3:00 PM	310 sf	0.39%	0 sf	0.00%	
3:15 PM	312 sf	0.39%	0 sf	0.00%	
3:30 PM	312 sf	0.39%	0 sf	0.00%	
3:45 PM	313 sf	0.39%	0 sf	0.00%	
4:00 PM	314 sf	0.39%	0 sf	0.00%	
4:15 PM	313 sf	0.39%	0 sf	0.00%	
4:30 PM	311 sf	0.39%	0 sf	0.00%	
4:45 PM	317 sf	0.40%	0 sf	0.00%	
5:00 PM	324 sf	0.41%	0 sf	0.00%	
5:15 PM	330 sf	0.41%	0 sf	0.00%	
5:30 PM	337 sf	0.42%	74 sf	0.09%	
5:45 PM	343 sf	0.43%	766 sf	0.96%	
6:00 PM	349 sf	0.44%	2,538 sf	3.18%	
6:15 PM	355 sf	0.45%	4,658 sf	5.84%	
6:30 PM	358 sf	0.45%	7,446 sf	9.34%	
6:45 PM	443 sf	0.56%	12,507 sf	15.69%	
7:00 PM	2./40 st	3.44%	18.567 st	23.29%	

23,543 sf

13,098 sf

29.53%

16.43%

12.10%

71.13%

Mirror date: Ju	une 7				Shadow / Sunlight Balance Key		
Analysis hours:	6:52 AM-7:36 PM (PI	DT)			Existing Shadow Project Shadow Sunlight Remaining		
		-					
Analysis Time	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE		
	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun		
6:52 AM	50,834 sf	63.76%	0 sf	0.00%			
7:00 AM	38,547 sf	48.35%	0 sf	0.00%			
7:15 AM	23,311 sf	29.24%	0 sf	0.00%			
7:30 AM	14,470 sf	18.15%	0 sf	0.00%			
7:45 AM	9,371 sf	11.75%	0 sf	0.00%			
8:00 AM	5,646 sf	7.08%	0 sf	0.00%			
8:15 AM	2,762 sf	3.46%	0 sf	0.00%			
8:30 AM	421 sf	0.53%	0 sf	0.00%			
8:45 AM	358 sf	0.45%	0 sf	0.00%			
9:00 AM	352 sf	0.44%	0 sf	0.00%			
9:15 AM	351 sf	0.44%	0 sf	0.00%			
9:30 AM	349 sf	0.44%	0 sf	0.00%			
9:45 AM	347 sf	0.44%	0 sf	0.00%			
10:00 AM	344 sf	0.43%	0 sf	0.00%			
10:15 AM	341 sf	0.43%	0 sf	0.00%			
10:30 AM	336 sf	0.42%	0 sf	0.00%			
10:45 AM	333 sf	0.42%	0 sf	0.00%			
11:00 AM	328 sf	0.41%	0 sf	0.00%			
11:15 AM	326 sf	0.41%	0 sf	0.00%			
11:30 AM	320 sf	0.40%	0 sf	0.00%			
11:45 AM	315 sf	0.40%	0 sf	0.00%			
12:00 PM	310 sf	0.39%	0 sf	0.00%			
12:15 PM	306 sf	0.38%	0 sf	0.00%			
12:30 PM	301 sf	0.38%	0 sf	0.00%			
12:45 PM	296 sf	0.37%	0 sf	0.00%			
1:00 PM	290 sf	0.36%	0 sf	0.00%			
1:15 PM	290 sf	0.36%	0 sf	0.00%			
1:30 PM	295 sf	0.37%	0 sf	0.00%			
1:45 PM	300 sf	0.38%	0 sf	0.00%			
2:00 PM	299 sf	0.38%	0 sf	0.00%			
2:15 PM	305 sf	0.38%	0 sf	0.00%			
2:30 PM	305 sf	0.38%	0 sf	0.00%			
2:45 PM	311 sf	0.39%	0 sf	0.00%			
3:00 PM	311 sf	0.39%	0 sf	0.00%			
3:15 PM	313 sf	0.39%	0 sf	0.00%			
3:30 PM	314 sf	0.39%	0 sf	0.00%			
3:45 PM	315 sf	0.40%	0 sf	0.00%			
4:00 PM	31/L sf	0.40%	0 sf	0.00%			
4:00 FM	314 si	0.35%	0 si	0.00%			
4:30 PM	31/L of	0.40%	0 si	0.00%			
4:30 T M	314 31 318 cf	0.39%	0 si	0.00%			
4.45 FM	204 of	0.40%	0 si	0.00%			
5.00 PW	324 SI	0.41%	0 SI	0.00%			
5.10 PW	227 of	0.41%	0 SI	0.00%			
D.OU PIVI	007 SI	0.42%	7951 900 of	1.010/			
0:40 PW	344 SI	0.43%	003 SI	1.01%			
6:UU PIM	351 ST	0.44%	2,590 ST	3.25%			
0:15 PM	300 ST	0.45%	4,726 ST	5.93%			
6:30 PM	360 st	0.45%	7,584 st	9.51%			
6:45 PM	361 st	0.45%	12,/31 st	15.9/%			
7:00 PM	2,607 St	3.27%	18,808 st	23.59%			

23,643 sf

12,790 sf

29.65%

16.04%

12.22%

72.19%

9,740 sf

57,555 sf

7:15 PM

7:36 PM

7:33 PM

58,892 sf

JULI I	Z				
Mirror date: M	lay 31				Shadow / Sunlight Balance Key
Analysis hours:	6:56 AM-7:33 PM (P	DT)			Existing Shadow Project Shadow Sunlight Remaining
	· · · · · · · · · · · · · · · · · · ·	,			
Analysia Time	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
6:56 AM	50,586 sf	63.45%	0 sf	0.00%	
7:00 AM	44,365 sf	55.64%	0 sf	0.00%	
7:15 AM	26,606 sf	33.37%	0 sf	0.00%	
7:30 AM	16,118 sf	20.22%	0 sf	0.00%	
7:45 AM	10,499 sf	13.17%	0 sf	0.00%	
8:00 AM	6,475 sf	8.12%	0 sf	0.00%	
8:15 AM	3,404 sf	4.27%	0 sf	0.00%	
8:30 AM	913 sf	1.15%	0 sf	0.00%	
8:45 AM	362 sf	0.45%	0 sf	0.00%	
9:00 AM	358 sf	0.45%	0 sf	0.00%	
9:15 AM	358 sf	0.45%	0 sf	0.00%	
9:30 AM	355 sf	0.44%	0 sf	0.00%	
9:45 AM	352 sf	0.44%	0 sf	0.00%	
10:00 AM	348 sf	0.44%	0 sf	0.00%	
10:15 AM	344 sf	0.43%	0 sf	0.00%	
10:30 AM	341 sf	0.43%	0 sf	0.00%	
10:45 AM	336 sf	0.42%	0 sf	0.00%	
11:00 AM	333 sf	0.42%	0 sf	0.00%	
11:15 AM	328 sf	0.41%	0 sf	0.00%	
11:30 AM	323 sf	0.41%	0 sf	0.00%	
11:45 AM	320 sf	0.40%	0 sf	0.00%	
12:00 PM	315 sf	0.40%	0 sf	0.00%	
12:15 PM	310 sf	0.39%	0 sf	0.00%	
12:30 PM	305 sf	0.38%	0 sf	0.00%	
12:45 PM	300 sf	0.38%	0 sf	0.00%	
1:00 PM	295 sf	0.37%	0 sf	0.00%	
1:15 PM	294 sf	0.37%	0 sf	0.00%	
1:30 PM	295 sf	0.37%	0 sf	0.00%	
1:45 PM	300 sf	0.38%	0 sf	0.00%	
2:00 PM	304 sf	0.38%	0 sf	0.00%	
2:15 PM	307 sf	0.39%	0 sf	0.00%	
2:30 PM	310 sf	0.39%	0 sf	0.00%	
2:45 PM	312 sf	0.39%	0 sf	0.00%	
3:00 PM	316 sf	0.40%	0 sf	0.00%	
3:15 PM	317 sf	0.40%	0 sf	0.00%	
3:30 PM	318 sf	0.40%	0 sf	0.00%	
3:45 PM	319 sf	0.40%	0 sf	0.00%	
4:00 PM	320 sf	0.40%	0 sf	0.00%	
4:15 PM	321 sf	0.40%	0 sf	0.00%	
4:30 PM	318 sf	0.40%	0 sf	0.00%	
4:45 PM	319 sf	0.40%	0 sf	0.00%	
5:00 PM	326 sf	0.41%	0 sf	0.00%	
5:15 PM	333 sf	0.42%	0 sf	0.00%	
5:30 PM	340 sf	0.43%	95 sf	0.12%	
5:45 PM	347 sf	0.43%	988 sf	1.24%	
6:00 PM	353 sf	0.44%	2,819 sf	3.54%	
6:15 PM	360 sf	0.45%	5,013 sf	6.29%	
6:30 PM	364 sf	0.46%	8,139 sf	10.21%	
6:45 PM	365 sf	0.46%	13,533 sf	16.97%	
7:00 PM	2,749 sf	3.45%	19,586 sf	24.56%	
7:15 PM	11,853 sf	14.87%	23,151 sf	29.04%	

12,091 sf

15.16%

73.86%

Mirror date: May 24 Analysis hours: 7:01 AM-7:30 PM (PDT)					Shadow / Sunlight Balance Key Existing Shadow Project Shadow Sunlight Remaining
Analusia Tima	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
7:01 AM	50,004 sf	62.72%	0 sf	0.00%	
7:16 AM	29,770 sf	37.34%	0 sf	0.00%	
7:30 AM	18,763 sf	23.53%	0 sf	0.00%	
7:45 AM	11,929 sf	14.96%	0 sf	0.00%	
8:00 AM	7,509 sf	9.42%	0 sf	0.00%	
8:15 AM	4,181 sf	5.24%	0 sf	0.00%	
8:30 AM	1,531 sf	1.92%	0 sf	0.00%	
8:45 AM	370 sf	0.46%	0 sf	0.00%	
9:00 AM	369 sf	0.46%	0 sf	0.00%	
9:15 AM	367 sf	0.46%	0 sf	0.00%	
9:30 AM	363 sf	0.46%	0 sf	0.00%	
9:45 AM	359 sf	0.45%	0 sf	0.00%	
10:00 AM	355 sf	0.44%	0 sf	0.00%	
10:15 AM	350 sf	0.44%	0 sf	0.00%	
10:30 AM	347 sf	0.44%	0 sf	0.00%	
10:45 AM	342 sf	0.43%	0 sf	0.00%	
11:00 AM	338 sf	0.42%	0 sf	0.00%	
11:15 AM	333 sf	0.42%	0 sf	0.00%	
11:30 AM	328 sf	0.41%	0 sf	0.00%	
11:45 AM	326 sf	0.41%	0 sf	0.00%	
12:00 PM	320 sf	0.40%	0 sf	0.00%	
12:15 PM	315 sf	0.40%	0 sf	0.00%	
12:30 PM	310 sf	0.39%	0 sf	0.00%	
12:45 PM	305 sf	0.38%	0 sf	0.00%	
1:00 PM	297 sf	0.37%	0 sf	0.00%	
1:15 PM	297 sf	0.37%	0 sf	0.00%	
1:30 PM	299 sf	0.37%	0 sf	0.00%	
1:45 PM	305 sf	0.38%	0 sf	0.00%	
2:00 PM	306 sf	0.38%	0 sf	0.00%	
2:15 PM	311 sf	0.39%	0 sf	0.00%	
2:30 PM	315 sf	0.40%	0 sf	0.00%	
2:45 PM	316 sf	0.40%	0 sf	0.00%	
3:00 PM	318 sf	0.40%	0 sf	0.00%	
3:15 PM	322 sf	0.40%	0 sf	0.00%	
3:30 PM	323 sf	0.41%	0 sf	0.00%	
3:45 PM	325 sf	0.41%	0 sf	0.00%	
4:00 PM	326 sf	0.41%	0 sf	0.00%	
4:15 PM	327 sf	0.41%	0 sf	0.00%	
4:30 PM	324 sf	0.41%	0 sf	0.00%	
4:45 PM	325 sf	0.41%	0 sf	0.00%	
5:00 PM	328 sf	0.41%	0 sf	0.00%	
5:15 PM	335 sf	0.42%	0 sf	0.00%	
5:30 PM	343 sf	0.43%	127 sf	0.16%	
5:45 PM	350 sf	0.44%	1,342 sf	1.68%	
6:00 PM	358 sf	0.45%	3,259 sf	4.09%	
6:15 PM	365 sf	0.46%	5,564 sf	6.98%	
6:30 PM	370 sf	0.46%	9,283 sf	11.64%	
6:45 PM	372 sf	0.47%	15,050 sf	18.88%	
7:00 PM	3,247 sf	4.07%	21,012 sf	26.35%	
7:15 PM	16,614 sf	20.84%	21,649 sf	27.15%	

14.34%

11,437 sf

75.93%

7:30 PM

60,538 sf

7:15 PM

7:25 PM

27,093 sf

62,041 sf

Mirror date: May 17 Analysis hours: 7:07 AM-7:25 PM (PDT)					Shadow / Sunlight Balance Key Existing Shadow Project Shadow Sunlight Remaining
A	EXISTING	EXISTING SHADOW		NEW SHADOW	SHADOW/SUNLIGHT BALANCE
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
7:07 AM	49.509 sf	62.09%	0 sf	0.00%	
7:15 AM	37.436 sf	46.95%	0 sf	0.00%	
7:30 AM	22.345 sf	28.03%	0 sf	0.00%	
7:45 AM	13.746 sf	17.24%	0 sf	0.00%	
8:00 AM	8.791 sf	11.03%	0 sf	0.00%	
8:15 AM	5.114 sf	6.41%	0 sf	0.00%	
8:30 AM	2.277 sf	2.86%	0 sf	0.00%	
8:45 AM	386 sf	0.48%	0 sf	0.00%	
9:00 AM	383 sf	0.48%	0 sf	0.00%	
9:15 AM	378 sf	0.47%	0 sf	0.00%	
9:30 AM	373 sf	0.47%	0 sf	0.00%	
9:45 AM	369 sf	0.46%	0 sf	0.00%	
10:00 AM	363 sf	0.46%	0 sf	0.00%	
10:15 AM	358 sf	0.45%	0 sf	0.00%	
10:30 AM	353 sf	0.44%	0 sf	0.00%	
10:45 AM	349 sf	0.44%	0 sf	0.00%	
11:00 AM	344 sf	0.43%	0 sf	0.00%	
11:15 AM	339 sf	0.42%	0 sf	0.00%	
11:30 AM	334 sf	0.42%	0 sf	0.00%	
11:45 AM	331 sf	0.42%	0 sf	0.00%	
12:00 PM	325 sf	0.41%	0 sf	0.00%	
12:15 PM	320 sf	0.40%	0 sf	0.00%	
12:30 PM	315 sf	0.39%	0 sf	0.00%	
12:45 PM	310 sf	0.39%	0 sf	0.00%	
1:00 PM	302 sf	0.38%	0 sf	0.00%	
1:15 PM	302 sf	0.38%	0 sf	0.00%	
1:30 PM	304 sf	0.38%	0 sf	0.00%	
1:45 PM	310 sf	0.39%	0 sf	0.00%	
2:00 PM	312 sf	0.39%	0 sf	0.00%	
2:15 PM	316 sf	0.40%	0 sf	0.00%	
2:30 PM	321 sf	0.40%	0 sf	0.00%	
2:45 PM	322 sf	0.40%	0 sf	0.00%	
3:00 PM	325 sf	0.41%	0 sf	0.00%	
3:15 PM	328 sf	0.41%	0 sf	0.00%	
3:30 PM	330 sf	0.41%	0 sf	0.00%	
3:45 PM	331 sf	0.42%	0 sf	0.00%	
4:00 PM	333 sf	0.42%	0 sf	0.00%	
4:15 PM	335 sf	0.42%	0 sf	0.00%	
4:30 PM	333 sf	0.42%	0 sf	0.00%	
4:45 PM	335 sf	0.42%	0 sf	0.00%	
5:00 PM	332 sf	0.42%	0 sf	0.00%	
5:15 PM	339 sf	0.43%	9 sf	0.01%	
5:30 PM	348 sf	0.44%	231 sf	0.29%	
5:45 PM	356 sf	0.45%	1,870 sf	2.34%	
6:00 PM	364 sf	0.46%	3,908 sf	4.90%	
6:15 PM	372 sf	0.47%	6,375 sf	8.00%	
6:30 PM	379 sf	0.47%	11,016 sf	13.82%	
6:45 PM	436 sf	0.55%	17,282 sf	21.68%	
7:00 PM	4,131 sf	5.18%	23,128 sf	29.01%	

17,695 sf

10,311 sf

22.19%

12.93%

33.98%

77.81%

Mirror date: N	- <u> </u>				Shadow / Sunlight Balance Key
Analysis hours:	7:12 AM-7:18 PM (PI	)T)			Existing Shadow Project Shadow Sunlight Remaining
Analysis Time	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE
-	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
7:12 AM	48,928 sf	61.37%	0 sf	0.00%	
7:15 AM	44,981 sf	56.42%	0 sf	0.00%	
7:30 AM	26,793 sf	33.60%	0 sf	0.00%	
7:45 AM	15,908 sf	19.95%	0 sf	0.00%	
8:00 AM	10,275 sf	12.89%	0 sf	0.00%	
8:15 AM	6,189 sf	7.76%	0 sf	0.00%	
8:30 AM	3,117 sf	3.91%	0 sf	0.00%	
8:45 AM	586 sf	0.74%	0 sf	0.00%	
9:00 AM	398 sf	0.50%	0 sf	0.00%	
9:15 AM	391 sf	0.49%	0 sf	0.00%	
9:30 AM	385 sf	0.48%	0 sf	0.00%	
9:45 AM	379 sf	0.48%	0 sf	0.00%	
10:00 AM	373 sf	0.47%	0 sf	0.00%	
10:15 AM	367 sf	0.46%	0 sf	0.00%	
10:30 AM	362 sf	0.45%	0 sf	0.00%	
10:45 AM	357 sf	0.45%	0 sf	0.00%	
11:00 AM	351 sf	0.44%	0 sf	0.00%	
11:15 AM	347 sf	0.44%	0 sf	0.00%	
11:30 AM	342 sf	0.43%	0 sf	0.00%	
11:45 AM	336 sf	0.42%	0 sf	0.00%	
12:00 PM	331 sf	0.41%	0 sf	0.00%	
12:15 PM	325 sf	0.41%	0 sf	0.00%	
12:30 PM	320 sf	0.40%	0 sf	0.00%	
12:45 PM	315 sf	0.40%	0 sf	0.00%	
1:00 PM	309 sf	0.39%	0 sf	0.00%	
1:15 PM	309 sf	0.39%	0 sf	0.00%	
1:30 PM	311 sf	0.39%	0 sf	0.00%	
1:45 PM	315 sf	0.39%	0 sf	0.00%	
2:00 PM	321 sf	0.40%	0 sf	0.00%	
2:15 PM	323 sf	0.40%	0 sf	0.00%	
2:30 PM	326 sf	0.41%	0 sf	0.00%	
2:45 PM	330 sf	0.41%	0 sf	0.00%	
3:00 PM	333 sf	0.42%	0 sf	0.00%	
3:15 PM	335 sf	0.42%	0 sf	0.00%	
3:30 PM	336 sf	0.42%	0 sf	0.00%	
3:45 PM	340 sf	0.43%	0 sf	0.00%	
4:00 PM	341 sf	0.43%	0 sf	0.00%	
4:15 PM	343 sf	0.43%	0 sf	0.00%	
4:30 PM	345 sf	0.43%	0 sf	0.00%	
4:45 PM	344 sf	0.43%	0 sf	0.00%	
5:00 PM	343 sf	0.43%	0 sf	0.00%	
5:15 PM	345 sf	0.43%	65 sf	0.08%	
5:30 PM	354 sf	0.44%	776 sf	0.97%	
5:45 PM	363 sf	0.46%	2,622 sf	3.29%	
6:00 PM	373 sf	0.47%	4,839 sf	6.07%	
6:15 PM	382 sf	0.48%	7,911 sf	9.92%	
6:30 PM	390 sf	0.49%	13,545 sf	16.99%	
6:45 PM	1,242 sf	1.56%	19,899 sf	24.96%	
7:00 PM	7.577 sf	9.50%	24.399 sf	30.60%	

10,863 sf

7,943 sf

13.62%

9.96%

59.65%

79.22%

47,558 sf

63,162 sf

7:15 PM

7:18 PM

Mirror date: May 3 Analysis hours: 7:19 AM-7:10 PM (PDT)					Shadow / Sunlight Balance Key Existing Shadow Project Shadow Sunlight Remaining
Anglugia Tima	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
7:19 AM	48,147 sf	60.39%	0 sf	0.00%	
7:30 AM	32,374 sf	40.60%	0 sf	0.00%	
7:45 AM	19,270 sf	24.17%	0 sf	0.00%	
8:00 AM	12,037 sf	15.10%	0 sf	0.00%	
8:15 AM	7,473 sf	9.37%	0 sf	0.00%	
8:30 AM	4,015 sf	5.04%	0 sf	0.00%	
8:45 AM	1,297 sf	1.63%	0 sf	0.00%	
9:00 AM	415 sf	0.52%	0 sf	0.00%	
9:15 AM	407 sf	0.51%	0 sf	0.00%	
9:30 AM	398 sf	0.50%	0 sf	0.00%	
9:45 AM	391 sf	0.49%	0 sf	0.00%	
10:00 AM	384 sf	0.48%	0 sf	0.00%	
10:15 AM	379 sf	0.47%	0 sf	0.00%	
10:30 AM	371 sf	0.47%	0 sf	0.00%	
10:45 AM	367 sf	0.46%	0 sf	0.00%	
11:00 AM	360 sf	0.45%	0 sf	0.00%	
11:15 AM	354 sf	0.44%	0 sf	0.00%	
11:30 AM	348 sf	0.44%	0 sf	0.00%	
11:45 AM	343 sf	0.43%	0 sf	0.00%	
12:00 PM	337 sf	0.42%	0 sf	0.00%	
12:15 PM	334 sf	0.42%	0 sf	0.00%	
12:30 PM	326 sf	0.41%	0 sf	0.00%	
12:45 PM	321 sf	0.40%	0 sf	0.00%	
1:00 PM	314 sf	0.39%	0 sf	0.00%	
1:15 PM	314 sf	0.39%	0 sf	0.00%	
1:30 PM	320 sf	0.40%	0 sf	0.00%	
1:45 PM	326 sf	0.41%	0 sf	0.00%	
2:00 PM	325 sf	0.41%	0 sf	0.00%	
2:15 PM	332 sf	0.42%	0 sf	0.00%	
2:30 PM	333 sf	0.42%	0 sf	0.00%	
2:45 PM	338 sf	0.42%	0 sf	0.00%	
3:00 PM	340 sf	0.43%	0 sf	0.00%	
3:15 PM	346 sf	0.43%	0 sf	0.00%	
3:30 PM	348 sf	0.44%	0 sf	0.00%	
3:45 PM	350 sf	0.44%	0 sf	0.00%	
4:00 PM	353 sf	0.44%	0 sf	0.00%	
4:15 PM	356 sf	0.45%	0 sf	0.00%	
4:30 PM	357 sf	0.45%	0 sf	0.00%	
4:45 PM	359 sf	0.45%	0 sf	0.00%	
5:00 PM	358 sf	0.45%	0 sf	0.00%	
5:15 PM	358 sf	0.45%	141 sf	0.18%	
5:30 PM	362 sf	0.45%	1,580 sf	1.98%	
5:45 PM	373 sf	0.47%	3,624 sf	4.55%	
6:00 PM	384 sf	0.48%	6,082 sf	7.63%	
6:15 PM	395 sf	0.50%	10.531 sf	13.21%	
6:30 PM	414 sf	0.52%	17.017 sf	21.34%	
6:45 PM	2.699 sf	3.38%	23,183 sf	29.08%	
7:10 PM	61,455 sf	77.08%	7,436 sf	9.33%	

Mirror date: April 26					Shadow / Sunlight Balance Key		
Analysis hours:	7:25 AM-7:02 PM (P	DT)		Existing Shadow Project Shadow Sunlight Remaining			
Analysis Time	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE		
	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun		
7:25 AM	47,105 sf	59.08%	0 sf	0.00%			
7:30 AM	39,877 sf	50.01%	0 sf	0.00%			
7:45 AM	23,552 sf	29.54%	0 sf	0.00%			
8:00 AM	14,209 sf	17.82%	0 sf	0.00%			
8:15 AM	8,848 sf	11.10%	0 sf	0.00%			
8:30 AM	4,973 sf	6.24%	0 sf	0.00%			
8:45 AM	2,073 sf	2.60%	0 sf	0.00%			
9:00 AM	435 sf	0.55%	0 sf	0.00%			
9:15 AM	424 sf	0.53%	0 sf	0.00%			
9:30 AM	414 sf	0.52%	0 sf	0.00%			
9:45 AM	405 sf	0.51%	0 sf	0.00%			
10:00 AM	397 sf	0.50%	0 sf	0.00%			
10:15 AM	390 sf	0.49%	0 sf	0.00%			
10:30 AM	382 sf	0.48%	0 sf	0.00%			
10:45 AM	378 sf	0.47%	0 sf	0.00%			
11:00 AM	371 sf	0.46%	0 sf	0.00%			
11:15 AM	364 sf	0.46%	0 sf	0.00%			
11:30 AM	357 sf	0.45%	0 sf	0.00%			
11:45 AM	352 sf	0.44%	0 sf	0.00%			
12:00 PM	345 sf	0.43%	0 sf	0.00%			
12:15 PM	340 sf	0.43%	0 sf	0.00%			
12:30 PM	334 sf	0.42%	0 sf	0.00%			
12:45 PM	328 sf	0.41%	0 sf	0.00%			
1:00 PM	324 sf	0.41%	0 sf	0.00%			
1:15 PM	325 sf	0.41%	0 sf	0.00%			
1:30 PM	325 sf	0.41%	0 sf	0.00%			
1:45 PM	331 sf	0.42%	0 sf	0.00%			
2:00 PM	337 sf	0.42%	0 sf	0.00%			
2:15 PM	341 sf	0.43%	0 sf	0.00%			
2:30 PM	343 sf	0.43%	0 sf	0.00%			
2:45 PM	350 sf	0.44%	0 sf	0.00%			
3:00 PM	351 sf	0.44%	0 sf	0.00%			
3:15 PM	354 sf	0.44%	0 sf	0.00%			
3:30 PM	360 sf	0.45%	0 sf	0.00%			
3:45 PM	363 sf	0.45%	0 sf	0.00%			
4:00 PM	366 sf	0.46%	0 sf	0.00%			
4:15 PM	370 sf	0.46%	0 sf	0.00%			
4:30 PM	370 sf	0.46%	0 sf	0.00%			
4:45 PM	375 sf	0.47%	0 sf	0.00%			
5:00 PM	376 sf	0.47%	52 sf	0.07%			
5:15 PM	377 sf	0.47%	714 sf	0.89%			
5:30 PM	376 sf	0.47%	2,605 sf	3.27%			
5:45 PM	385 sf	0.48%	4,893 sf	6.14%			
6:00 PM	399 sf	0.50%	8,129 sf	10.19%			
6:15 PM	412 sf	0.52%	14.061 sf	17.64%			
6:30 PM	1.482 sf	1.86%	20,709 sf	25.97%			
6.45 PM	7,262 sf	9.11%	25.384 sf	31.84%			

8.76%

76.73%

6,988 sf

61,180 sf

7:02 PM

6:52 PM

60,629 sf

Mirror date: A	pril 19				Shadow / Sunlight Balance Kev
Analysis hours:	7:31 AM-6:52 PM (F	νDT)		Existing Shadow Project Shadow Sunlight Remaining	
Applyzia Time EXISTING SHADOW					
Analysis Time	EXISTING			NEW SHADUW	SHADUW/SUNLIGHT BALANGE
7.01 AM	Shadow Area	Coverage	Snadow Area	Coverage	
7:31 AIVI	40,043 SI	57.75%	0 si	0.00%	
7:45 AM	28,846 ST	36.18%	0 sf	0.00%	
0.00 AIVI	10,407 SI	20.00%	0 si	0.00%	
8:15 AM	10,211 SI	12.81%	0 si	0.00%	
8:30 AM	0,903 SI	7.47%	0 si	0.00%	
8:45 AM	2,841 SI	3.30%	0 si	0.00%	
9:00 AM	459 SI	0.58%	0 si	0.00%	
9:15 AM	443 SI	0.50%	0 si	0.00%	
9:30 AM	431 SI	0.54%	0 si	0.00%	
9:45 AM	421 ST	0.53%	0 sf	0.00%	
10:00 AM	411 SI	0.52%	0 si	0.00%	
10:15 AM	403 SI	0.51%	0 si	0.00%	
10:30 AM	395 SI	0.30%	0 si	0.00%	
10.45 AW	200 SI	0.49%	0 si	0.00%	
11.15 AM	074 of	0.40%	0 si	0.00%	
11:15 AM	374 SI	0.47%	0 si	0.00%	
11:30 AIVI	307 SI	0.46%	0 si	0.00%	
11:45 AM	30   SI	0.43%	0 si	0.00%	
12:00 PM	300 SI	0.44%	0 si	0.00%	
12:15 PIVI	349 SI	0.44%	0 si	0.00%	
12:30 PIVI	343 SI	0.43%	0 si	0.00%	
12.43 PIVI	337 SI	0.42%	0 si	0.00%	
1.15 DM	330 SI	0.41%	0 si	0.00%	
1.13 FIVI	226 of	0.42%	0 si	0.00%	
1:45 DM	330 SI	0.42%	0 si	0.00%	
1.43 FIVI	343 SI	0.43%	0 si	0.00%	
2.00 PIVI	340 SI	0.43%	0 si	0.00%	
2.13 FIVI	255 cf	0.44%	0 si	0.00%	
2.30 FW	257 of	0.45%	0 si	0.00%	
2.43 FIVI	307 SI	0.45%	0 si	0.00%	
3.00 FM	304 SI 366 cf	0.40%	0 Si	0.00%	
3:30 PM	370 sf	0.40%	0 si	0.00%	
2:45 DM	276 cf	0.40%	0 si	0.00%	
3:43 T M	370 SI 380 cf	0.47%	0 si	0.00%	
4.00 T M	38/ ef	0.48%	0 si	0.00%	
4.13 FM	304 31 380 cf	0.40%	0 si	0.00%	
4:45 PM	201 of	0.49%	0 si	0.00%	
4.45 FM	391 SI	0.49%	161 of	0.00%	
5.15 PM	300 ef	0.50%	1 767 sf	2.20%	
5.30 DM	/02 of	0.50%	3 020 of	1 01%	
5.45 DM	402 SI	0.50%	6,561 of	9.34%	
6:00 PM	402 SI 418 ef	0.50%	11 775 ef	14 77%	
6:15 PM	650 ef	0.32 /0	18 7/3 ef	23 51%	
6:30 PM	3 4/6 ef	4 32%	25 375 ef	31.83%	
6:45 PM	29 606 sf	37 13%	15 504 sf	19.45%	

8.02%

6,392 sf

76.04%

6:42 PM

59,424 sf

Mirror date: April 12 Analysis hours: 7:37 AM-6:42 PM (PDT)					Shadow / Sunlight Balance Key Existing Shadow Project Shadow Sunlight Remaining		
Analysis Time		SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE		
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun		
7:37 AM	44,570 sf	55.90%	0 sf	0.00%			
7:45 AM	34,041 sf	42.69%	0 sf	0.00%			
8:00 AM	19,736 sf	24.75%	0 sf	0.00%			
8:15 AM	11,724 sf	14.70%	0 sf	0.00%			
8:30 AM	7,019 sf	8.80%	0 sf	0.00%			
8:45 AM	3,649 sf	4.58%	0 sf	0.00%			
9:00 AM	1,049 sf	1.32%	0 sf	0.00%			
9:15 AM	465 sf	0.58%	0 sf	0.00%			
9:30 AM	450 sf	0.56%	0 sf	0.00%			
9:45 AM	438 sf	0.55%	0 sf	0.00%			
10:00 AM	427 sf	0.54%	0 sf	0.00%			
10:15 AM	418 sf	0.52%	0 sf	0.00%			
10:30 AM	409 sf	0.51%	0 sf	0.00%			
10:45 AM	408 sf	0.51%	0 sf	0.00%			
11:00 AM	403 sf	0.51%	0 sf	0.00%			
11:15 AM	406 sf	0.51%	0 sf	0.00%			
11:30 AM	399 sf	0.50%	0 sf	0.00%			
11:45 AM	404 sf	0.51%	0 sf	0.00%			
12:00 PM	394 sf	0.49%	0 sf	0.00%			
12:15 PM	397 sf	0.50%	0 sf	0.00%			
12:30 PM	385 sf	0.48%	0 sf	0.00%			
12:45 PM	387 sf	0.49%	0 sf	0.00%			
1:00 PM	370 sf	0.46%	0 sf	0.00%			
1:15 PM	379 sf	0.48%	0 sf	0.00%			
1:30 PM	372 sf	0.47%	0 sf	0.00%			
1:45 PM	377 sf	0.47%	0 sf	0.00%			
2:00 PM	368 sf	0.46%	0 sf	0.00%			
2:15 PM	370 sf	0.46%	0 sf	0.00%			
2:30 PM	368 sf	0.46%	0 sf	0.00%			
2:45 PM	372 sf	0.47%	0 sf	0.00%			
3:00 PM	376 sf	0.47%	0 sf	0.00%			
3:15 PM	380 sf	0.48%	0 sf	0.00%			
3:30 PM	387 sf	0.48%	0 sf	0.00%			
3:45 PM	390 sf	0.49%	0 sf	0.00%			
4:00 PM	394 sf	0.49%	0 sf	0.00%			
4:15 PM	399 sf	0.50%	0 sf	0.00%			
4:30 PM	406 sf	0.51%	0 sf	0.00%			
4:45 PM	413 sf	0.52%	76 sf	0.10%			
5:00 PM	418 sf	0.52%	1,008 sf	1.26%			
5:15 PM	425 sf	0.53%	3,007 sf	3.77%			
5:30 PM	433 sf	0.54%	5,473 sf	6.86%			
5:45 PM	437 sf	0.55%	9,760 sf	12.24%			
6:00 PM	445 sf	0.56%	16,582 sf	20.80%			
6:15 PM	2,452 sf	3.08%	23,497 sf	29.47%			
6:30 PM	14,286 sf	17.92%	24,030 sf	30.14%			

7.49%

5,975 sf

74.53%

## **SEPTEMBER 6**

Mirror date: April 5					Shadow / Sunlight Balance Key		
Analysis hours:	7:44 AM-6:31 PM (P	PDT)			Existing Shadow Project Shadow Sunlight Remaining		
Analysia Tima	EXISTING	SHADOW	PROJECT NET NEW SHADOW		SHADOW/SUNLIGHT BALANCE		
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun		
7:44 AM	41,848 sf	52.49%	0 sf	0.00%			
8:00 AM	23,420 sf	29.37%	0 sf	0.00%			
8:15 AM	13,351 sf	16.75%	0 sf	0.00%			
8:30 AM	8,170 sf	10.25%	0 sf	0.00%			
8:45 AM	4,491 sf	5.63%	0 sf	0.00%			
9:00 AM	1,737 sf	2.18%	0 sf	0.00%			
9:15 AM	510 sf	0.64%	0 sf	0.00%			
9:30 AM	513 sf	0.64%	0 sf	0.00%			
9:45 AM	528 sf	0.66%	0 sf	0.00%			
10:00 AM	535 sf	0.67%	0 sf	0.00%			
10:15 AM	556 sf	0.70%	0 sf	0.00%			
10:30 AM	557 sf	0.70%	0 sf	0.00%			
10:45 AM	578 sf	0.73%	0 sf	0.00%			
11:00 AM	574 sf	0.72%	0 sf	0.00%			
11:15 AM	593 sf	0.74%	0 sf	0.00%			
11:30 AM	583 sf	0.73%	0 sf	0.00%			
11:45 AM	600 sf	0.75%	0 sf	0.00%			
12:00 PM	581 sf	0.73%	0 sf	0.00%			
12:15 PM	594 sf	0.75%	0 sf	0.00%			
12:30 PM	570 sf	0.72%	0 sf	0.00%			
12:45 PM	580 sf	0.73%	0 sf	0.00%			
1:00 PM	555 sf	0.70%	0 sf	0.00%			
1:15 PM	571 sf	0.72%	0 sf	0.00%			
1:30 PM	546 sf	0.68%	0 sf	0.00%			
1:45 PM	557 sf	0.70%	0 sf	0.00%			
2:00 PM	532 sf	0.67%	0 sf	0.00%			
2:15 PM	536 sf	0.67%	0 sf	0.00%			
2:30 PM	505 sf	0.63%	0 sf	0.00%			
2:45 PM	503 sf	0.63%	0 sf	0.00%			
3:00 PM	469 sf	0.59%	0 sf	0.00%			
3:15 PM	460 sf	0.58%	0 sf	0.00%			
3:30 PM	430 sf	0.54%	0 sf	0.00%			
3:45 PM	423 sf	0.53%	0 sf	0.00%			
4:00 PM	415 sf	0.52%	0 sf	0.00%			
4:15 PM	421 sf	0.53%	0 sf	0.00%			
4:30 PM	428 sf	0.54%	9 sf	0.01%			
4:45 PM	437 sf	0.55%	381 sf	0.48%			
5:00 PM	444 sf	0.56%	2,196 sf	2.75%			
5:15 PM	457 sf	0.57%	4,455 sf	5.59%			
5:30 PM	467 sf	0.59%	7,692 sf	9.65%			
5:45 PM	482 sf	0.60%	14,188 sf	17.80%			
6:00 PM	1,664 sf	2.09%	21,800 sf	27.34%			
6:15 PM	7,504 sf	9.41%	27,406 sf	34.37%			
6:31 PM	58,205 sf	73.00%	4,196 sf	5.26%			

## **SEPTEMBER 13**

Mirror date: March 29					Shadow / Sunlight Balance Key	
Analysis hours:	7:50 AM-6:21 PM (P	DT)			Existing Shadow Project Shadow Sunlight Remaining	
Analysis Time _	EXISTING SHADOW		PROJECT NET NEW SHADOW		SHADOW/SUNLIGHT BALANCE	
	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun	
7:50 AM	39,156 sf	49.11%	0 sf	0.00%		
8:00 AM	27,644 sf	34.67%	0 sf	0.00%		
8:15 AM	15,716 sf	19.71%	0 sf	0.00%		
8:30 AM	9,578 sf	12.01%	0 sf	0.00%		
8:45 AM	5,638 sf	7.07%	0 sf	0.00%		
9:00 AM	2,751 sf	3.45%	0 sf	0.00%		
9:15 AM	881 sf	1.10%	0 sf	0.00%		
9:30 AM	886 sf	1.11%	0 sf	0.00%		
9:45 AM	912 sf	1.14%	0 sf	0.00%		
10:00 AM	908 sf	1.14%	0 sf	0.00%		
10:15 AM	929 sf	1.17%	0 sf	0.00%		
10:30 AM	920 sf	1.15%	0 sf	0.00%		
10:45 AM	938 sf	1.18%	0 sf	0.00%		
11:00 AM	924 sf	1.16%	0 sf	0.00%		
11:15 AM	942 sf	1.18%	0 sf	0.00%		
11:30 AM	920 sf	1.15%	0 sf	0.00%		
11:45 AM	936 sf	1.17%	0 sf	0.00%		
12:00 PM	911 sf	1.14%	0 sf	0.00%		
12:15 PM	926 sf	1.16%	0 sf	0.00%		
12:30 PM	897 sf	1.13%	0 sf	0.00%		
12:45 PM	909 sf	1.14%	0 sf	0.00%		
1:00 PM	878 sf	1.10%	0 sf	0.00%		
1:15 PM	898 sf	1.13%	0 sf	0.00%		
1:30 PM	874 sf	1.10%	0 sf	0.00%		
1:45 PM	889 sf	1.11%	0 sf	0.00%		
2:00 PM	858 sf	1.08%	0 sf	0.00%		
2:15 PM	869 sf	1.09%	0 sf	0.00%		
2:30 PM	834 sf	1.05%	0 sf	0.00%		
2:45 PM	837 sf	1.05%	0 sf	0.00%		
3:00 PM	798 sf	1.00%	0 sf	0.00%		
3:15 PM	792 sf	0.99%	0 sf	0.00%		
3:30 PM	743 sf	0.93%	0 sf	0.00%		
3:45 PM	724 sf	0.91%	0 sf	0.00%		
4:00 PM	666 sf	0.83%	0 sf	0.00%		
4:15 PM	629 sf	0.79%	0 sf	0.00%		
4:30 PM	561 sf	0.70%	126 sf	0.16%		
4:45 PM	519 sf	0.65%	1,521 sf	1.91%		
5:00 PM	483 sf	0.61%	3.570 sf	4.48%		
5:15 PM	493 sf	0.62%	6,190 sf	7.76%		
5:30 PM	510 sf	0.64%	11,786 sf	14.78%		
5:45 PM	1,010 sf	1.27%	19,344 sf	24.26%		
6:00 PM	4.087 sf	5.13%	27,215 sf	34.13%		
6:15 PM	35,766 sf	44.86%	12,571 sf	15.77%		
6:21 PM	60,866 sf	76.34%	2,938 sf	3.69%		
#### **SEPTEMBER 20**

nuinov (Spring equinov on March 22 similar) Fall Ar

Fall equinox (S	Spring equinox on N	larch 22 similar)		Shadow / Sunlight Balance Key		
Analysis hours: 7:57 AM-6:09 PM (PDT)					Existing Shadow Project Shadow Sunlight Remaining	
Analysia Timo	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE	
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun	
7:57 AM	37,321 sf	46.81%	0 sf	0.00%		
8:00 AM	33,285 sf	41.75%	0 sf	0.00%		
8:15 AM	19,507 sf	24.47%	0 sf	0.00%		
8:30 AM	11,623 sf	14.58%	0 sf	0.00%		
8:45 AM	7,280 sf	9.13%	0 sf	0.00%		
9:00 AM	4,120 sf	5.17%	0 sf	0.00%		
9:15 AM	1,737 sf	2.18%	0 sf	0.00%		
9:30 AM	1,479 sf	1.85%	0 sf	0.00%		
9:45 AM	1,481 sf	1.86%	0 sf	0.00%		
10:00 AM	1,446 sf	1.81%	0 sf	0.00%		
10:15 AM	1,454 sf	1.82%	0 sf	0.00%		
10:30 AM	1,418 sf	1.78%	0 sf	0.00%		
10:45 AM	1,431 sf	1.79%	0 sf	0.00%		
11:00 AM	1,396 sf	1.75%	0 sf	0.00%		
11:15 AM	1,411 sf	1.77%	0 sf	0.00%		
11:30 AM	1,374 sf	1.72%	0 sf	0.00%		
11:45 AM	1,392 sf	1.75%	0 sf	0.00%		
12:00 PM	1,355 sf	1.70%	0 sf	0.00%		
12:15 PM	1,373 sf	1.72%	0 sf	0.00%		
12:30 PM	1,332 sf	1.67%	0 sf	0.00%		
12:45 PM	1,352 sf	1.70%	0 sf	0.00%		
1:00 PM	1,319 sf	1.65%	0 sf	0.00%		
1:15 PM	1,347 sf	1.69%	0 sf	0.00%		
1:30 PM	1,312 sf	1.65%	0 sf	0.00%		
1:45 PM	1,340 sf	1.68%	0 sf	0.00%		
2:00 PM	1,308 sf	1.64%	0 sf	0.00%		
2:15 PM	1,333 sf	1.67%	0 sf	0.00%		
2:30 PM	1,297 sf	1.63%	0 sf	0.00%		
2:45 PM	1,319 sf	1.65%	0 sf	0.00%		
3:00 PM	1,285 sf	1.61%	0 sf	0.00%		
3:15 PM	1,301 sf	1.63%	0 sf	0.00%		
3:30 PM	1,263 sf	1.58%	0 sf	0.00%		
3:45 PM	1,275 sf	1.60%	0 sf	0.00%		
4:00 PM	1,231 sf	1.54%	0 sf	0.00%		
4:15 PM	1,233 sf	1.55%	65 sf	0.08%		
4:30 PM	1,180 sf	1.48%	902 sf	1.13%		
4:45 PM	1,162 sf	1.46%	2,798 sf	3.51%		
5:00 PM	1,093 sf	1.37%	5,134 sf	6.44%		
5:15 PM	1,047 sf	1.31%	9,695 sf	12.16%		
5:30 PM	981 sf	1.23%	16,908 sf	21.21%		
5:45 PM	3,365 sf	4.22%	24,286 sf	30.46%		
6:00 PM	19,552 sf	24.52%	22,277 sf	27.94%		
6:09 PM	55,662 sf	69.81%	6,470 sf	8.12%		

#### **SEPTEMBER 27**

Μ Ar

Mirror date: March 15 Analysis hours: 8:03 AM-5:58 PM (PDT)					Shadow / Sunlight Balance Key		
					Existing Shadow Project Shadow Sunlight Remaining		
	EXISTING	i SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE		
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun		
8:03 AM	36,124 sf	45.31%	0 sf	0.00%			
8:15 AM	24,020 sf	30.13%	0 sf	0.00%			
8:30 AM	14,121 sf	17.71%	0 sf	0.00%			
8:45 AM	9,348 sf	11.72%	0 sf	0.00%			
9:00 AM	5,838 sf	7.32%	0 sf	0.00%			
9:15 AM	3,275 sf	4.11%	0 sf	0.00%			
9:30 AM	2,358 sf	2.96%	0 sf	0.00%			
9:45 AM	2,312 sf	2.90%	0 sf	0.00%			
10:00 AM	2,226 sf	2.79%	0 sf	0.00%			
10:15 AM	2,203 sf	2.76%	0 sf	0.00%			
10:30 AM	2,132 sf	2.67%	0 sf	0.00%			
10:45 AM	2,123 sf	2.66%	0 sf	0.00%			
11:00 AM	2,060 sf	2.58%	0 sf	0.00%			
11:15 AM	2,065 sf	2.59%	0 sf	0.00%			
11:30 AM	2,007 sf	2.52%	0 sf	0.00%			
11:45 AM	2,020 sf	2.53%	0 sf	0.00%			
12:00 PM	1,970 sf	2.47%	0 sf	0.00%			
12:15 PM	1,989 sf	2.50%	0 sf	0.00%			
12:30 PM	1,943 sf	2.44%	0 sf	0.00%			
12:45 PM	1,970 sf	2.47%	0 sf	0.00%			
1:00 PM	1,931 sf	2.42%	0 sf	0.00%			
1:15 PM	1,965 sf	2.46%	0 sf	0.00%			
1:30 PM	1,935 sf	2.43%	0 sf	0.00%			
1:45 PM	1,976 sf	2.48%	0 sf	0.00%			
2:00 PM	1,949 sf	2.44%	0 sf	0.00%			
2:15 PM	1,995 sf	2.50%	0 sf	0.00%			
2:30 PM	1,972 sf	2.47%	0 sf	0.00%			
2:45 PM	2,024 sf	2.54%	0 sf	0.00%			
3:00 PM	2,011 sf	2.52%	0 sf	0.00%			
3:15 PM	2,068 sf	2.59%	0 sf	0.00%			
3:30 PM	2,064 sf	2.59%	0 sf	0.00%			
3:45 PM	2,131 sf	2.67%	0 sf	0.00%			
4:00 PM	2,142 sf	2.69%	1 sf	0.00%			
4:15 PM	2,224 sf	2.79%	367 sf	0.46%			
4:30 PM	2,251 sf	2.82%	2,080 sf	2.61%			
4:45 PM	2,356 sf	2.96%	4,233 sf	5.31%			
5:00 PM	2,423 sf	3.04%	7,741 sf	9.71%			
5:15 PM	2,581 sf	3.24%	14,399 sf	18.06%			
5:30 PM	4,394 sf	5.51%	21,552 sf	27.03%			
5:45 PM	11,426 sf	14.33%	27,259 sf	34.19%			
5:58 PM	51,655 sf	64.79%	7,978 sf	10.01%			

5:47 PM

52,542 sf

65.90%

8,032 sf

Mirror date: N	Narch 8				Shadow / Sunlight Balance Key
Analysis hours:	: 8:09 AM-5:47 PM (P	DT)			Existing Shadow Project Shadow Sunlight Remaining
Analysis Time	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
8:09 AM	35,505 sf	44.53%	0 sf	0.00%	
8:15 AM	29,739 sf	37.30%	0 sf	0.00%	
8:30 AM	17,978 sf	22.55%	0 sf	0.00%	
8:45 AM	11,763 sf	14.75%	0 sf	0.00%	
9:00 AM	7,803 sf	9.79%	0 sf	0.00%	
9:15 AM	4,992 sf	6.26%	0 sf	0.00%	
9:30 AM	3,354 sf	4.21%	0 sf	0.00%	
9:45 AM	3,244 sf	4.07%	0 sf	0.00%	
10:00 AM	3,100 sf	3.89%	0 sf	0.00%	
10:15 AM	3,035 sf	3.81%	0 sf	0.00%	
10:30 AM	2,924 sf	3.67%	0 sf	0.00%	
10:45 AM	2,888 sf	3.62%	0 sf	0.00%	
11:00 AM	2,800 sf	3.51%	0 sf	0.00%	
11:15 AM	2,785 sf	3.49%	0 sf	0.00%	
11:30 AM	2,713 sf	3.40%	0 sf	0.00%	
11:45 AM	2,715 sf	3.41%	0 sf	0.00%	
12:00 PM	2,657 sf	3.33%	0 sf	0.00%	
12:15 PM	2,673 sf	3.35%	0 sf	0.00%	
12:30 PM	2,625 sf	3.29%	0 sf	0.00%	
12:45 PM	2,651 sf	3.33%	0 sf	0.00%	
1:00 PM	2,618 sf	3.28%	0 sf	0.00%	
1:15 PM	2,664 sf	3.34%	0 sf	0.00%	
1:30 PM	2,635 sf	3.31%	0 sf	0.00%	
1:45 PM	2,690 sf	3.37%	0 sf	0.00%	
2:00 PM	2,677 sf	3.36%	0 sf	0.00%	
2:15 PM	2,746 sf	3.44%	0 sf	0.00%	
2:30 PM	2,747 sf	3.45%	0 sf	0.00%	
2:45 PM	2,832 sf	3.55%	0 sf	0.00%	
3:00 PM	2,854 sf	3.58%	0 sf	0.00%	
3:15 PM	2,962 sf	3.72%	0 sf	0.00%	
3:30 PM	3,012 sf	3.78%	0 sf	0.00%	
3:45 PM	3,156 sf	3.96%	0 sf	0.00%	
4:00 PM	3,251 sf	4.08%	130 sf	0.16%	
4:15 PM	3,456 sf	4.33%	1,417 sf	1.78%	
4:30 PM	3,640 sf	4.57%	3,348 sf	4.20%	
4:45 PM	3,987 sf	5.00%	6,015 sf	7.54%	
5:00 PM	4,355 sf	5.46%	11,827 sf	14.83%	
5:15 PM	5,888 sf	7.38%	18,874 sf	23.67%	
5:30 PM	9,835 sf	12.34%	26,227 sf	32.89%	

10.07%

Mirror date: M	larch 1				Shadow / Sunlight Balance Key
Analysis hours:	8:16 AM-5:37 PM (PI	)T)			Existing Shadow Project Shadow Sunlight Remaining
	EVICTING	CHADOW			
Analysis Time	Shadaw Araa	Coverage			Belative levels of Shadow vs. Sun
8·16 AM	35 027 ef	/3 03%	O sf		
8:30 AM	22 780 cf	43.53 /0 28.57%	0 si	0.00%	
8:45 AM	1/ 605 sf	18 32%	0 Si	0.00%	
9:00 AM	10 170 sf	12 75%	0 Si	0.00%	
9:15 AM	7 015 sf	8.80%	0 sf	0.00%	
9:30 AM	4 567 sf	5 73%	0 sf	0.00%	
9:45 AM	4,349 sf	5 45%	0 sf	0.00%	
10:00 AM	4,045 st	5 15%	0 sf	0.00%	
10:15 AM	3 973 sf	4 98%	0 sf	0.00%	
10:30 AM	3 797 sf	4 76%	0 sf	0.00%	
10:45 AM	3 722 sf	4.67%	0 sf	0.00%	
11:00 AM	3 595 sf	4.51%	0 sf	0.00%	
11:15 AM	3 559 sf	4 46%	0 sf	0.00%	
11:30 AM	3 466 sf	4.35%	0 sf	0.00%	
11:45 AM	3.456 sf	4.33%	0 sf	0.00%	
12:00 PM	3.386 sf	4.25%	0 sf	0.00%	
12:15 PM	3,399 sf	4.26%	0 sf	0.00%	
12:30 PM	3.347 sf	4.20%	0 sf	0.00%	
12:45 PM	3.381 sf	4.24%	0 sf	0.00%	
1:00 PM	3.348 sf	4.20%	0 sf	0.00%	
1:15 PM	3.400 sf	4.26%	0 sf	0.00%	
1:30 PM	3.385 sf	4.25%	0 sf	0.00%	
1:45 PM	3.458 sf	4.34%	0 sf	0.00%	
2:00 PM	3.466 sf	4.35%	0 sf	0.00%	
2:15 PM	3,565 sf	4.47%	0 sf	0.00%	
2:30 PM	3.600 sf	4.52%	0 sf	0.00%	
2:45 PM	3,737 sf	4.69%	0 sf	0.00%	
3:00 PM	3,815 sf	4.78%	0 sf	0.00%	
3:15 PM	4,009 sf	5.03%	0 sf	0.00%	
3:30 PM	4,150 sf	5.21%	0 sf	0.00%	
3:45 PM	4,424 sf	5.55%	54 sf	0.07%	
4:00 PM	4,664 sf	5.85%	755 sf	0.95%	
4:15 PM	5,072 sf	6.36%	2,519 sf	3.16%	
4:30 PM	5,491 sf	6.89%	4,695 sf	5.89%	
4:45 PM	6,163 sf	7.73%	9,412 sf	11.80%	
5:00 PM	7,165 sf	8.99%	16,217 sf	20.34%	
5:15 PM	11,127 sf	13.96%	22,753 sf	28.54%	
5:30 PM	29,168 sf	36.58%	19,417 sf	24.35%	
5:37 PM	54,384 sf	68.21%	7,592 sf	9.52%	

Mirror date: F	ebruary 22				Shadow / Sunlight Balance Key
Analysis nours:	8:22 AIVI-5:27 PIVI (P	(וט			Existing Shadow Project Shadow Sunlight Remaining
Analysia Timo	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
8:22 AM	34,616 sf	43.42%	0 sf	0.00%	
8:30 AM	28,127 sf	35.28%	0 sf	0.00%	
8:45 AM	17,849 sf	22.39%	0 sf	0.00%	
9:00 AM	12,733 sf	15.97%	0 sf	0.00%	
9:15 AM	9,195 sf	11.53%	0 sf	0.00%	
9:30 AM	6,467 sf	8.11%	0 sf	0.00%	
9:45 AM	5,600 sf	7.02%	0 sf	0.00%	
10:00 AM	5,264 sf	6.60%	0 sf	0.00%	
10:15 AM	5,062 sf	6.35%	0 sf	0.00%	
10:30 AM	4,823 sf	6.05%	0 sf	0.00%	
10:45 AM	4,701 sf	5.90%	0 sf	0.00%	
11:00 AM	4,526 sf	5.68%	0 sf	0.00%	
11:15 AM	4,459 sf	5.59%	0 sf	0.00%	
11:30 AM	4,330 sf	5.43%	0 sf	0.00%	
11:45 AM	4,306 sf	5.40%	0 sf	0.00%	
12:00 PM	4,213 sf	5.28%	0 sf	0.00%	
12:15 PM	4,224 sf	5.30%	0 sf	0.00%	
12:30 PM	4,162 sf	5.22%	0 sf	0.00%	
12:45 PM	4,203 sf	5.27%	0 sf	0.00%	
1:00 PM	4,172 sf	5.23%	0 sf	0.00%	
1:15 PM	4,244 sf	5.32%	0 sf	0.00%	
1:30 PM	4,243 sf	5.32%	0 sf	0.00%	
1:45 PM	4,350 sf	5.46%	0 sf	0.00%	
2:00 PM	4,385 sf	5.50%	0 sf	0.00%	
2:15 PM	4,533 sf	5.69%	0 sf	0.00%	
2:30 PM	4,613 sf	5.79%	0 sf	0.00%	
2:45 PM	4,816 sf	6.04%	0 sf	0.00%	
3:00 PM	4,961 sf	6.22%	0 sf	0.00%	
3:15 PM	5,246 sf	6.58%	0 sf	0.00%	
3:30 PM	5,488 sf	6.88%	0 sf	0.00%	
3:45 PM	5,901 sf	7.40%	199 sf	0.25%	
4:00 PM	6,307 sf	7.91%	1,696 sf	2.13%	
4:15 PM	6,950 sf	8.72%	3,654 sf	4.58%	
4:30 PM	7,673 sf	9.62%	6,984 sf	8.76%	
4:45 PM	8,831 sf	11.08%	13,245 sf	16.61%	
5:00 PM	12,073 sf	15.14%	19,402 sf	24.33%	
5:15 PM	19,560 sf	24.53%	23,399 sf	29.35%	
5:27 PM	56,231 sf	70.53%	8,049 sf	10.10%	

46,414 sf

56,973 sf

4:15 PM

4:18 PM

58.21%

71.46%

11,848 sf

8,734 sf

Mirror date: Fo	ebruary 15			Shadow / Sunlight Balance Key		
Analysis hours:	7:30 AM-4:18 PM (P	ST)			Existing Shadow Project Shadow Sunlight Remaining	
	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE	
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun	
7:30 AM	34.229 sf	42.93%	0 sf	0.00%		
7:45 AM	22,680 sf	28.45%	0 sf	0.00%		
8:00 AM	15,547 sf	19.50%	0 sf	0.00%		
8:15 AM	11,574 sf	14.52%	0 sf	0.00%		
8:30 AM	8,550 sf	10.72%	0 sf	0.00%		
8:45 AM	6,936 sf	8.70%	0 sf	0.00%		
9:00 AM	6,491 sf	8.14%	0 sf	0.00%		
9:15 AM	6,212 sf	7.79%	0 sf	0.00%		
9:30 AM	5,903 sf	7.40%	0 sf	0.00%		
9:45 AM	5,732 sf	7.19%	0 sf	0.00%		
10:00 AM	5,511 sf	6.91%	0 sf	0.00%		
10:15 AM	5,415 sf	6.79%	0 sf	0.00%		
10:30 AM	5,257 sf	6.59%	0 sf	0.00%		
10:45 AM	5,216 sf	6.54%	0 sf	0.00%		
11:00 AM	5,107 sf	6.41%	0 sf	0.00%		
11:15 AM	5,112 sf	6.41%	0 sf	0.00%		
11:30 AM	5,046 sf	6.33%	0 sf	0.00%		
11:45 AM	5,093 sf	6.39%	0 sf	0.00%		
12:00 PM	5,067 sf	6.35%	0 sf	0.00%		
12:15 PM	5,155 sf	6.47%	0 sf	0.00%		
12:30 PM	5,171 sf	6.49%	0 sf	0.00%		
12:45 PM	5,306 sf	6.65%	0 sf	0.00%		
1:00 PM	5,370 sf	6.74%	0 sf	0.00%		
1:15 PM	5,564 sf	6.98%	0 sf	0.00%		
1:30 PM	5,693 sf	7.14%	0 sf	0.00%		
1:45 PM	5,964 sf	7.48%	0 sf	0.00%		
2:00 PM	6,184 sf	7.76%	0 sf	0.00%		
2:15 PM	6,574 sf	8.24%	0 sf	0.00%		
2:30 PM	6,937 sf	8.70%	74 sf	0.09%		
2:45 PM	7,520 sf	9.43%	922 sf	1.16%		
3:00 PM	8,140 sf	10.21%	2,606 sf	3.27%		
3:15 PM	9,123 sf	11.44%	4,826 sf	6.05%		
3:30 PM	10,279 sf	12.89%	10,011 sf	12.56%		
3:45 PM	12,784 sf	16.03%	16,225 sf	20.35%		
4:00 PM	17,825 sf	22.36%	22,067 sf	27.68%		

14.86%

10.95%

59,230 sf

4:10 PM

74.29%

7,464 sf

Mirror date: F	ebruary 8			Shadow / Sunlight Bal	ance Key		
Analysis nours:	: 7:36 AIVI-4:10 PIVI (P	51)			Existing Shadow	Project Shadow	Sunlight Remaining
	EXISTING	SHADOW	PROJECT NET	NEW SHADOW		SHADOW/SUNLIGHT BA	ALANCE
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage		Relative levels of Shadow	vs. Sun
7:36 AM	33,969 sf	42.60%	0 sf	0.00%			
7:45 AM	27,672 sf	34.71%	0 sf	0.00%			
8:00 AM	18,570 sf	23.29%	0 sf	0.00%			
8:15 AM	14,201 sf	17.81%	0 sf	0.00%			
8:30 AM	10,781 sf	13.52%	0 sf	0.00%			
8:45 AM	8,361 sf	10.49%	0 sf	0.00%			
9:00 AM	7,786 sf	9.77%	0 sf	0.00%			
9:15 AM	7,415 sf	9.30%	0 sf	0.00%			
9:30 AM	7,025 sf	8.81%	0 sf	0.00%			
9:45 AM	6,796 sf	8.52%	0 sf	0.00%			
10:00 AM	6,524 sf	8.18%	0 sf	0.00%			
10:15 AM	6,394 sf	8.02%	0 sf	0.00%			
10:30 AM	6,204 sf	7.78%	0 sf	0.00%			
10:45 AM	6,145 sf	7.71%	0 sf	0.00%			
11:00 AM	6,019 sf	7.55%	0 sf	0.00%			
11:15 AM	6,018 sf	7.55%	0 sf	0.00%			
11:30 AM	5,946 sf	7.46%	0 sf	0.00%			
11:45 AM	5,998 sf	7.52%	0 sf	0.00%			
12:00 PM	5,978 sf	7.50%	0 sf	0.00%			
12:15 PM	6,083 sf	7.63%	0 sf	0.00%			
12:30 PM	6,116 sf	7.67%	0 sf	0.00%			
12:45 PM	6,283 sf	7.88%	0 sf	0.00%			
1:00 PM	6,380 sf	8.00%	0 sf	0.00%			
1:15 PM	6,623 sf	8.31%	0 sf	0.00%			
1:30 PM	6,805 sf	8.53%	0 sf	0.00%			
1:45 PM	7,153 sf	8.97%	0 sf	0.00%			
2:00 PM	7,461 sf	9.36%	0 sf	0.00%			
2:15 PM	7,968 sf	9.99%	0 sf	0.00%			
2:30 PM	8,473 sf	10.63%	195 sf	0.24%			
2:45 PM	9,244 sf	11.59%	1,627 sf	2.04%			
3:00 PM	10,096 sf	12.66%	3,432 sf	4.30%			
3:15 PM	11,462 sf	14.38%	6,964 sf	8.73%			
3:30 PM	13,195 sf	16.55%	12,798 sf	16.05%			
3:45 PM	17,631 sf	22.11%	18,245 sf	22.88%			
4:00 PM	29,999 sf	37.62%	19,197 sf	24.08%			

9.36%

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Mirror date: February 1					Shadow / Sunlight Balance Key		
Analysis hours:	7:43 AM-4:03 PM (P	ST)		Existing Shadow Project Shadow Sunlight Remaining			
Analysis Timo	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE		
Analysis mile	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun		
7:43 AM	33,814 sf	42.41%	0 sf	0.00%			
7:45 AM	32,838 sf	41.19%	0 sf	0.00%			
8:00 AM	22,768 sf	28.56%	0 sf	0.00%			
8:15 AM	16,986 sf	21.30%	0 sf	0.00%			
8:30 AM	13,167 sf	16.51%	0 sf	0.00%			
8:45 AM	10,439 sf	13.09%	0 sf	0.00%			
9:00 AM	9,157 sf	11.48%	0 sf	0.00%			
9:15 AM	8,666 sf	10.87%	0 sf	0.00%			
9:30 AM	8,177 sf	10.26%	0 sf	0.00%			
9:45 AM	7,883 sf	9.89%	0 sf	0.00%			
10:00 AM	7,553 sf	9.47%	0 sf	0.00%			
10:15 AM	7,383 sf	9.26%	0 sf	0.00%			
10:30 AM	7,156 sf	8.98%	0 sf	0.00%			
10:45 AM	7,075 sf	8.87%	0 sf	0.00%			
11:00 AM	6,929 sf	8.69%	0 sf	0.00%			
11:15 AM	6,920 sf	8.68%	0 sf	0.00%			
11:30 AM	6,840 sf	8.58%	0 sf	0.00%			
11:45 AM	6,898 sf	8.65%	0 sf	0.00%			
12:00 PM	6,882 sf	8.63%	0 sf	0.00%			
12:15 PM	7,005 sf	8.79%	0 sf	0.00%			
12:30 PM	7,056 sf	8.85%	0 sf	0.00%			
12:45 PM	7,255 sf	9.10%	0 sf	0.00%			
1:00 PM	7,387 sf	9.26%	0 sf	0.00%			
1:15 PM	7,678 sf	9.63%	0 sf	0.00%			
1:30 PM	7,906 sf	9.92%	0 sf	0.00%			
1:45 PM	8,297 sf	10.41%	0 sf	0.00%			
2:00 PM	8,647 sf	10.85%	0 sf	0.00%			
2:15 PM	9,230 sf	11.58%	42 sf	0.05%			
2:30 PM	9,859 sf	12.37%	660 sf	0.83%			
2:45 PM	10,827 sf	13.58%	2,220 sf	2.78%			
3:00 PM	12,031 sf	15.09%	4,160 sf	5.22%			
3:15 PM	13,999 sf	17.56%	8,978 sf	11.26%			
3:30 PM	17,022 sf	21.35%	14,624 sf	18.34%			
3:45 PM	23,242 sf	29.15%	19,487 sf	24.44%			
4:00 PM	50,477 sf	63.31%	9,652 sf	12.11%			
4:03 PM	60,941 sf	76.43%	6,616 sf	8.30%			

Mirror date: J Analysis hours:	anuary 25 : 7:51 AM-3:57 PM (P	ST)			Shadow / Sunlight Balance Key Existing Shadow Project Shadow Sunlight Remaining
Analysia Tima	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE
Analysis Time	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
7:51 AM	33,834 sf	42.44%	0 sf	0.00%	
8:00 AM	27,198 sf	34.11%	0 sf	0.00%	
8:15 AM	19,638 sf	24.63%	0 sf	0.00%	
8:30 AM	15,669 sf	19.65%	0 sf	0.00%	
8:45 AM	12,627 sf	15.84%	0 sf	0.00%	
9:00 AM	10,576 sf	13.26%	0 sf	0.00%	
9:15 AM	9,959 sf	12.49%	0 sf	0.00%	
9:30 AM	9,356 sf	11.73%	0 sf	0.00%	
9:45 AM	8,981 sf	11.26%	0 sf	0.00%	
10:00 AM	8,574 sf	10.75%	0 sf	0.00%	
10:15 AM	8,357 sf	10.48%	0 sf	0.00%	
10:30 AM	8,088 sf	10.14%	0 sf	0.00%	
10:45 AM	7,983 sf	10.01%	0 sf	0.00%	
11:00 AM	7,813 sf	9.80%	0 sf	0.00%	
11:15 AM	7,795 sf	9.78%	0 sf	0.00%	
11:30 AM	7,700 sf	9.66%	0 sf	0.00%	
11:45 AM	7,750 sf	9.72%	0 sf	0.00%	
12:00 PM	7,734 sf	9.70%	0 sf	0.00%	
12:15 PM	7,863 sf	9.86%	0 sf	0.00%	
12:30 PM	7,926 sf	9.94%	0 sf	0.00%	
12:45 PM	8,135 sf	10.20%	0 sf	0.00%	
1:00 PM	8,281 sf	10.39%	0 sf	0.00%	
1:15 PM	8,589 sf	10.77%	0 sf	0.00%	
1:30 PM	8,842 sf	11.09%	0 sf	0.00%	
1:45 PM	9,261 sf	11.61%	0 sf	0.00%	
2:00 PM	9,639 sf	12.09%	0 sf	0.00%	
2:15 PM	10,368 sf	13.00%	110 sf	0.14%	
2:30 PM	11,180 sf	14.02%	1,071 sf	1.34%	
2:45 PM	12,402 sf	15.55%	2,688 sf	3.37%	
3:00 PM	14,003 sf	17.56%	5,303 sf	6.65%	
3:15 PM	16,583 sf	20.80%	10,603 sf	13.30%	
3:30 PM	21,097 sf	26.46%	15,573 sf	19.53%	
3:45 PM	32,090 sf	40.25%	17,000 sf	21.32%	
3:57 PM	63,740 sf	79.94%	5,231 sf	6.56%	

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Mirror date: January 18					Shadow / Sunlight Balance Key
Analysis hours: 7:57 AM-3:54 PM (PST)					Existing Shadow Project Shadow Sunlight Remaining
Analysis Time	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE
Analysis fille	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
7:57 AM	33,862 sf	42.47%	0 sf	0.00%	
8:00 AM	32,297 sf	40.51%	0 sf	0.00%	
8:15 AM	22,645 sf	28.40%	0 sf	0.00%	
8:30 AM	17,976 sf	22.55%	0 sf	0.00%	
8:45 AM	14,800 sf	18.56%	0 sf	0.00%	
9:00 AM	12,086 sf	15.16%	0 sf	0.00%	
9:15 AM	11,232 sf	14.09%	0 sf	0.00%	
9:30 AM	10,509 sf	13.18%	0 sf	0.00%	
9:45 AM	10,051 sf	12.61%	0 sf	0.00%	
10:00 AM	9,571 sf	12.00%	0 sf	0.00%	
10:15 AM	9,303 sf	11.67%	0 sf	0.00%	
10:30 AM	8,982 sf	11.27%	0 sf	0.00%	
10:45 AM	8,847 sf	11.10%	0 sf	0.00%	
11:00 AM	8,645 sf	10.84%	0 sf	0.00%	
11:15 AM	8,615 sf	10.81%	0 sf	0.00%	
11:30 AM	8,496 sf	10.66%	0 sf	0.00%	
11:45 AM	8,526 sf	10.69%	0 sf	0.00%	
12:00 PM	8,489 sf	10.65%	0 sf	0.00%	
12:15 PM	8,619 sf	10.81%	0 sf	0.00%	
12:30 PM	8,682 sf	10.89%	0 sf	0.00%	
12:45 PM	8,908 sf	11.17%	0 sf	0.00%	
1:00 PM	9,068 sf	11.37%	0 sf	0.00%	
1:15 PM	9,398 sf	11.79%	0 sf	0.00%	
1:30 PM	9,663 sf	12.12%	0 sf	0.00%	
1:45 PM	10,114 sf	12.69%	0 sf	0.00%	
2:00 PM	10,555 sf	13.24%	0 sf	0.00%	
2:15 PM	11,423 sf	14.33%	166 sf	0.21%	
2:30 PM	12,392 sf	15.54%	1,335 sf	1.67%	
2:45 PM	13,870 sf	17.40%	2,991 sf	3.75%	
3:00 PM	15,821 sf	19.84%	6,227 sf	7.81%	
3:15 PM	18,958 sf	23.78%	11,622 sf	14.58%	
3:30 PM	24,684 sf	30.96%	15,820 sf	19.84%	
3:45 PM	40,792 sf	51.16%	13,294 sf	16.67%	
3:54 PM	65,379 sf	82.00%	4,216 sf	5.29%	

Mirror date: January 11 Analysis hours: 8:04 AM-3:51 PM (PST)					Shadow / Sunlight Bala	ance Key Project Shadow	Sunlight Remaining
Analysia Tima	EXISTING	SHADOW	PROJECT NET	NEW SHADOW		SHADOW/SUNLIGHT BA	ALANCE
Analysis nine	Shadow Area	Coverage	Shadow Area	Coverage		Relative levels of Shadow	vs. Sun
8:04 AM	33,990 sf	42.63%	0 sf	0.00%			
8:15 AM	26,798 sf	33.61%	0 sf	0.00%			
8:30 AM	19,977 sf	25.06%	0 sf	0.00%			
8:45 AM	16,798 sf	21.07%	0 sf	0.00%			
9:00 AM	13,904 sf	17.44%	0 sf	0.00%			
9:15 AM	12,432 sf	15.59%	0 sf	0.00%			
9:30 AM	11,580 sf	14.52%	0 sf	0.00%			
9:45 AM	11,031 sf	13.84%	0 sf	0.00%			
10:00 AM	10,475 sf	13.14%	0 sf	0.00%			
10:15 AM	10,154 sf	12.73%	0 sf	0.00%			
10:30 AM	9,785 sf	12.27%	0 sf	0.00%			
10:45 AM	9,620 sf	12.07%	0 sf	0.00%			
11:00 AM	9,389 sf	11.78%	0 sf	0.00%			
11:15 AM	9,344 sf	11.72%	0 sf	0.00%			
11:30 AM	9,210 sf	11.55%	0 sf	0.00%			
11:45 AM	9,208 sf	11.55%	0 sf	0.00%			
12:00 PM	9,152 sf	11.48%	0 sf	0.00%			
12:15 PM	9,276 sf	11.63%	0 sf	0.00%			
12:30 PM	9,331 sf	11.70%	0 sf	0.00%			
12:45 PM	9,562 sf	11.99%	0 sf	0.00%			
1:00 PM	9,728 sf	12.20%	0 sf	0.00%			
1:15 PM	10,076 sf	12.64%	0 sf	0.00%			
1:30 PM	10,356 sf	12.99%	0 sf	0.00%			
1:45 PM	10,829 sf	13.58%	0 sf	0.00%			
2:00 PM	11,318 sf	14.20%	0 sf	0.00%			
2:15 PM	12,290 sf	15.41%	211 sf	0.26%			
2:30 PM	13,399 sf	16.81%	1,458 sf	1.83%			
2:45 PM	15,101 sf	18.94%	3,118 sf	3.91%			
3:00 PM	17,290 sf	21.69%	6,680 sf	8.38%			
3:15 PM	20,980 sf	26.31%	11,921 sf	14.95%			
3:30 PM	27,515 sf	34.51%	15,612 sf	19.58%			
3:45 PM	48,572 sf	60.92%	8,982 sf	11.27%			
3:51 PM	66,442 sf	83.33%	3,229 sf	4.05%			

## **DECEMBER 6**

Mirror date: J Analysis hours:	anuary 4 : 8:10 AM-3:51 PM (P	ST)			Shadow / Sunlight Balance Key           Existing Shadow         Project Shadow         Sunlight Remaining
Analysia Tima	EXISTING	SHADOW	PROJECT NET	NEW SHADOW	SHADOW/SUNLIGHT BALANCE
Analysis nime	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
8:10 AM	34,138 sf	42.82%	0 sf	0.00%	
8:15 AM	30,788 sf	38.61%	0 sf	0.00%	
8:30 AM	21,945 sf	27.52%	0 sf	0.00%	
8:45 AM	18,528 sf	23.24%	0 sf	0.00%	
9:00 AM	15,497 sf	19.44%	0 sf	0.00%	
9:15 AM	13,455 sf	16.88%	0 sf	0.00%	
9:30 AM	12,503 sf	15.68%	0 sf	0.00%	
9:45 AM	11,871 sf	14.89%	0 sf	0.00%	
10:00 AM	11,233 sf	14.09%	0 sf	0.00%	
10:15 AM	10,859 sf	13.62%	0 sf	0.00%	
10:30 AM	10,444 sf	13.10%	0 sf	0.00%	
10:45 AM	10,247 sf	12.85%	0 sf	0.00%	
11:00 AM	9,986 sf	12.52%	0 sf	0.00%	
11:15 AM	9,923 sf	12.45%	0 sf	0.00%	
11:30 AM	9,781 sf	12.27%	0 sf	0.00%	
11:45 AM	9,760 sf	12.24%	0 sf	0.00%	
12:00 PM	9,675 sf	12.14%	0 sf	0.00%	
12:15 PM	9,778 sf	12.26%	0 sf	0.00%	
12:30 PM	9,828 sf	12.33%	0 sf	0.00%	
12:45 PM	10,059 sf	12.62%	0 sf	0.00%	
1:00 PM	10,225 sf	12.82%	0 sf	0.00%	
1:15 PM	10,581 sf	13.27%	0 sf	0.00%	
1:30 PM	10,867 sf	13.63%	0 sf	0.00%	
1:45 PM	11,350 sf	14.23%	0 sf	0.00%	
2:00 PM	11,850 sf	14.86%	0 sf	0.00%	
2:15 PM	12,899 sf	16.18%	218 sf	0.27%	
2:30 PM	14,094 sf	17.68%	1,443 sf	1.81%	
2:45 PM	15,944 sf	20.00%	3,074 sf	3.86%	
3:00 PM	18,264 sf	22.91%	6,661 sf	8.35%	
3:15 PM	22,204 sf	27.85%	11,729 sf	14.71%	
3:30 PM	29,167 sf	36.58%	15,165 sf	19.02%	
3:45 PM	51,284 sf	64.32%	7,263 sf	9.11%	
3:51 PM	67,253 sf	84.35%	2,206 sf	2.77%	

### **DECEMBER 13**

Mirror date: D	ecember 28			Shadow / Sunlight Balance Key	
Analysis hours:	: 8:15 AM-3:52 PM (P	ST)			Existing Shadow Project Shadow Sunlight Remaining
Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW		SHADOW/SUNLIGHT BALANCE
	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
8:15 AM	34,296 sf	43.01%	0 sf	0.00%	
8:30 AM	24,903 sf	31.23%	0 sf	0.00%	
8:45 AM	19,824 sf	24.86%	0 sf	0.00%	
9:00 AM	16,775 sf	21.04%	0 sf	0.00%	
9:15 AM	14,349 sf	18.00%	0 sf	0.00%	
9:30 AM	13,199 sf	16.55%	0 sf	0.00%	
9:45 AM	12,497 sf	15.67%	0 sf	0.00%	
10:00 AM	11,798 sf	14.80%	0 sf	0.00%	
10:15 AM	11,372 sf	14.26%	0 sf	0.00%	
10:30 AM	10,912 sf	13.69%	0 sf	0.00%	
10:45 AM	10,686 sf	13.40%	0 sf	0.00%	
11:00 AM	10,397 sf	13.04%	0 sf	0.00%	
11:15 AM	10,315 sf	12.94%	0 sf	0.00%	
11:30 AM	10,160 sf	12.74%	0 sf	0.00%	
11:45 AM	10,122 sf	12.70%	0 sf	0.00%	
12:00 PM	10,017 sf	12.56%	0 sf	0.00%	
12:15 PM	10,103 sf	12.67%	0 sf	0.00%	
12:30 PM	10,139 sf	12.72%	0 sf	0.00%	
12:45 PM	10,365 sf	13.00%	0 sf	0.00%	
1:00 PM	10,523 sf	13.20%	0 sf	0.00%	
1:15 PM	10,876 sf	13.64%	0 sf	0.00%	
1:30 PM	11,162 sf	14.00%	0 sf	0.00%	
1:45 PM	11,638 sf	14.60%	0 sf	0.00%	
2:00 PM	12,111 sf	15.19%	0 sf	0.00%	
2:15 PM	13,181 sf	16.53%	176 sf	0.22%	
2:30 PM	14,402 sf	18.06%	1,298 sf	1.63%	
2:45 PM	16,284 sf	20.42%	2,872 sf	3.60%	
3:00 PM	18,644 sf	23.38%	6,189 sf	7.76%	
3:15 PM	22,413 sf	28.11%	11,209 sf	14.06%	
3:30 PM	29,370 sf	36.84%	14,547 sf	18.24%	
3:45 PM	49,137 sf	61.63%	8,244 sf	10.34%	
3:52 PM	68,006 sf	85.29%	1,234 sf	1.55%	

#### **DECEMBER 20**

W A

Winter solstice	e (December 21 sin	nilar)		Shadow / Sunlight Balance Key	
Analysis hours:	8:19 AM-3:54 PM (P	ST)			Existing Shadow Project Shadow Sunlight Remaining
Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW		SHADOW/SUNLIGHT BALANCE
	Shadow Area	Coverage	Shadow Area	Coverage	Relative levels of Shadow vs. Sun
8:19 AM	34,367 sf	43.10%	0 sf	0.00%	
8:30 AM	27,440 sf	34.42%	0 sf	0.00%	
8:45 AM	20,893 sf	26.20%	0 sf	0.00%	
9:00 AM	17,706 sf	22.21%	0 sf	0.00%	
9:15 AM	15,138 sf	18.99%	0 sf	0.00%	
9:30 AM	13,606 sf	17.07%	0 sf	0.00%	
9:45 AM	12,851 sf	16.12%	0 sf	0.00%	
10:00 AM	12,105 sf	15.18%	0 sf	0.00%	
10:15 AM	11,645 sf	14.60%	0 sf	0.00%	
10:30 AM	11,150 sf	13.98%	0 sf	0.00%	
10:45 AM	10,898 sf	13.67%	0 sf	0.00%	
11:00 AM	10,587 sf	13.28%	0 sf	0.00%	
11:15 AM	10,488 sf	13.15%	0 sf	0.00%	
11:30 AM	10,316 sf	12.94%	0 sf	0.00%	
11:45 AM	10,282 sf	12.90%	0 sf	0.00%	
12:00 PM	10,155 sf	12.74%	0 sf	0.00%	
12:15 PM	10,226 sf	12.83%	0 sf	0.00%	
12:30 PM	10,243 sf	12.85%	0 sf	0.00%	
12:45 PM	10,458 sf	13.12%	0 sf	0.00%	
1:00 PM	10,603 sf	13.30%	0 sf	0.00%	
1:15 PM	10,943 sf	13.73%	0 sf	0.00%	
1:30 PM	11,224 sf	14.08%	0 sf	0.00%	
1:45 PM	11,686 sf	14.66%	0 sf	0.00%	
2:00 PM	12,106 sf	15.18%	0 sf	0.00%	
2:15 PM	13,129 sf	16.47%	123 sf	0.15%	
2:30 PM	14,306 sf	17.94%	1,058 sf	1.33%	
2:45 PM	16,120 sf	20.22%	2,555 sf	3.20%	
3:00 PM	18,394 sf	23.07%	5,375 sf	6.74%	
3:15 PM	21,849 sf	27.40%	10,292 sf	12.91%	
3:30 PM	28,259 sf	35.44%	13,907 sf	17.44%	
3:45 PM	43,990 sf	55.17%	10,921 sf	13.70%	
2.54 DM	60 224 of	95 60%	020 of	1 0/10/-	









East / Indiana Street Rendered Elevation





West / Highway 280 Rendered Elevation





1806 Belles Street, Suite 6B San Francisco, CA 94129 tel 415.498.0141 fax 415.493.0141

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PREVISION DESIGN | 700 INDIANA STREET SHADOW ANALYSIS REPORT | FINAL | JANUARY 22, 2024

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#### Exhibit E

700 Indiana Street: Dogpatch Arts Plaza Qualitative Shadow Analysis, dated June 13, 2024



#### 700 INDIANA STREET: DOGPATCH ARTS PLAZA QUALITATIVE SHADOW ANALYSIS

June 13, 2024

The Dogpatch Arts Plaza is an approximately 4,500-sf publicly accessible open space directly north of the project. The plaza consists of stadium-style concrete seating along the western edge of the plaza, an approximately 40-ft long linear installation of fixed planters with seating running east-west on the southern side of the plaza, a raised statue pedestal in the center of the space, and three small trees along the northern side of the plaza. Throughout the plaza, about a dozen movable chairs are available for visitors.



Figure 1: View of Dogpatch Arts Plaza, looking west from Indiana Street

Under existing conditions, the plaza is already shaded by an existing structure on the project site, however the project would result in some additional net new shadow falling on the Dogpatch Arts Plaza throughout the year and would be affected daily from approximately mid-morning through mid-afternoon hours.



On dates near the summer solstice (6/21), the project's net new shadow would fall primarily along the southern edge of the plaza (ref. Exhibit B). On dates near the spring and fall equinoxes (3/20 and 9/22), the plaza currently receives shadow from the existing structure, but additionally affected areas or project shadow would occur in the central and northern portions of the plaza (ref. Exhibit C). On dates near the Winter Solstice (12/20) the plaza is substantially shaded by the existing structure, so only the northern edge of the plaza would be affected by net new shadow from the project (ref. Exhibit D).

While all areas of the plaza would receive new shadow at various times, during the periods affected by the project less than 10% of the plaza would be shaded at most times. The maximum shading would occur around midday during spring and fall, which would affect up to approximately 35% of the plaza area for a short period of time.

Of the features and uses in the plaza, the areas of fixed seating would likely be the most sensitive to the addition of net new shadow from the project, however at times when net new project shadow would be cast on the plaza, these features are already cast in shadow under existing conditions for most of the year, and would receive only an incremental amount of additional net new project shadow during summer months. Additionally, the availability of movable seating (chairs) would allow park visitors to find unshaded areas to sit at times when the fixed seating areas would be cast in shadow.

#### Exhibit F

Planning Review and Entitlements of Biotech Developments, a letter published by the Loma Prieta Sierra Club dated November 11, 2024



#### SAN MATEO, SANTA CLARA & SAN BENITO COUNTIES

November 11, 2022

Honorable Mayor and Members of the City Council Chair and Members of the Planning Commission

#### Subject: Planning Review and Entitlements of Biotech Developments

Dear Members of the City Council and Planning Commission:

The Sierra Club Loma Prieta Chapter's Sustainable Land Use Committee (SLU) advocates on land use issues in San Mateo and Santa Clara Counties. In that role, we are interested in the overall planning of our cities for the physical and environmental health of our communities.

Bio-tech has brought us many great advantages in saving lives and food production. Bio-tech labs deal with a wide range of infectious agents from benign to lethal. Therefore, it comes with a certain level of risk. However, these risks are not well understood.

Cities need to manage the risks with a clear understanding of **differences between biosafety levels (BSL) 1- 4.** And they need the active assistance of the departments of public health, safety and emergency preparedness. Attached is the *Sierra Club's Guidelines for Biosafety Levels (BSL) in Biotech Laboratories* and a very <u>short video</u> of the differences between the basic types of bio-tech labs.

Historically, labs have been located in industrial zoning for public health reasons. Now, however, bio-tech development is being proposed in mixed use zones in cities in San Mateo and Santa Clara Counties. In an urbanized setting, some of the **biological infectious agents being studied**, at BSL 2 and 3, and animal research could create a health emergency in the event of human error, accidents or in disasters such as serious seismic events. Furthermore, siting of such facilities in shoreline areas, identified as flood zones and high liquefaction zones, can create potential vulnerabilities for the regional Bay ecology and human health should public infrastructure be compromised and emergency protocols fail.

East Coast cities, where bio-tech has had a long history, provide early guidance to facilitate development through their zoning and other early mechanisms, as bio-hazards can be potentially more serious than many other impacts.

We hope your city will study and establish clear and effective new planning code requirements for Biotechnology developments, including zoning, permiting, monitoring and emergency procedures, before approving further projects. Thank you for your consideration.

Respectfully Yours,

Gita Dev, FAIA, Co-Chair Sustainable Land Use Committee

Jennifer Chang Hetterly Bay Alive Campaign Lead

Cc: Planning Director and Housing Commission members James Eggers, Executive Director, Sierra Club Loma Prieta Chapter Gladwyn d'Souza, Conservation Chair, Sierra Club Loma Prieta Chapter

Sierra Club Loma Prieta, Sustainable Land Use Committee BioSafety Guidelines Rev. March 28, 2022



Laboratories

This is a brief overview of biosafety levels for research laboratories, drawing from Lab Manager (<u>www.labmanager.com</u>)*Updated Dec 27, 2021 ; November 15, 2021* and from the Centers for Disease Control and National Institutes of Health

In light of numerous proposed biotech developments in highly urbanized locations, this document provides a starting point for identifying issues in facilities using biological materials. Proper facility location and design for research or clinical labs, permitting, and operations are essential to ensuring that people working in the facility as well as the public and the environment outside the facility are protected.

As a matter of public health and safety, cities must be rigorous in reviewing and approving these facilities.

A specialized biotech laboratory that deals with infectious agents is the biosafety lab. Biosafety labs may be devoted to research or to production activities and involve working with infectious materials or laboratory animals. It is essential to pay attention to the proper design of these facilities, to proper protocols in using the facilities, and procedures in the event of emergencies and disasters. Biological safety levels (BSL) are ranked from one to four, based on the agents or organisms used in the labs. Each higher level builds on the previous level, adding constraints and barriers.

**The four biosafety levels** were developed to protect against a world of select agents, including bacteria, fungi, parasites, prions, rickettsial agents and viruses (the largest group).

Studying the most infectious agents also means extensive security measures must be in place **because of their virulence and because of their potential to escape the lab and infect the surrounding population, environment** or for use in bioterrorism. When the work involves vertebrate animals, additional precautions and safety requirements are necessary.

The <u>Centers for Disease Control and Prevention</u> (CDC) and the <u>National Institutes of Health</u> (NIH) are the main sources for biological safety information for infectious agents. The publication *Biosafety in Microbiological and Biomedical Laboratories* <u>https://www.cdc.gov/labs/BMBL.html</u> is a principal reference.

Issues for City Planning Departments, County and City Departments of Public Health, City Planning Commissioners, and City Council Members to address when reviewing planning applications for

#### developments including BIOTECH laboratories.

Incidents involving biological, chemical, physical, and radiological hazards can have a significant impact on the safety and health of workers in laboratory settings. In addition, consideration needs to be given to risks to the community and the environment in the event of accidents, disasters and building failure. This is particularly important if proposed developments are in proximity to vulnerable populations and fragile Bay ecosystems, and where risk of disruption from seismic disasters and sea level and groundwater rise is high.

- Determine the Biological Safety Levels While Level 1 labs are generally considered safe, Level 2 labs are not advisable where there is the potential for structural failure. San Francisco Airport and all area airports do not permit Levels 2, or above, within some Land Use Safety Compatibility Zones. In addition, structural or infrastructure failure for biosafety lab buildings on soils subject to liquefaction in seismic events, such as bay fill, should be carefully considered as it could pose a community and/or environmental safety risk.
- <u>Consider prohibiting Level 3 and Level 4 labs</u>, entirely, in urban and shoreline areas, because of public safety.
- <u>Consider risks from flooding and public infrastructure safety</u>, including flooding and subsurface impacts from sea level and groundwater rise, for biosafety labs above Level 1.
- <u>Require the applicant to submit in writing the BSL for the proposed project</u> with a provision that changing to a higher level BSL will not be allowed without prior review and approval by the city and may not be allowed at all if so determined by the city.
- In the case of a speculative development where the final tenants or buyers may not be known during the city entitlements process, include the allowed BSL in the entitlements and in the EIR. After entitlement, require the developer to submit, in writing, the BSL for each company that is being considered for rental or purchase of space in the development, as they occur, before the lease or purchase is finalized, to ensure compliance.
- <u>Any change to the BSL level</u> will need review at City Council level and may not be allowed. In addition, re-evaluation under CEQA may be required.
- <u>Require the applicant to identify the range of diseases</u> to be studied and the agents to be used in the proposed facility.
- <u>Require the applicant to define emergency protocols and safety design features</u> for the building(s) and surrounding area, including Bay wetlands.
- <u>Require the applicant to define safety redundancy measures</u> for HVAC and air exhaust systems, waste disposal and storm water management systems, water quality safety, etc. in the building(s) design and long-term use
- <u>Require the applicant to identify if animals will be used</u> in the research and how they will be housed, secured, and protected.
- <u>Require rigorous environmental assessments</u> for any potential air or water pollution, or waste disposal materials generated by the facility, especially airborne particles or bio-hazardous materials.
- <u>Include a biological safety analysis and health impact report</u> on potential short and longterm safety impacts on the city, the bay, and the regional environment. **This should be a key component of the Environmental Impact Review process.**
- <u>Require a monitoring and verification program</u> to ensure that the facility is complying with the city requirements and the proponent's commitments to the city and all related regulatory agencies (e.g. fire dept, Cal-OSHA, CDC, USDA, etc.) including inspections and violations reports.

#### **Reference:**

#### <u>CDC and NIH—Biosafety in Microbiological and Biomedical Laboratories—6<sup>th</sup> Edition</u> <u>https://www.selectagents.gov/</u>

Level 1 Biosafety level one, the lowest level, applies to work with agents that do not consistently cause disease in healthy adults Non-pathogenic microbe	Biosafety level one, the lowest level, applies to work with agents that usually pose a minimal potential threat to laboratory workers and the environment and do not consistently cause disease in healthy adults. Research with these agents is generally performed on standard open laboratory benches without the use of special containment equipment. BSL 1 labs are not usually isolated from the general building. Lab personnel are trained and supervised on specific procedures by trained scientists. Standard microbiology practices, e.g. mechanical pipetting and safe sharps handling, are usually enough to protect laboratory workers and other employees in the building. Routine docontamination of work surfaces occurs and potentially infectious materials are
	decontamination of work suffaces occurs, and potentially infectious materials are decontaminated prior to disposal, generally by autoclaving. Standard microbiological practices also include hand washing and a prohibition on eating or drinking in the lab. Lab workers wear normal personal protective equipment. Biohazard signs are posted and access to the lab is limited whenever infectious agents are present.
Level 2 Biosafety level two covers work with agents associated with human disease, i.e., pathogenic or infectious organisms posing a moderate hazard.	Biosafety level two covers work with agents associated with human disease, i.e., pathogenic or infectious organisms posing a moderate hazard. Examples are the equine encephalitis viruses and HIV. Care is used to prevent percutaneous injury (needlesticks and cuts), ingestion and mucous membrane exposures in addition to the standard microbiological practices of BSL 1. Caution is used when handling and disposing of contaminated sharps. The laboratory's written biosafety manual details any needed immunizations (e.g., hepatitis B vaccine or TB skin testing). Access to the lab is more controlled than for BSL 1 facilities. Immunocompromised persons with increased risk for infection may be denied admittance at the discretion of the laboratory director.
innuenza, saimonella,	BSL 2 labs must also provide the next level of barriers, i.e., specialty safety equipment and facilities. Work with infectious agents involves a Class II biosafety cabinet, an autoclave, and an eyewash station. Self-closing lockable doors and biohazard warning signs are required at access points
Level 3 These are indigenous or exotic agents that may cause serious or lethal disease via aerosol transmission.	Yellow fever, St. Louis encephalitis and West Nile virus are examples of agents requiring biosafety level 3 practices and controls. Work with these agents must be registered with all appropriate government agencies. These are indigenous or exotic agents that may cause serious or lethal disease via aerosol transmission. Beyond the BSL 2 practices and equipment, work in BSL 3 labs involves tighter access control and decontamination of all wastes in the facility.
HIV, HSN1 flu, SARS-CoV2 plague, anthrax	More protective primary barriers are used in BSL 3 laboratories, including solid-front wraparound gowns, scrub suits or coveralls made of materials such as Tyvek <sup>®</sup> and respirators as necessary. Facility design incorporates self-closing double-door access separated from general building corridors. The ventilation must provide ducted, directional airflow by drawing air into the lab from clean areas and with no recirculation
Level 4 Agents requiring BSL 4 facilities and practices are extremely dangerous and pose a high risk of life-	Agents requiring BSL 4 facilities and practices are extremely dangerous and pose a high risk of life-threatening disease. Examples are the Ebola virus, the Lassa virus, and any agent with unknown risks of pathogenicity and transmission. BSL 4 facilities provide the maximum protection and containment, requiring complete clothing change before entry, a shower on exit, and decontamination of all materials prior to leaving the facility.
threatening disease. Ebola, smallpox	The BSL 4 laboratory contains a Class III biological safety cabinet or equivalent in combination with a positive-pressure, air-supplied full-body suit. Usually, BSL 4 laboratories are in separate buildings or a totally isolated zone with dedicated supply and exhaust ventilation. Exhaust streams generally are filtered through high-efficiency particulate air (HEPA) filters.