Exhibit A

Holland & Knight Response Letter on Behalf of AG-CCRP, dated June 18, 2019

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[Sent via email]

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Re: Public Market Parcel B - Response to Wareham Appeal Letter

Dear Mr. Guina, Ms. Visveshwara, Mr. Bryant and Ms. Desai:

As you know, we represent AG-CCRP Public Market, L.P. (AG-CCRP) in its application for a Final Development Plan (FDP) for Parcel B (FDP18-001). We are in receipt of the appeal of the Planning Commission's May 14, 2019 approval of the Parcel B FDP filed by Matt Francois on behalf of Wareham Development (Appellant), dated May 29, 2019. We request that you include this response in the record provided to the City Council pursuant to Emeryville Planning Code Section 9-7.1405(a). We thank you for your assistance in doing so.

Executive Summary

As discussed in this letter, Appellant's arguments are unfounded. Parcel B is a critical element of the Marketplace development, providing much needed services for the businesses at the Public Market and offices for Emeryville's growing research and development community. Design of the Parcel B building is consistent with the governing PDP, complies with all conditions of approval and mitigation measures, conforms to the City's General Plan, and does not require

additional review under the California Environmental Quality Act (CEQA). The following summarizes our responses to the Appellant's contentions, as discussed in further detail in this letter:

- (Section I) Appellant's Interest Given the continually shifting nature of the Appellant's objections and behavior throughout the appeal process, we find it hard to believe that the Appellant's interest is motivated purely by its objections to the design of Parcel B. Further, we find it telling that the alternative designs proposed by the Appellant don't address any of their complaints about the Parcel B FDP; rather, they increase the views from the Appellant's building to the Bay, indicating that Appellant's real interest may be protection of tenant views.
- <u>(Section II) Background</u> There has been remarkable continuity on this project with full fluency of the PDP's goals, intent and objectives of the original approvals, as well as the precise, technical requirements. The Appellant has been involved in the process since the PDP was adopted, and nonetheless went forward with the EmeryStation project with full and complete notice of the PDP's permitted development, but now continues to raise comments on features already approved in the context of the PDP and Marketplace Environmental Impact Report (EIR).
- (Section III) FDP is Consistent with the Governing PDP The PDP conceptualized a total development envelope, allowing for flexibility in the overall project design as the parcel-specific designs are refined, with limitations considering the total scope of development and the associated environmental impacts. The Parcel B FDP adheres to the PDP. The 113 foot proposed height is less than the "not to exceed 120 feet" Parcel B standard and undimensioned PDP plans. The retail square footage is less than that identified in the PDP for Parcel B. The proposed research and development square footage is greater than that identified in the PDP for Parcel B; as discussed below, detailed environmental analysis confirmed there are no new impacts associated with the Parcel B proposal. The Parcel B FDP responds to current market conditions with a design and floorplates that will attract research and development tenants, activate the pedestrian experience and enhance the mixed use district.
- (Section IV) FDP Complies with Conditions of Approval and Mitigation Measures There has been ample planning and analysis of the Parcel B FDP in relation to the PDP design standards, conditions of approval, and mitigation measures. This ultimately resulted in very clear and thoughtful statements by the Planning Commissioners at the four hearings to date on the Parcel B FDP. The Commissioners' statements, backed by substantial evidence, demonstrate that the FDP substantially conforms to the PDP. Specifically, the Parcel B FDP complies with the aesthetic and wind conditions of approval. The project creates a vital streetscape that enhances the pedestrian experience. A computerized wind tunnel study, the best scientific wind analysis available, finds that conditions will be *improved* by the addition of the proposed Parcel B building and, therefore, will not result in significant wind impacts.
- (Section V) FDP is Consistent with the City's General Plan A city has broad discretion to construe its policies in light of its plan's purposes. Here, the Parcel B FDP is clearly consistent with the General Plan's urban design goals.
- <u>(Section VI) More CEQA is Not Required</u> CEQA includes a strong presumption against requiring any further environmental review once an EIR has been prepared for a project. A detailed, 65-page Environmental Checklist was prepared to consider the environmental

impacts associated with the Parcel B FDP in relation to the impacts identified in the prior EIR. There are no circumstances requiring further environmental review. Specifically, a traffic analysis concludes that the proposed FDP will generate fewer trips compared to the PDP. As noted, a computerized wind tunnel study shows that the Parcel B building will improve wind conditions. Notably, the Parcel B FDP qualifies for a state law (SB 743), which provides that aesthetic impacts may not be considered significant impacts. Finally, while not directly addressed in the Appellant's letter, we feel compelled to address what may be the Appellant's concern – views – and note that private views are not protected under any applicable law here.

• (Section VII) The Proposed Design Alternatives are Not Feasible – The alternatives are not feasible for a number of reasons. In short, they are cost-prohibitive and are not counterbalanced by any additional revenue generating space/use. The Appellant, itself, has recognized that underground parking is not viable in connection with its Berkeley 10th Street project. From an aesthetic perspective, the designs suffer from the same critiques that the Appellant's architects raised in reference to the Parcel B FDP.

The Parcel B FDP's benefits are countless, as best described by Commissioner Keller, quoted in full below and excerpted here: "This project as before us continues the intention of the 2008 PDP, while providing our best chance in today's economy of supporting existing businesses in the Public Market; while creating the interest, draw and excitement to attract new retail and food services in the Public Market and the greater neighborhood."

Based on the ample analysis and substantial record created during the entitlement process and through the 5+ month appeal process, we respectfully request that the City Council affirm the Planning Commission May 14, 2019 unanimous vote denying the appeal and approving the Parcel B FDP. (Emeryville Code, § 9-7.1405)

I. The Appellant's Interest

At the outset, we find it hard to believe that the Appellant's interest is motivated purely by its objections to the design of Parcel B given the continually shifting nature of the Appellant's objections and behavior throughout the appeal process. Commissioner Keller expressed this sentiment at the April 25, 2019 Parcel B FDP approval hearing. He stressed that "the applicant has been more than patient on this." "The appellant keeps throwing up [issues], and each time they come to us it's something different. You know, before it was about creating a seven story canyon, now that seems to have disappeared and now it's all about wind – so I'm really upset with this..." Underlying Appellant's arguments, it seems clear that the Appellant is anticompetitive and perhaps concerned about views at its EmeryStation property, which are addressed in Section VI(D).

The Appellant's behavior evidences "gamesmanship," indicating its motivation may be anti-competitive. First, as identified to the Planning Commission, the Appellant already commented on the scope and scale of the development in 2007 before the EIR was certified. (See, e.g., Final EIR, Comment B5). Over a decade later, the Appellant continues to make many of the same comments about massing and design. These comments were, however, addressed in the Final EIR in 2007. The City Council then certified the Marketplace EIR in July 2008 and approved

the PDP in August 2008. With full and complete notice of the Marketplace project, Appellant proceeded with its development plan for the EmeryStation West office/laboratory project, which we understand was later approved in 2010. Now, Appellant continues to raise comments on features already approved in the context of the EIR and PDP to slow the processing of this office/R&D project. As represented by the Public Market Food Hall vendors at the January 24, 2019 Planning Commission hearing, the Parcel B office/R&D project will complete the vision of the Marketplace project and activate the project's mixed uses to ensure its overall success.

Second, the Appellant continues to utilize delay tactics to slow the processing of the Parcel B FDP. During the processing of the FDP, the Appellant did not attend the December Study Session. Instead, the Appellant appealed the Planning Commission's approval of the Parcel B FDP on January 24, 2019 in a 3-page letter. The Appellant then waited until 4:59 pm the night of the April 24, 2019 Parcel B appeal hearing to submit supplemental materials, including a wind study that was dated 5 days prior (on April 19, 2019). This "late hit" submittal ultimately necessitated a continuance of the appeal hearing to May 14, 2019, further delaying the processing of the FDP.¹

We note that in response to the Appellant's "late hit" submittal, we submitted a preliminary computerized wind tunnel study. This report was prepared to address the Appellant's concerns. As the most scientific form of wind analysis, it takes several weeks to prepare. It was provided by Charlie Bryant to the Appellant as soon as it was completed on May 13, 2019. With approximately 25 hours' notice, the Appellant had a full evening and business day to share the study with the Appellant's consultant and respond before the May 14th hearing.

Finally, it appears Appellant is using the planning process to exercise control over the development of the EmeryStation cluster. In the time between the original approval hearing and the continued appeal hearing, AG-CCRP representatives attempted to meet with representatives of the Appellant. Those meetings were cancelled, however, for a number of reasons. With very little notice, the Appellant requested that City officials be present at one meeting, which was not possible to coordinate. Additionally, again with very little notice, the Appellant provided alternative designs that were clearly infeasible just days before the April 25, 2019 hearing. That the Appellant "on its own initiative spent a good deal of money and time working with experienced laboratory architect DGA and other consultants to create alternative designs" demonstrates the Appellant's intention to circumvent the Planning Commission and approval process to control design of competitors' projects.

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¹ The gamesmanship of such "late hit" submittals ultimately frustrates the purpose of CEQA review. As the court acknowledged in *Citizens for Responsible Equitable Environmental Development v. City of San Diego* (2011) 196 Cal. App. 4th 515, 527, voluminous submittals made on the day of the hearing were clearly intended only to preserve an appeal, did not offer the agency "the opportunity to evaluate and respond to them," and were insufficient to exhaust administrative remedies.

² Wareham Development Appeal of the Planning Commission's May 14, 2019 Approval of Final Development Plan for the Marketplace Redevelopment Project, "Parcel B" (FDP 18-001) at p. 14 (May 29, 2019) [Hereinafter "Appeal"].

With this background, it came as little surprise that the Appellant would now submit an approximately 150 page appeal letter more than 5 months into an elongated appeal process.³ None of this behavior seems to reflect an Appellant that merely wants to helpfully suggest design modifications. Rather, this behavior reflects the behavior of an Appellant⁴ seeking to slow and stop a project in an anti-competitive manner.⁵

II. Background

There has been careful consideration of development on Parcel B for over a decade. The following is a brief history of the Parcel B Project, including all approvals and the Appellant's objections. The Appellant first commented on the Project's massing and design in 2007 in connection with the Marketplace PDP and EIR to which the City responded. The City then certified the Project's EIR and approved the PDP in 2008. The Marketplace Final EIR, certified on July 15, 2008, included analysis of the "Reduced Main Street Alternative." The Reduced Main Street Alternative included the realignment of Shellmound St. to allow the construction of 120,000 GSF office, 29,150 GSF commercial and parking on Parcel B. Mitigation measures were further modified to address the Reduced Main Street Alternative. Two years later, in 2010, the Appellant's EmeryStation West project was approved.

In 2016, the City approved Parcel B's FDP. A modified plan was proposed at a 2018 study session and the Planning Commission approved the Parcel B FDP on January 24, 2019. The Appellant then appealed the decision on February 8, 2019. On March 19, 2019, the City Council remanded the appeal to the Planning Commission to address the concerns raised in the

³ The new, 150-page letter calls into question the propriety and legality of doing so, given that the City Council's direction that the remand to the Planning Commission was limited to the "issues raised in the appeal letter from Wareham dated February 8, 2019." (Resolution FDP18-001R). Following the Planning Commission's January 24. 2019 approval of the FDP, AG-CCRP has now spent more than 5 months addressing this appeal. The Appellant's tactic of continually delaying the process, and now flooding the record at such a late stage, sets a bad precedent. ⁴ We note that the Appellant has previously challenged the Parcel A FDP. According to the Wareham Development website, the company has eleven properties in Emeryville. All but two of which are within the EmeryStation cluster. Of those nine EmeryStation properties, seven are listed for laboratory use with the remaining two properties being the Amtrak Station and the Terraces. Notably, the EmeryStation listings tout Wareham Development's strong relationship with the R&D community and emphasize the properties' state-of-the-art R&D facilities. This saturated concentration of properties in the EmeryStation cluster indicates Wareham's intention to control the cluster and monopolize Emeryville's research and development facilities. See generally, Properties: Emeryville, California, WAREHAM PROPERTIES (last accessed June 7, 2019), http://www.warehamdevelopment.com/prop-emeryville.html. ⁵ We note that a comprehensive study of all CEQA lawsuits filed between 2010-2012 reveals systematic abuse of CEQA litigation that undermines the state's environmental, social equity, and economic priorities. The study revealed that while only 8% of lawsuits are officially brought by business groups and competitors, 64% of those filing CEQA lawsuits are individuals or 'local groups,' the vast majority of which have no prior track record of environmental advocacy - and CEQA litigation abuse is significantly the domain of special interests such as competitors and labor unions seeking non-environmental outcomes. Hiring a law firm to predict dire environmental consequences of a development project and even eventually sue the project is a common and well-documented CEQA abuse tactic employed by competitors. Jennifer Hernandez, David Friedman, and Stephanie DeHerrera. 2015. In the Name of the Environment: How Litigation Abuse Under the California Environmental Quality Act Undermines California's Environmental, Social Equity, and Economic Priorities - and Proposed Reforms to Protect the Environment from CEQA Litigation Abuse. Available at: https://www.hklaw.com/publications/in-the-name-of-the-environmentlitigation-abuse-under-cega-august-2015/, last accessed June 3, 2019.

Appellant's appeal. AG-CCRP made repeated attempts to meet with the Appellant prior to the April 25, 2019 Parcel B FDP appeal hearing. As a result of the Appellant's late hit submittal, the hearing was postponed until May 14th, 2019, when the Planning Commission voted unanimously to re-approve the Parcel B FDP.

Notwithstanding the Appellant's objections, there has been remarkable continuity on this project. Charlie Bryant and Miroo Desai led the planning process when the PDP was processed and continue to provide invaluable insight on the project processing. For what it's worth, our firm has represented AG-CCRP as well as its predecessor, TMG Partners, on the Marketplace project, now commonly referred to as the Public Market project, for more than 13 years in entitlement processing, regulatory permitting, due diligence and transactional support. This is not a project where there has been turn-over resulting in unfamiliarity with the original approvals. To the contrary, this project has been processed with full fluency of the goals, intent and objectives of the original approvals, as well as the precise, technical requirements. Adherence to the spirit of the PDP, as well it its technical requirements, is discussed and demonstrated in the following discussion.

III. FDP is Consistent with the Governing PDP

The Appellant cites the legal standard for approving an FDP (Emeryville Planning Code Section 9-7.1004(b):

In approving a final development plan, the Planning Commission must make both of the following findings:

- (1) The final development plan substantially conforms to the preliminary development plan.
- (2) Changes and conditions of approval specified by the City Council in its approval of the preliminary development plan have been met.

The Appellant does not, however, capture the overarching principle behind the Planned Unit Development (PUD) District, the PDP/FDP process or the PDP substantial conformance determination.

The Emeryville Code explains that PUD zones are intended to "encourage the creative development of large sites so as to permit flexibility in physical design, achieve attractive designs which encourage large-scale site planning, and ensure that the applicable provisions of the General Plan are established early in the formation of such development proposals. (Emeryville Planning Code Section 9-7.1001) A PDP is intended to establish the zoning for a site and a FDP is intended to refine a parcel-specific design over time with detailed design specifications. (Emeryville Planning Code Section 9-7.1003, 9-7.1009)

Accordingly, the Marketplace PDP and EIR establish a development envelope, with numeric standards. The standards for Parcel B are copied below (PDP, Section I(A)(3)):

Shellmound Site: Construction of:

Office 1: 120,000 sq. ft. (5 floors over 5 floors of parking)

Commercial E: 29,150 sq. ft. (2 floors) Parking C: 518 spaces (5 floors)

Height: Maximum height not to exceed 120 feet

Importantly, the numeric standards identified for the Parcel B building did NOT specify the length of the building or differentiate between the height of the building on the northern or southern end; rather, the height standard is "not to exceed 120 feet." In contrast, the PDP did distinguish height standards within parcels for other parcels. See, for example, the varying height standards for the site now known as Parcel A (PDP, Section I(A)(3)):

(2) Shellmound site: Construction of:

Northern Portion:

Residential 3: 196 units Retail C: 6,200 sq. ft. Parking B: 127 spaces

Height: 14-level tower with a maximum height of 175 feet

Southern Portion:

Residential 2: 10 townhouses

Retail B: 8,525 sq. ft. Parking A: 541 spaces

Height: 4.5 levels with maximum height of 50 feet

As shown, the numeric standards for Parcel B did not create a shorter height standard for either portion of the parcel allowing for the reasonable interpretation that the 120 foot height standard applies to the entire parcel. Further, the approved plans, those dated April 16, 2008, consisting of pages 1 to 15 and copied below, did NOT include dimensions for the length of the buildings nor for the height of the northern end of the parcel.

It should be noted that the renderings the Appellant's attorney attached as Exhibit C (pages 84 – 104) include colored renderings of the block level massing that were not part of the legally binding approved plans. The legally binding approved plans are attached as Exhibit A. As the date or source of these renderings is not known, they should not be considered in determining PDP conformance. These irrelevant drawings are attached as Exhibit B.

A. Intent of the PDP

Notably, the PDP describes the intent of the PDP in three instances. The PDP was intended to allow some flexibility so long as final development plans "substantially comply" with the spirit and intent of the Marketplace PDP to "create a vibrant, mixed use neighborhood" (PDP, §III.A.1.d., III.B.1.d, III.C.1.b.):

The intent of the PDP is to achieve a vibrant, mixed use neighborhood. The Final Development Plan may allow any use, including multi-family residential and any use allowed on Table 1 above; provided however, that if any allowed use other than the allowed use designated on the Preliminary Development Plan, or any increase in the square footage or number of units is proposed in any building designated as residential in the Preliminary Development Plan, the Applicant shall submit a traffic study and the City shall require appropriate compliance with the California Environmental Quality Act prior to approval.

In other words, the PDP was conceptualized as a total development envelope, with limitations based on the total scope of development and the associated environmental impacts.

B. FDP Conformance to PDP

The Parcel B FDP adheres to the spirit outlined in the above PDP language. Parcel B consists of 14,000 square feet of retail space, 150,000 square feet of office/lab space and 565 parking spaces. The proposed height is 113 feet. Although the research and development square footage of office is greater that identified in the PDP for Parcel B, the retail square footage is less than that identified in the PDP for Parcel B. While the northern portion of the building extends taller than the diagrams in the PDP plans, as discussed above, it's a more than reasonable interpretation that the height is consistent with the numeric standards that identify 120 feet as the height standard for the entire parcel.

Even acknowledging that the northern end of the building extends higher than the diagrams in the PDP plans, there are no environmental impacts associated with that increase, as addressed in Section VI below. Moreover, the applicable conditions have been satisfied. In particular, a traffic study prepared by Kimley Horn and submitted to the Planning Commission demonstrates that the proposed Parcel B FDP project would generate fewer trips when compared to the PDP.

The Appellant notes that Jeffrey Heller finds the FDP does not conform with the PDP. In contrast with the City staff and AG-CCRP's consultants, who have been involved in design and entitlement processing since the PDP was approved, Mr. Heller has not been involved in the project in the intervening decade since the PDP was approved. With this context, Mr. Heller's letter mischaracterizes the Parcel B building and the overall urban design implementation as a whole.

The Public Market architects from Hart Howerton have explained that the current master plan for the overall site, and for Parcel B in particular, is a real-world, practical evolution of the PDP that can be implemented in today's market. Hart Howerton is confident that the same sort of design refinement and minor variations would occur if Heller Manus had been commissioned to execute the work. Mr. Heller states that "the length of the proposed building is unprecedented." In fact, the Bay Street and the Appellant's Emerytech buildings are both longer than the Parcel B building. Mr. Heller's concerns about a super block, excessive shadows, unscreened parking and wind exceedances are equally misinformed. For example, wind analysis indicates that placement of the open-air parking levels will help mitigate wind speeds. Further, the building's variation

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⁶ Appeal (Exhibit F) at p. 1.

and articulation are incorporated into the facade design, rather than changes in height and massing. Contrary to Mr. Heller's contention that "the proposed project does not expand the pedestrian network," the overall project has built a more comprehensive pedestrian and multimodal network than envisioned in the PDP. A more careful review of the final building design and overall project design would likely lead Mr. Heller to a different set of observations.

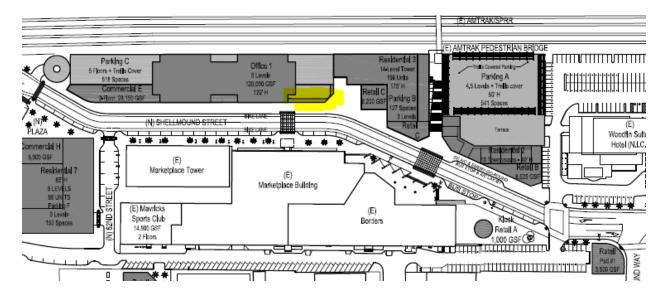
Finally, it is noted that at the May 14 continuation of the April 25th, 2019 Planning Commission hearing (Continued May 14th Hearing) Chair Barrera concluded that "in reading all the material and going back to the conditions of approval and the PDP, I find that this project is in substantial compliance with the . . . previously approved PDP." Agreeing, Commissioner Keller noted that because the "proposal is not substantially or significantly different than the . . . approved PDP . . . it does not require council approval or an amendment of the EIR."

C. Relevance of Parcel A

We disagree with the Appellant's argument in footnote 4 that the development on Parcel A is not relevant to the proposal on Parcel B. This comment is raised in relation to the discussion in the Planning Commission staff reports noting that Parcel A was approved at a lower height than as permitted in the PDP. As described above, the PDP was approved to achieve a "vibrant mixed use neighborhood." For anyone that does not recall, the project was the first neighborhood development in the nation to achieve LEED Platinum certification by the U.S. Green Building Council and has been designated by the California Department of Housing and Community Development as a Gold Catalyst Project as a critical Transit Oriented Development housing project. These awards were based on the project's critical mix of high density uses near transit. Contrary to the Appellant's intimation, the awards celebrate the project's development of a green neighborhood and mix of uses and not the exact height dimensions listed in a PDP.

Notably, the Appellant also challenged the original Parcel A FDP using many of the same tactics that the Appellant is using now, resulting in a shorter building on Parcel A. As discussed, the PDP was conceptualized as a total development envelope, with limitations based on considering the total scope of development and the associated environmental impacts. In that case, with a substantially shorter building on Parcel A (86 feet on the northern end and 50 feet on the southern end) rather than the 175 feet approved in the PDP, it can be argued that doing so created more project-wide capacity in comparison to the approved PDP.

In footnote 5, the Appellant disputes the distance between Parcels A and B, claiming that a reduction of 8 feet in the FDP from the PDP is significant. First, it is noted here that at ground-level the PDP actually included *no* gap between Parcels A and B as the PDP indicated that ground level retail may be constructed. In that sense, the proposed Parcel B FDP creates a greater ground-level gap than the PDP, which thereby results in a better pedestrian experience, with more activated open space for community gathering, along Shellmound Street.



Hart Howerton explains that because the Parcel A building is set back from the property line in some instances and encroaches the line in others, Parcel A is usually within 1' to 2' of the property subdivision line. Therefore, Hart Howerton utilized the property subdivision line for measuring purposes. In the approved Parcel B FDP, the Parcel B stair tower is 58'-3" from the property line with Parcel A. The majority of the massing of Parcel B is an additional 11'-3" further back, for a total of 69'-6" overall. At the Continued May 14th Hearing, Chair Barrera stressed that "68 feet of separation between buildings is not a narrow gap . . . the separation between Parcel A and Parcel B will fit perfectly into the context of Emeryville and it's in substantial compliance with the 76 feet that was analyzed as part of the PDP." Additionally, Commissioner Keller analyzed the spacing of all of the Appellant's buildings in the EmeryStation cluster. Commissioner Keller shared a figure showing that, in fact, Parcel B "will have the greatest distance separating it from EmeryStation West than any distance within Emeryville's buildings or its neighbors."

IV. FDP Complies with Conditions of Approval and Mitigation Measures

The Parcel B FDP complies with the Conditions of Approval and Mitigation Measures as discussed below. Given that AG-CCRP has processed and received approvals from the Planning Commission for five FDPs for parcels in the Marketplace project, AG-CRRP and its consultants are intimately aware of the Conditions of Approval and Mitigation Measures.

A. Aesthetic Conditions of Approval and Mitigation Measures

The aesthetic conditions raised by the Appellant have already been addressed thoroughly throughout the Planning Commission proceedings. They are addressed here once again. We have identified the findings of the Planning Commission as we believe the Commissioners took the time to address their comments in a manner that would leave no question about the satisfaction of the findings.⁷

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⁷ The Appellant complains that at the Continued May 14th Hearing, members of the Planning Commission "delivered seemingly-scripted remarks concerning the relationship of the FDP to City design standards and the PDP conditions" and approved the FDP with no changes without "meaningful deliberation or discussion." (Appeal at p.

E. DESIGN RELATED

- 1. Each of the following . . . measures shall be incorporated into the final project design (AES-1):
 - The proposed structures shall adequately reference, and be visually compatible with and not detract from the surrounding industrial buildings.

The Parcel B design makes every attempt to adequately reference and be visually compatible with neighboring structures. The Planning Commissioners complimented that fact at the December 2018 study session. Like the surrounding industrial buildings, Parcel B's design starts with a simple form and massing, making a modest expression of its structural frame. The building employs big windows to provide as much daylight to working floor areas as possible in harmony with neighboring industrial buildings. Further, the design avoids the use of historicist forms or literal use of materials that would imply masonry construction or load-bearing walls as well as unintentional stepbacks and superfluous articulations that wouldn't be typical of building type, so as not to detract from the authenticity and spirit of the surrounding industrial edifices.

Acknowledging the intention behind Parcel B's design, Commissioner Keller emphasized at the Continued May 14th Hearing that the building fits well within Emeryville's architectural vernacular. As "detailed in [the] previous commission meeting, I clearly illustrated how this particular architectural style echoes the established architectural vernacular of Emeryville in the EmeryTech building on 65th street" as well as "the Besler building on 40th street and the original Sherwin Williams building on Horton."

• Create streetscape vitality and enhance the pedestrian experience through detailed treatment of building facades, including entryways, fenestration, and signage, vertical walls broken up with architectural detailing, protruded and recessed tower elements, stepped-back upper floors to provide appropriate building height transitions to adjacent buildings, and through the use of carefully chosen building materials, texture and color.

Streetscape vitality has always been the primary goal of the Public Market master plan, as it fosters every desired outcome, for the project team and the City. This drove the separation of Parcels A and B into separate buildings, where in the PDP there was a single uninterrupted façade for the entire length. The following is an overview by Hart Howerton regarding Parcel B's design details that foster a vibrant streetscape:

Active uses line the buildings' street frontages, which require an appropriate architectural expression. The detailed treatment of building facades, especially at the ground floor

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^{4).} Wareham's comments fail to acknowledge that any scripted remarks are likely a result of their own late hit submittal of materials at the April 25th, 2019 hearing, which provided the Planning Commission three weeks to review Staff reports for the proposed FDP and consider the Appellant's concerns.

level, enhance the pedestrian experience. The base of the building is carefully designed and detailed with tenant- and project-specific storefront window systems and proportions. Anticipated signage and awnings provide color and variety within a stable rhythm of structural piers. The base utilizes a base-middle-top expression to further reinforce the pedestrian scale, employing a string course and material change to mark these transitions.

Parcel B has protruded and recessed elements to articulate the building. Stair and elevator towers, at the north and south ends, are expressed as tower elements, while the main entry is a recessed element, corresponding to the location of the main mid-block cross walk. Each of these expressions reinforce a plaza or pedestrian gathering space and correspond to cross walks at intersections and mid-block. Building materials, textures and colors were carefully chosen to enhance the Public Market District's visual character, while not mimicking the surrounding industrial buildings or repeating the mistakes of the corporate modernist-style buildings in the area.

At the Continued May 14th Hearing, Commissioner Guerrero stated that he did not "believe that this proposed design negatively impacts the neighborhood pedestrian experience." In fact, he underscored "that it will improve our experience as a neighborhood" and that he is "excited to see [the project] move forward." Further, Commissioner Donaldson noted that the Commission had looked at the building carefully and that "the building was generally received well." Further, she highlighted that she hopes the planned artwork will make the building "more exciting and more interesting" and a contribution to the neighborhood in the way that the artwork on buildings in the Arts District of Los Angeles has made the area a "pleasure to wander around . . . and discover things."

Chair Barrera then stated that she thinks that "the pedestrian experience is very rich and very interesting and satisfies this condition." "The reason I believe this project meets this requirement is because there are varied building materials at the ground floor commercial level, including the bulk head width, the type of siding that is different from the materials on the rest of the wall. There is articulation on the ground floor with the storefront window systems that are recessed from the vertical columns that separate the spaces. The window storefront systems provide a deep reveal and the . . . transoms above the storefront system add interest . . . [and] the linear elevations of the building, although it is very large, as you pointed out in your letter that it is approximately five hundred feet, is broken up by the prominent entrance in the middle . . ."

 Design of building facades shall include sufficient articulation and detail to avoid the appearance of blank walls or box-like forms.

Hart Howerton emphasizes that the Parcel B design includes generously scaled windows set within and an expressed structural framework that covers the upper floors of the building, providing both articulation and the avoidance of blank walls. Additionally, articulation is incorporated into the ground floor, which is lined with retail and active uses. While for acoustic, functional and safety reasons, the bottom 20 feet of the building directly adjacent the train tracks does have a blank wall, the majority of the building does not. The building's massing is simple, but not box-like. Projecting towers, a recessed entry notch, and a set-back roof line provide

urban scale articulation without resorting to the gratuitous formal moves to avoid box-like design, such as the horizontal and vertical curves, that other buildings in the area employ. As referenced throughout, consistent with the Public Market Development Agreement, the Public Art Committee recommended approval of the Public Market Public Art Final Plan, which has planned for prominently featured art on the east and west facades of the Parcel B building. (Exhibit C)

Commissioner Keller, Commissioner Guerrero, Commissioner Young and Chair Barrera refuted the contention that the project will have blank walls or a box-like form at the Continued May 14th hearing. Commissioner Keller stated that he could "say with conviction that storefronts with large swaths of dimensional artwork do not create such a feared experience or environment." Commissioner Guerrero commented that the commission had given "thorough feedback about the design and were able to see some elements that would be applied to the building that [they] are really excited about." He also noted that "in fact, the Planning Commission on multiple occasions recommended that the building facing the Wareham building actually be adjusted so that it did look visually appealing" and that these factors were "definitely something [the commission] considered early on." Commissioner Young was "taken" with the comment that the project was a box. He stated that he remembered that when the project was approved he "was extremely ecstatic about the design" and he thinks that "design really means Emeryville." Chair Barrera concluded that "although the overall building design is rectangular or box-like in form, it definitely has enough . . . architectural detail both on the pedestrian level and throughout the entire building . . . and [that] coupled with the art that's proposed . . . this design meets not just this condition of approval, but the rest of the conditions of approval related to design in the original PDP."

2. All proposed new buildings shall be shown in detail including building materials, colors, skin, and fenestration. Towers and buildings along the rail road tracks shall be articulated with treatment such as variations in building planes, colors and materials, balconies and trellises to ensure that no visual wall is created along the railroad right of way. Visible exteriors of the structures shall be designed to blend in with the urban fabric of the neighborhood.

Hart Howerton designed Parcel B building to be experienced in the round, in spaces and on all four sides; from up close along Shellmound street, from down the street, and from across the tracks. As noted in their presentation to the Planning Commission in January, the Parcel B design has no "back." The façade design includes the same strategy of facade design for office and parking levels along the railroad tracks as it does facing Shellmound street, including the same materials, massing, articulation, window patterns, structural bay dimension and expression. Significantly, site-specific artwork features prominently on both facades as well.

As noted above, Chair Barrera addressed this condition at the Continued May 14th Hearing. She stated that she thinks that "the pedestrian experience is very rich and very interesting and satisfies this condition." "The reason I believe this project meets this requirement is because

there are varied building materials at the ground floor commercial level, including the bulk head width, the type of siding that is different from the materials on the rest of the wall. There is articulation on the ground floor with the storefront window systems that are recessed from the vertical columns that separate the spaces. The window storefront systems provide a deep reveal and the . . . transoms above the storefront system add interest . . . [and] the linear elevations of the building, although it is very large, as you pointed out in your letter that it is approximately five hundred feet, is broken up by the prominent entrance in the middle . . ."

5. Building heights shall not exceed the heights shown in the Preliminary Development Plan.

Section III above includes a long discussion of the interpretation of the PDP, including the numeric height standard in the PDP "not to exceed 120 feet." This standard did not distinguish between the northern and southern end of the parcel, allowing for the reasonable interpretation that the 120 foot height standard applies to the entire Parcel B. Moreover, the proposed 113 foot tall building is shorter than the 120 feet allowed under the PDP. Significantly, at the Continued May 14th hearing, Chair Barrera underscored that "in reading all the material and going back to the conditions of approval and the PDP, I find that this project is in substantial compliance with the . . . previously approved PDP."

The Appellant also submitted opinions by the DGA Architectural firm regarding this measure. Scott Williams of DGA asserts than an individual FDP design is more important than the overall PDP. Respectfully, the Hart Howerton team, City staff and the Planning Commission have disagreed. Likewise, his assertions based on UD-P-33, UD-P-36, and UD-P-38 are misplaced. The building's form, scale, massing, materials, and articulation are a direct response to the surrounding industrial buildings and to the vision of the original PDP created by Heller Manus. Of relevance, the original PDP included buildings that were taller and bulkier on almost every block than what CCRP and Avalon Bay have proposed. At each turn, AG-CCRP and Avalon Bay have proposed a more fine-grained, human-scaled, walkable neighborhood than the original PDP. Mr. Williams's letter articulates a misinformed critique of the project following the Conditions of Approval listed above. As with Mr. Heller's letter, Hart Howerton believes that with a more careful review of the building design, drawing upon a better understanding of Emeryville and the overall urban design of the place, would lead Mr. Williams to a different set of conclusions.

B. Wind Conditions of Approval and Mitigation Measures

The wind analysis conducted to date has been more than adequate and shows that the proposed design would not negatively impact wind conditions.

While not mentioned by the Appellant, we first note that it is not clear that WIND 1 (Reduced Main Street) was intended to apply to Parcel B. It says that the construction of the "Shellmound mixed use and high rise tower buildings and UA Cinema building sites" shall be subject to review by qualified wind consultants. This may have been intended to refer only to the 175-foot Shellmound mixed use high rise tower on what is now known as Parcel A and the 150-foot tall building on the UA Cinema site, which is now known as Parcel D. Specifically, the Final EIR

states that the "shape and massing for the 150-foot and 175-foot tall towers would not be broken-up or articulated, particularly for the UA Cinema site and north office, which could contain flat, extended wall surfaces." (Final EIR, p. 131). The Final EIR then imposed the mitigation measure requiring final design review by a qualified wind consultant.⁸ In any event, substantial wind analysis has been conducted.

1. Qualified Wind Consultant Review

First, a wind analysis was conducted of the proposed Parcel B design (March 22, 2019). Donald Ballanti, a certified meteorologist, who previously prepared a Wind Analysis Memorandum evaluating the PDP (see Draft EIR, Appendix F) prepared a report evaluating the current Parcel B FDP. The analysis (attached as <u>Exhibit D</u>) concludes the following:

In summary, the proposed Parcel B building is somewhat exposed to prevailing wind directions and is aligned across the important west wind direction. However, the presence of naturally-ventilated parking garage space in the bottom half of the structure means that any upwind and downwind pressure differences generated at the top floors of the building would result in airflow through the parking garage floors and not wind accelerations at ground level. Based on the exposure, massing and orientation of the proposed building it would not have the potential to adversely affect ground-level winds near its base, at proposed landscaped open space areas at the north and south ends of the site, within adjacent Parcel A to the south, or at properties east of the site on the far side of the UPRR train tracks.

Mr. Ballati further concluded, "[s]ince the project does not have the potential to adversely affect wind, wind tunnel or computerized fluid dynamics testing would not be recommended for this project."

2. <u>Computerized Wind Tunnel Study</u>

Even though Mr. Ballanti concluded that more wind analysis was not necessary, RWDI conducted a computerized wind tunnel study. A preliminary report (RWDI Preliminary Report) was previously submitted on May 13, 2019. The RWDI Preliminary Report was based on the construction of a scale replica of the Parcel B site and surroundings, which were tested in a wind tunnel to simulate the winds approaching and interacting with the project site. This is the most advanced and accurate means of predicting wind speeds around buildings and structures. The report shows that "[i]n general, the addition of the proposed building has a *positive* effect on the wind conditions." (RWDI Preliminary Report, Executive Summary, *emphasis* added, <u>Exhibit E</u>).

The RWDI Preliminary Report first considered Wind Hazards Conditions, which considers whether a project would "create winds exceeding 36 mph for more than one hour during daylight hours of the year." Under existing conditions, it found a wind hazard on the east side of the train tracks, next to the Appellant's building, at the foot of the pedestrian bridge tower. The wind

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⁸ In the Final EIR, the mitigation measure was referred to as Mitigation Measure WIND-2 (Reduced Main Street alternative). The numbering of the mitigation measures in the final approval documents was changed to be WIND-1 (Reduced Man Street alternative).

hazard was actually eliminated once the proposed Parcel B project was added to the model and under the cumulative conditions.

The RWDI Preliminary Report also considered Wind Comfort for informational purposes. Although not applicable towards determining whether a project creates a significant impact, the comfort criteria consider wind speeds comfortable for pedestrian use and public seating areas. The RWDI Preliminary Report found that under existing conditions some locations are expected to exceed the comfort criterion. With the addition of the proposed building to the site, wind conditions are expected to be moderated. Significantly, the number of locations where wind speeds exceed the comfort criterion decrease from 24, under existing conditions, to 15 locations, when the Parcel B project is added to the model. (RWDI Preliminary Report, Executive Summary). The computerized, scientific methods and results were definitive. Not only would the Parcel B FDP not have impacts, it would improve wind conditions.

3. *CPP "Experience-Based" Assessment*

The Appellant's letter includes a letter from CPP, who conducted an "experienced-based" analysis. This qualitative assessment does not stand up to a computerized wind tunnel test.

CPP's letter uses the San Francisco Planning Code "pedestrian comfort" criteria, but CPP's letter focuses only a few locations "without considering the existing wind conditions or the future wind conditions at all pedestrian areas around the development, therefore [RWDI doesn't] believe the [CPP] report to give the full picture." (RWDI Response Letter, p. 1). CCP also purports to identify locations where the hazard level is "nearly" met, without actually identifying any locations where a hazard level is exceeded. As discussed, both with respect to pedestrian comfort and wind hazards, the Parcel B FDP improves conditions.

Further, in evaluating significance, what is most relevant here is the significance criteria used in the Marketplace EIR. It is excerpted here (Marketplace DEIR, p. 334, **bold** emphasis added):

The CEQA Guidelines did not include any specific criterion for the evaluation of a project's wind effects, and neither the State of California or the City of Emeryville have established criteria or standards for judging the effects of development projects on wind. The cities of Oakland and San Francisco have, however, established criteria for the evaluation of wind impacts. The City of Oakland considers a project to have significant wind impacts if it would result in one hour of winds exceeding 36 mph. San Francisco considers a project to have significant wind impacts if it would result in one occurrence per year of winds greater than 36 mph. The wind criteria developed for Oakland and San Francisco are based on research conducted in several locations and would be appropriate for a project located in Emeryville due to similar geographic proximity to the San Francisco Bay and adjacent of the communities to Emeryville. For this analysis, the project is considered to have a potentially significant wind impact if:

• The *exposure*, *orientation* and *massing* of a proposed structure can be expected to substantially increase ground-level winds in pedestrian corridors or public spaces near the project site. Since the ambient wind (undisturbed by buildings) in Emeryville

seldom exceeds 36 mph, a project must *substantially increase winds* for this threshold to be exceeded.

Accordingly, the Marketplace EIR considered the CEQA Guidelines as well as the San Francisco and Oakland thresholds and ultimately determined that a project would be considered significant if would substantial increase ground-level winds in pedestrian corridors or public spaces near the project site and that a project must substantially increase winds to be considered significant.

CPP relies on the San Francisco criteria, but that criteria has not been adopted by the City of Emeryville. Rather, Emeryville exercised its discretion in selecting the significance criteria for the Marketplace EIR, quoted above. (San Francisco Baykeeper, Inc. v State Lands Comm'n (2015) 242 CA4th 202, 227; North Coast Rivers Alliance v Marin Mun. Water Dist. (2013) 216 CA4th 614, 625).

4. *RWDI Response*

RWDI reviewed the CPP report and provided a response letter (RWDI Response Letter), attached here as Exhibit F. It notes that CPP's considers only the wind results at a few locations between Parcels A and B. Further, CPP's analysis doesn't compare to existing conditions, which is certainly a relevant exercise when determining whether a project would substantially increase winds.

The RWDI Response Letter further explains:

When compared to the existing conditions, the addition of the study building reduces winds across the site (Table 2, Pedestrian Wind Study RWDI # 1902969, May 13, 2019 [(Pedestrian Wind Study)]). On average, without the study building in place, the average wind speed for the comfort criteria is 12 mph for an average of 15% of the time with a total of 24 of the 45 tested locations exceeding the 11 mph comfort criteria. Once the study building is in place, the average wind speed for the comfort criteria is reduced to 11 mph for an average of 12% of the time with the total number of exceedances reducing to 15 of the 45 tested locations.

For arguments sake, to focus on just the area that CPP focuses on in their report, the area between Parcels A and B ...the average wind speed without the study building in place is 14.6 mph With the addition of the study building the average wind speed in this area is reduced to 14.0 mph. The difference is marginal but does show a decrease in wind speeds, once the study building is in place.

Of more importance than the comfort conditions are the Hazard conditions, which show the same trend when the conditions for the site with the study building in place is compared to the conditions for the existing site. Across the entire site, the average wind speed that is exceeded for 1 hr/year on the existing site is 28 mph. This speed decreases to 26 mph with the study building in place. The total number of locations that exceeds the hazard criterion is also reduced from 1 to 0 with the addition of the study building (Table 1 of the [Pedestrian Wind Study]).

In the same area....as discussed previously [between Parcels A and B], there are no exceedances in any of these locations with or without the study building, and the average wind speed that is exceeded for 1 hr/year is decreased from 31.0 mph in the existing condition to 30.4 mph once the study building is in place.

In simple terms, given that the Project *reduces* average wind speeds as compared to existing conditions, it cannot be considered to create a significant impact under the Marketplace EIR significance threshold (which asks whether a project would substantially increase winds) or WIND 1 (Reduced Main Street Alternative) (which asks whether winds generated by the structure could reach hazardous levels). Accordingly, there is no new significant impact.

Finally, Appellant's argument that the wind analysis should compare the FDP to the approved PDP structure analyzed in the EIR is not germane. The significance threshold used to determine if mitigation measures are necessary refer to final designs. Therefore, the relevant consideration is whether the final designs would substantially increase winds or generate winds that reach hazardous levels. Since the Pedestrian Wind Study found that the Parcel B project would not result in any hazardous wind impacts and, in fact, would eliminate one hazardous wind locations under existing conditions and generally decrease winds, an analysis of the difference in wind between the PDP and Parcel B FDP is not relevant or necessary. (Pub Res Code §21166; San Diego Navy Broadway Complex Coalition v City of San Diego (2010) 185 Cal.App.4th 924).

5. Planning Commission Wind Findings

A majority of the Planning Commission members specifically addressed the Appellant's wind arguments at the Continued May 14th Hearing, finding that the RWDI Preliminary Report was definitive. Commissioner Keller stated that he felt "the issue has been fully addressed in the report study," agreeing "that the wind will not be an issue." He emphasized that "contrary to Wareham's assertion, the proposed buildings will not adversely affect the area by greatly increasing wind." Commissioner Hidalgo noted that the wind data provided met the "substantial evidence argument." Commissioner Guerrero underscored that "we have a study that shows that the wind is not impacted heavily through this design." Adding to the sentiments of her fellow commissioners, Commissioner Thomson found that the evidence prepared regarding wind is "sufficient" and that she does not feel as though there is "an amplification of the wind characteristics that would make this project infeasible."

V. The FDP Is Consistent with the City's General Plan

A city's interpretation of its own general plan and policies is entitled to "great deference." (San Franciscans Upholding the Downtown Plan v. City & County of San Francisco (2002) 102 Cal. App. 4th 656, 678 ("[T]he body which adopted the general plan policies in its legislative capacity has unique competence to interpret those policies when applying them in its adjudicatory capacity."); Save our Peninsula Committee v. Monterey County Board of Supervisors (2001) 87 Cal. App. 4th 99, 142). The city has "broad discretion to construe its

policies in light of the plan's purposes." (*Id.*) The following demonstrates consistency with the General Plan goals.

UD-G-11- Sky Exposure. Building form and massing that furthers sky exposure for adjacent sidewalks and public spaces, especially in gathering places such as the core and neighborhood center.

The PDP building massing called for a 120 foot tall building. This approved PDP design created shadows that would fall on adjacent sidewalks. These shadow impacts were studied in the EIR and deemed acceptable. The FDP building design massing calls for a 113 foot tall building, and only 8 stories. (Additional floor-to-floor height was allocated to improve the quality of the office space.) Like the PDP, the approved FDP design creates shadows that fall on adjacent sidewalks. The FDP design is, however, more compact in its disposition than the PDP. The PDP has a much longer 5 story base element, which extends without relief from end to end of the site and has no gap at the ground level from Parcel A. The shadow studies included in the FDP submission illustrate that the shadow impacts of the FDP design are only marginally different than those of the PDP design, and do not impact primary open spaces and plazas.

Furthermore, at the Continued May 14th Hearing, Commissioner Donaldson said: "Comparing the TMG massing in 2008 to the City Center version, it looks to me like the . . . 2008 PDP has a big wall towering over the transit center building and significantly blocking light and air to the public space on the South side of the building. Whereas, the City Center leaves the public space on the South side of the Wareham building much more open and does have a gap and obstructs less of the view than the . . . Wareham building has so I would be in favor of approving, reapproving, this."

Several General Plan Urban Design policies deserve consideration here:

UD-P-33: Bulky and monolithic buildings shall be prevented through:

- Vertical articulation, such as step backs at higher floors, and less floor area as heights increase to reduce the apparent bulk of buildings.
- Horizontal articulation, such as varied setbacks, recessions/projections, change in materials, and building transparency, especially in Pedestrian Priority Zones.

UD-P-36: Where large floorplates are permitted, buildings shall be required to adhere to height, setback, and stepback standards, as required for view and sun access, but less stringent bulk standards shall be permitted.

UD-P-38: New development should employ changes in height, massing, and/or design character to create careful transitions in scale and density.

The approved Parcel B design responds to and embodies General Plan Urban Design policies UD-P-33, UD-P-36, and UD-P-38. As previously discussed, the building's form, scale, massing, materials, and articulation are a direct response the surrounding industrial buildings and the

vision of the original PDP. The design intention of the Parcel B building adheres to the industrial spirit of the site pursuant to AES-1, which provides that "the proposed structures shall adequately reference, and be visually compatible with and not detract from the surrounding industrial buildings." Parcel B has protruded and recessed elements to articulate the building. Stair and elevator towers, at the north and south ends, are expressed as tower elements, while the main entry is a recessed element, corresponding to the location of the main mid-block cross walk. The transitions in scale and character are carefully created at street level, where the user experience is most important and intimate.

VI. More CEQA Review is Not Required

The Appellant wrongly contends that the FDP triggers additional CEQA review.

A. <u>Post-EIR Presumption</u>

At the outset, it is noted that CEQA includes a strong presumption against requiring any further environmental review once an EIR has been prepared for a project. (Pub Res Code §21166; San Diego Navy Broadway Complex Coalition v City of San Diego (2010) 185 Cal.App.4th 924). Once an EIR has been completed, the lead agency or a responsible agency may not require a subsequent or supplemental EIR unless:

- Substantial changes are proposed in the project that will require major revisions of the EIR;
- Substantial changes occur in the circumstances under which the project is being undertaken that will require major revisions in the EIR; or
- New information of substantial importance to the project that was not known and could not have been known at the time the EIR was certified as complete becomes available.

In general, a subsequent or supplemental EIR will not be required as long as there are no new significant or substantially more severe impacts. (14 Cal. Code Regs. §15162(a)(1)). Minor modifications to a project are not sufficient to trigger the provisions for subsequent or supplemental EIRs under Guideline § 15162. If the proposed changes are within the scope of the previously approved project, no subsequent or supplemental EIR can be required. So long as there is substantial evidence to support an agency's determination of whether a modification has resulted in a "substantial change," that determination will not be overturned.

Agencies, therefore, have broad latitude in determining whether supplemental review is required. For example, in *Citizens Against Airport Pollution v. City of San Jose* (2014) 227 Cal. App. 4th 788, 802, the court approved of the city's reliance on an addendum to an EIR finalized in 1997. The eighth addendum to the EIR addressed extension of the plan horizon by over a decade and several modifications to projects and facilities within the Master Plan area. Nevertheless, the court concluded that because the impacts of the modifications were not significantly different from those analyzed in 1997, there was no need for supplemental or subsequent review pursuant to Guideline § 15162. *Id.* Similarly, the court in *Santa Teresa Citizen Action Group v. City of San Jose* (2003) 114 Cal. App. 4th 689, 704-05, found that only an addendum was needed when the City selected an entirely new alignment for its recycled water pipes because the new

alignment and its impacts were "not significantly different" from what the City had previously evaluated. *See also Concerned Dublin Citizens v. City of Dublin* (2013) 214 Cal. App. 4th 1301, 1318 (holding that no substantial change to the project when residential units were reallocated within areas of the specific plan).

B. <u>Detailed Environmental Review of Parcel B FDP</u>

As discussed herein, a detailed, 65-page Environmental Checklist was prepared to consider the environmental impacts associated with the Parcel B FDP in relation to the impacts identified in the prior EIR. There are no circumstances requiring further environmental review.

Additionally, with respect to aesthetics, the State Legislature has specified pursuant to SB 743 that "aesthetic impacts of...[an] employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment" under CEQA. (Pub. Res. Code §21099(d)(1)). "Transit priority area" means an area within one-half mile of a major transit stop. (Pub. Res. Code §21099(a)(7)). An "employment center project" means a project located on property "zoned for commercial uses with a floor area ratio of no less than 0.75 and that is located within a transit priority area." (Pub. Res. Code §21099(a)(1)). The project is, in fact, in a transit priority area as it is adjacent to the Emeryville Amtrak station. The Marketplace PDP zoning allows commercial uses. (See PDP, §III(A)(1)(c)). The FAR is 2.84. (See plans attached to January 25, 2019 Planning Commission materials). Accordingly, aesthetic impacts may not be considered significant impacts for this project under CEQA. However, the Environmental Checklist did evaluate size, massing and design in comparison to that analyzed in the PDP and found no new impacts. (Environmental Checklist, see p. 39).

C. Compliance with Mitigation Measures

It is noted that SB 743 was adopted in 2013 (added by Stats. 2013, Ch. 386, Sec. 5) and became effective on January 1, 2014. This state law went into effect after the Marketplace EIR was certified. This more recent directive in the form of state law arguably means that mitigation measures imposed in the EIR are not even required for the Parcel B project since state law says that there can't be significant impacts for a qualifying project. Nonetheless, the following analysis demonstrates compliance with the referenced mitigation measures.

<u>AES-1</u>: Each of the following 5 measures shall be incorporated into the final project design:

- The proposed structures shall adequately reference, and be visually compatible with and not detract from the surrounding industrial buildings.
- Create streetscape vitality and enhance the pedestrian experience through detailed treatment of building facades, including entryways, fenestration, and signage, vertical walls broken up with architectural detailing, protruded and recessed tower elements, stepped-back upper floors to provide appropriate building height transitions to adjacent buildings, and through the use of carefully chosen building materials, texture, and color.
- Design of building facades shall include sufficient articulation and detail to avoid the appearance of blank walls or box-like forms.

- Exterior materials utilized in construction of new buildings, as well as site and landscape improvements, shall be high quality and shall be selected for both their enduring aesthetic quality and for their long term durability, and their compatibility with the design motif of surrounding buildings.
- Detailed designs for the public plazas shall be developed. The plaza designs shall emphasize the public nature of the space and pedestrian comfort and sun/shade patterns during mid-day hours throughout the year. The plaza designs shall be sensitively integrated with the streetscape.

As discussed, the Planning Commission found that the proposed FDP references the architectural vernacular of Emeryville, enhances the pedestrian experience and includes sufficient articulation and detail to avoid the appearance of blank walls or box-like forms. Furthermore, the above mentioned awards highlight the Project design's attention to quality of materials and emphasize the public nature of the space. In addition, the wind study provides evidence that the design facilitates pedestrian comfort throughout the year.

<u>AES-2a</u>: The specific reflective properties of project building materials shall be assessed by the City during review of the Final Development Plans for the proposed project. Final Development Plan review shall ensure that the use of reflective exterior materials is minimized and that proposed reflective material would not create additional daytime or nighttime glare.

The Parcel B building's approach to reflective materials is consistent with AES-2a. While the project includes generous amounts of windows, the windows are comprised of smaller windows grouped together to minimize the visual and reflective impact of large areas of glass. The design of the remainder of the building includes metal panels and painted stucco, which are not reflective. Furthermore, configurations and application of the project's exterior materials do not create additional daytime or nighttime glare.

<u>AES-2b</u>: Specific lighting proposals shall be submitted and reviewed as part of each Final Development Plan for each new building on the project site and approved by the City prior to issuance of building permit. This review shall ensure that any outdoor night lighting for the project is downward facing and shielded so as not to create additional nighttime glare and shall conform with light and glare performance standards established by Zoning Ordinance Article 59 and the Maximum Intensity of Light Sources table.

The Public Market Tentative Map (approved by the Planning Commission by resolution No. SUBDIV 15-002 on October 22, 2015) included detailed lighting design for public spaces and streets, including drawings, specifications, and calculations. The City's permit documentation set and review process is parcel specific, ensuring that lighting details are properly assessed and evaluated with more particularity than available at the FDP/Entitlements stage of design.

<u>WIND-1a</u>: Final design of the roof deck open space terraces on the Shellmound building shall be heavily landscaped to reduce wind and improve usability and shall incorporate porous materials or structures (e.g., vegetation, hedges, screens, latticework, perforated

or expanded metal) which offer superior wind shelter compared to solid surfaces. Outdoor furnishings, such as tables shall either be either weighted or attached to the deck.

This mitigation measure does not apply to Parcel B, since it does not include roof deck open spaces. Section IV(B) above includes a thorough discussion of the ample wind impact analysis that has been conducted.

<u>WIND-1b</u>: Scale model wind tunnel or computerized computational fluid dynamics testing shall be conducted to determine how strong winds will be through the fourth floor breezeway between the Amtrak pedestrian bridge to the west side of the building. If winds through the breezeway exceed 36 mph, the breezeways design shall be altered to reduce wind speeds below this threshold. Alternatively, to avoid testing, the design of the breezeway could be altered with the addition of glazing at the west side opening. Testing or design modifications would reduce this impact to a less-than-significant level.

This mitigation measure does not apply to Parcel B, since it refers to the breezeway between the Amtrak pedestrian bridge and the west side of the building, which relates to the Parcel A building. Section IV(B) above includes a thorough discussion of the ample wind impact analysis that has been conducted. In fact, the RWDI computerized wind tunnel testing shows that when the project is modeled there were no locations around the vicinity of the Project site that exceed 36 mph. (RWDI Pedestrian Wind Study, Table 1). The Project actually eliminates one exceedance that occurs under existing conditions. (*Id.*)

<u>WIND-1: (Main Street and Reduced Main Street alternatives)</u>: Final design of the buildings constructed on the Shellmound and UA Cinema building sites shall be subject to review by a qualified wind consultant. The design review shall evaluate the architect's employment of one or more of the following design guidelines to reduce wind impacts to a less-than-significant level:

- West or southeasterly building faces shall be articulated and modulated through the use
 of architectural devices such as surface articulation, variation, variation of planes, wall
 surfaces and heights, as well as the placement of step-backs and other features.
- Utilize properly-located landscaping to mitigate winds. Porous materials (vegetation, hedges, screens, latticework, perforated or expanded metal) offer superior wind shelter compared to a solid surface.
- Avoid narrow gaps between buildings where westerly or southeasterly winds could be accelerated.
- Avoid "breezeways" or notches at the upwind corners of the building.

Wind tunnel or computerized computational fluid dynamics testing shall be required if a review of the final architectural design of the proposed mid-rise buildings is insufficient to determine whether the buildings would result in adverse wind impacts. Testing shall be used to determine if wind accelerations generated by the structure could reach hazardous levels and to develop design modifications that would reduce impacts to a less-than-significant level.

The discussion in Section IV(B) above explains how the wind mitigation measures and conditions of approval have been satisfied with the qualified wind consultant review of the Project as well as the computerized wind tunnel testing. That discussion, and supporting technical analysis, demonstrates that the Project structure would not result in hazardous wind levels.

<u>SHADE-1: (Main Street and Reduced Main Street Alternatives)</u>: No mitigation measure is available to reduce this impact to a less-than-significant level.

As described in the Environmental Checklist, the Final EIR concluded that the Final EIR project would result in a potentially significant impact to shade and shadow on public places throughout the Project site as a result of the sizeable increase in development. (Marketplace Final EIR, pp. 132-133). This impact was found to be significant and unavoidable because reducing the impact would involve undertaking a major reconfiguration of the project. (Marketplace Final EIR, p. 133). The Marketplace EIR did not find any feasible ways to mitigate impacts and, therefore, a Statement of Overriding Considerations was adopted acknowledging the significant and unavoidable shade impact. (*See* Ordinance 08-044, Exhibit D). Nonetheless, shadow studies were conducted as part of the Parcel B FDP process. (*See* January 25, 2019 Planning Commission FDP hearing materials, Sheet A2.10).

All of the reasons discussed above, therefore, support the environmental analysis conducted to date. In response to the Appellant's comment that there is a fatal flaw in the environmental analysis, that is simply not true. Appellant references the text of the Environmental Checklist that says the proposed Parcel B FDP Project is smaller than the PDP Project, noting that the PDP allowed development up to 120 feet, that the Parcel B is proposed at 113 feet and that aesthetic impacts would be similar. Section III above includes a long discussion of the interpretation of the PDP, including the numeric height standard in the PDP "not to exceed 120 feet." As the PDP did not distinguish between the northern and southern end of the parcel it is a reasonable interpretation that the 120 foot height standard applies to the entire Parcel B and that the proposed 113 foot tall building is shorter than the allowed 120 feet allowed under the PDP without additional environmental analysis

Even acknowledging that the northern portion of the proposed Parcel B FDP extends higher than as shown in the <u>un</u>dimensioned PDP plans, this does not result in any new significant impacts. First, the Kimley Horn traffic analysis considered the total square footage of the proposed Parcel B FDP and found no new significant impacts. (*See* Exhibit F).

As identified above, state law provides that aesthetic impacts may not be considered significant impacts for this project under CEQA. Thorough design analysis, including ample findings by the Planning Commission, has found no impacts. Computerized wind tunnel testing has found no significant impacts will result from the current proposal. Shade impacts were already identified as significant and unavoidable in the Marketplace EIR. Therefore, the Appellant's contention that more CEQA analysis is required is incorrect.

D. Private Views are Not Legally Protected Here

Finally, while not directly addressed in the Appellant's letter, we feel compelled to address what may be the Appellant's concern – views. What is telling about the Appellant's proposed alternatives is that both alternatives provide a better sightline from the Appellant's building to the San Francisco Bay. Private views are not protected under CEQA. *Bowman v. City of Berkeley* (2004) 122 Cal. App. 4th 572, 586 ("obstruction of a few private views in a project's immediate vicinity is not generally regarded as a significant environmental impact"); *Ocean View Estates Homeowners Assn. v. Montecito Water District* (2004) 116 Cal. App. 4th 396, 401; *Mira Mar Mobile Community v. City of Oceanside* (2004) 191 Cal. App. 4th 477, 492-93. Pursuant to CEQA Appendix G, in urbanized areas, compliance with zoning regulations regarding scenic quality is the only relevant question.

The CEQA Guidelines (specifically Appendix G) were recently amended to limit the review of aesthetics because, as the Natural Resources Agency explained, "[b]oth federal and state courts have struggled with the issue of precisely what questions related to aesthetics are relevant to an analysis of environmental impact." (Natural Resources Agency, Final Statement of Reasons for Amendments to the State CEQA Guidelines (Nov. 2018) at 66). As the court in *Bowman* noted, "Virtually every city in this state has enacted zoning ordinances for the purpose of improving the appearance of the urban environment. . . . While those local laws obviously do not preempt CEQA, . . . [aesthetic issues such as private views] are ordinarily the province of design review, not CEQA." (*Bowman*, 122 Cal. App. 4th at 593). To that end, CEQA analysis of environmental impacts pursuant to CEQA Guidelines Appendix G is now limited to assessing compliance with zoning regulations.

The Emeryville Planning Regulations do not have a view or light protection ordinance as is the case in some other cities. Rather, conformance with the PDP is the relevant issue under the Emeryville Planning Regulations. (Zoning Code 9-7.1004(b)). As discussed throughout, the project is consistent with the PDP. Additionally, there is no common law right to views, air or light. (*Venuto v Owens-Corning Fiberglas Corp.* (1971) 22 CA3d 116, 127 (California courts' rejection of an implied or inherent right to a view or to light and air across another's property is based on a public policy that favors using real property over keeping it vacant for the sake of another's view).) And finally, Appellant has no contractual private right to views. Specifically, the Appellant has no view or solar easement and no CC&Rs.

VII. The Proposed Design Alternatives are Not Feasible

The Appellant's alternatives are problematic for a number of reasons.

A. <u>Financial Infeasibility</u>

Primarily, the alternatives are cost-prohibitive and are not counterbalanced by any additional revenue generating space/use.

At the Continued May 14th Hearing, Commissioner Young stated he looked at the proposal "pretty deeply" and found that the cost to regain the space would be "intense." He "can't

imagine it going another direction unless there's somehow a huge amount of funds that are going to be able to pull this off to make the underground parking work [and] lower the building a couple of layers into the soil."

Option 1 reduces parking from 565 spaces to 460 spaces. This option is not feasible since the Parcel B parking is a critical piece of the overall project puzzle and must provide parking not only for the research & development uses and retail uses on Parcel B, but also the approved housing on Parcel A and the Food Hall customers. Reducing the parking so drastically would threaten the viability of the entire mixed use project. Again, since the Appellant has not taken issue with the amount of parking in the FDP proposal, it is not clear what this alternative accomplishes, other than perhaps better preserving views, which is not a protected right.

Option 1A relies on below-grade parking. As the Appellant well knows, underground parking is typically cost-prohibitive. In fact, when the Berkeley City Council recently suggested that Wareham provide underground parking for its medical office project located at 621 10th St., so as to not displace existing businesses at the project site, Wareham responded that doing so would be too costly and would delay the project. Wareham estimated that moving parking underground would cost approximately \$55,000 to \$65,000 per space. According to Wareham, underground parking, while feasible, was not a viable option.⁹

Furthermore, the design concepts proposed by DGA would result in significantly higher costs and lower revenue potential for the following reasons:

- Below-grade parking is infeasible or extremely cost prohibitive given the soil characteristics and adjacency to railroad tracks.
- Reducing parking below the proposed amount would violate leases of the existing Public Market and Marketplace Office tenants. (Note that the overall parking counts for the Marketplace Project fall within Emeryville Planning Code and well below the national or regional average for a mixed-use project of this type.)
- The shorter building podium reduces the length of ground floor retail and results in a longer "gap" between buildings which would discourage continuous shopping. (Note that the approved PDP had no gap between buildings.)
- The reduced office floorplates would not garner the same appeal in the market as the proposed office plates, which at est. 50,000 sq. ft. are very in demand by tech and research firms across the Bay Area.
- The reduced office plates result in a higher exterior facade to floor ratio, further driving up costs.

B. <u>Design Critiques</u>

U

From an aesthetic perspective, Hart Howerton's review of both options found that the glass boxes, which have no relation to their parking garage bases, could not sustain the same level of design critique that Mr. Heller and DGA applied to the approved Parcel B building. Both options would also fail to meet the General Plan's Urban Design Policies and the design related

⁹ Emilie Raguso, *Berkeley Kaiser Permanente Offices Could Open by 2021 After Council Vote Tuesday*, BERKLEYSIDE (May 1, 2019, 6:25 A.M.), https://www.berkeleyside.com/2019/05/01/kaiser-permanente-could-open-by-2021-after-berkeley-council-vote-tuesday.

conditions of approval. In fact, Hart Howerton finds that Mr. William's own critique perfectly describes the Appellant's proposed alternative design:

- "The proposed structure does not adequately reference and is not visually compatible with surrounding existing industrial buildings, or approved mixed use buildings on Parcels A, C and D."
- "Parcel B does not take any cues from industrial buildings in Emeryville."
- "This project lacks vitality, variety and architectural detail. The retail is nominally differentiated from levels above but the lack of variety in massing, and the relentless repetition of same size structural bays creates a monotonous pedestrian experience."
- "The primary form of this design is a box; ..."
- "The overall length and height of this design visually segregates the Emeryville Public Market from the Amtrak Station and all development east of the railroad tracks."
- "The design lacks articulation that diminishes or modulates the massive scale of the East and west Facades."

C. Parcel B Benefits in Comparison

In contrast, at the Continued May 14th Hearing, Commissioner Keller detailed the ways in which the Parcel B FDP adds value to Emeryville. "This project as before us continues the intention of the 2008 PDP, while providing our best chance in today's economy of supporting existing businesses in the Public Market; while creating the interest, draw and excitement to attract new retail and food services in the Public Market and the greater neighborhood. Everything about the Public Market, including Parcel B project, improves the pedestrian experience and the aesthetics of Emeryville. I'm astonished that Wareham, being the developer that they are, somehow missed the new benefits, so I'll list them. On the subject of transit, we have new bus stops with shelters [and] new AC transit routes, such as the 29 and the 36. For cycling, there are new green bike lanes, new bike racks and the addition of bike share. In open space, we have added nearly a half-acre to Christie Park and for the pedestrians, sidewalk stop signs to slow traffic and several new cross-walks all which greatly, greatly, contribute to the improved quality of life [of Emeryville]."

Conclusion

Based on the ample analysis and substantial record created during the entitlement process and through the 5 month appeal process, we respectfully request that the City Council affirm the Planning Commission and dismiss the appeal. (Emeryville Code, § 9-7.1405).

Sincerely yours,

aluflu

HOLLAND & KNIGHT LLP

Chelsea Maclean

Cc: Mark Stefan, AG-CCRP Public Market, LP (<u>Mark@ccrpllc.com</u>)
Sig Anderson, AG-CCRP Public Market, LP (<u>Sig@ccrpllc.com</u>)
Eron Ashley, Hart Howerton (EAshley@harthowerton.com)
Christopher Pizzi, Hart Howerton (<u>cpizzi@harthowerton.com</u>)

Exhibits

Exhibit A – Approved PDP Plans

Exhibit B – Examples of images provide by Appellant that were not part of legally binding approved plans

Exhibit C – Parcel B Artwork

Exhibit D – Qualified Wind Consultant Review

Exhibit E – RWDI Preliminary Report

Exhibit F – RWDI Response Letter and Pedestrian Wind Study

Exhibit G – Kimley Horn Analysis

Exhibit A

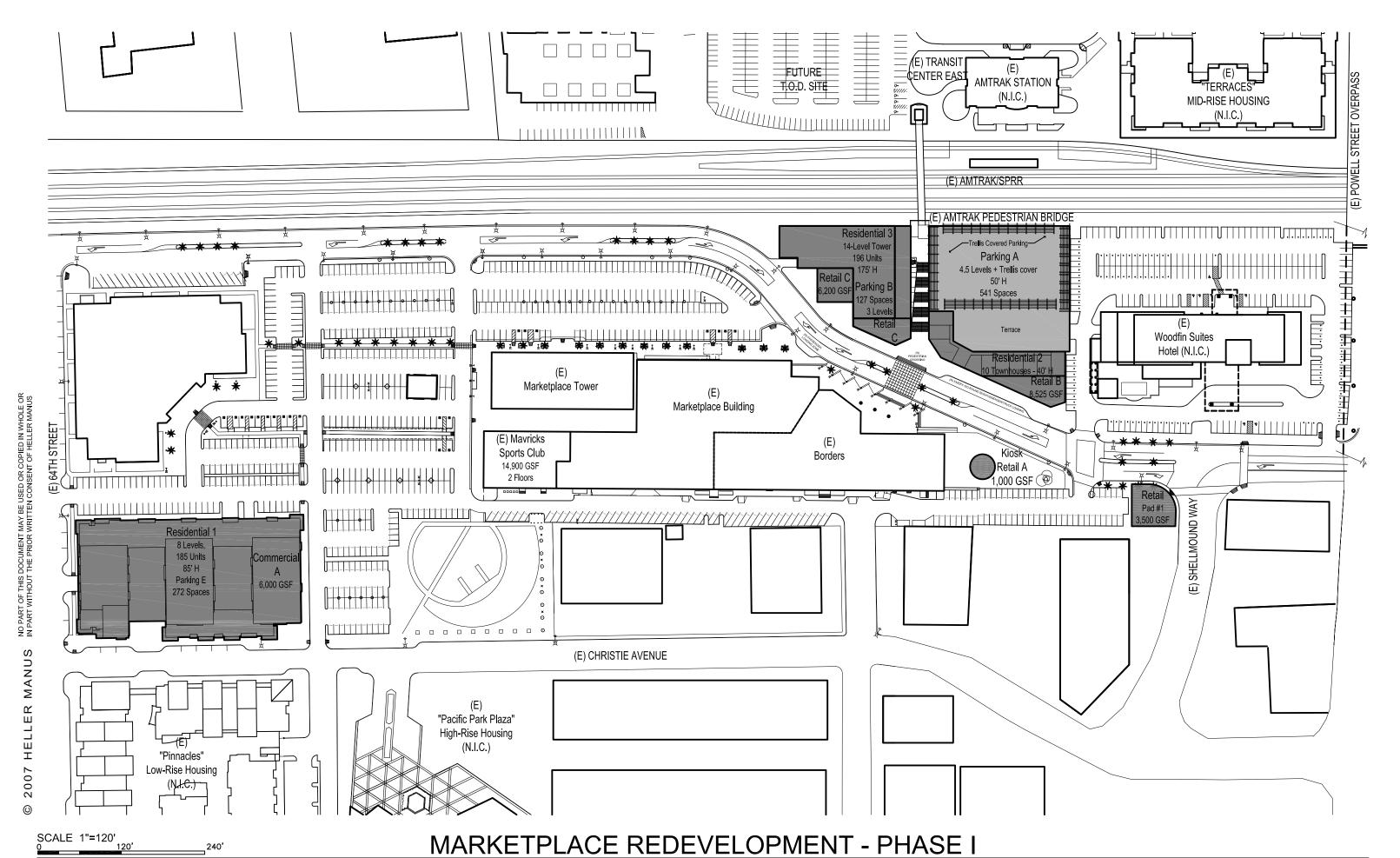
Approved Plans



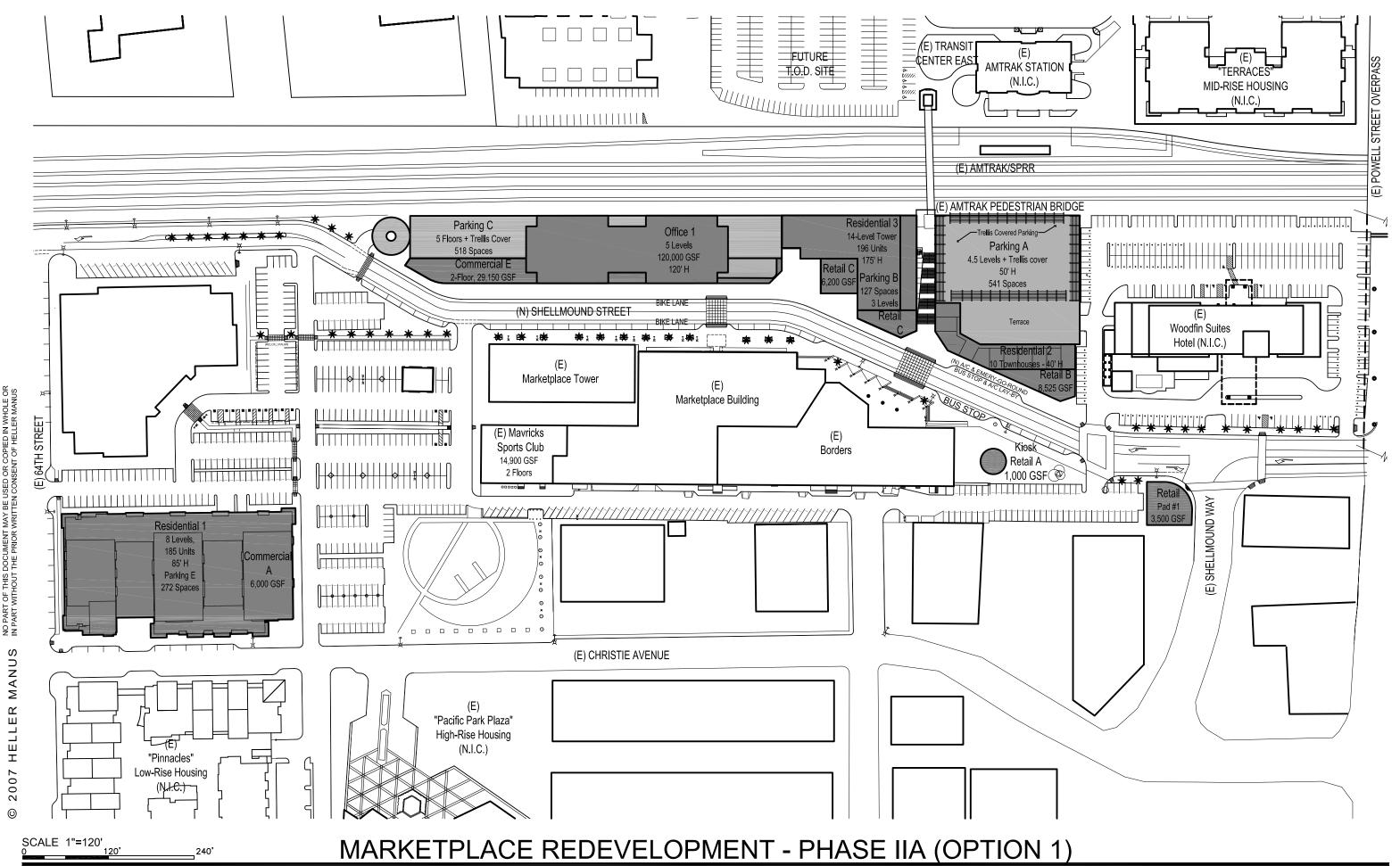
MARKETPLACE REDEVELOPMENT APRIL 16, 2008





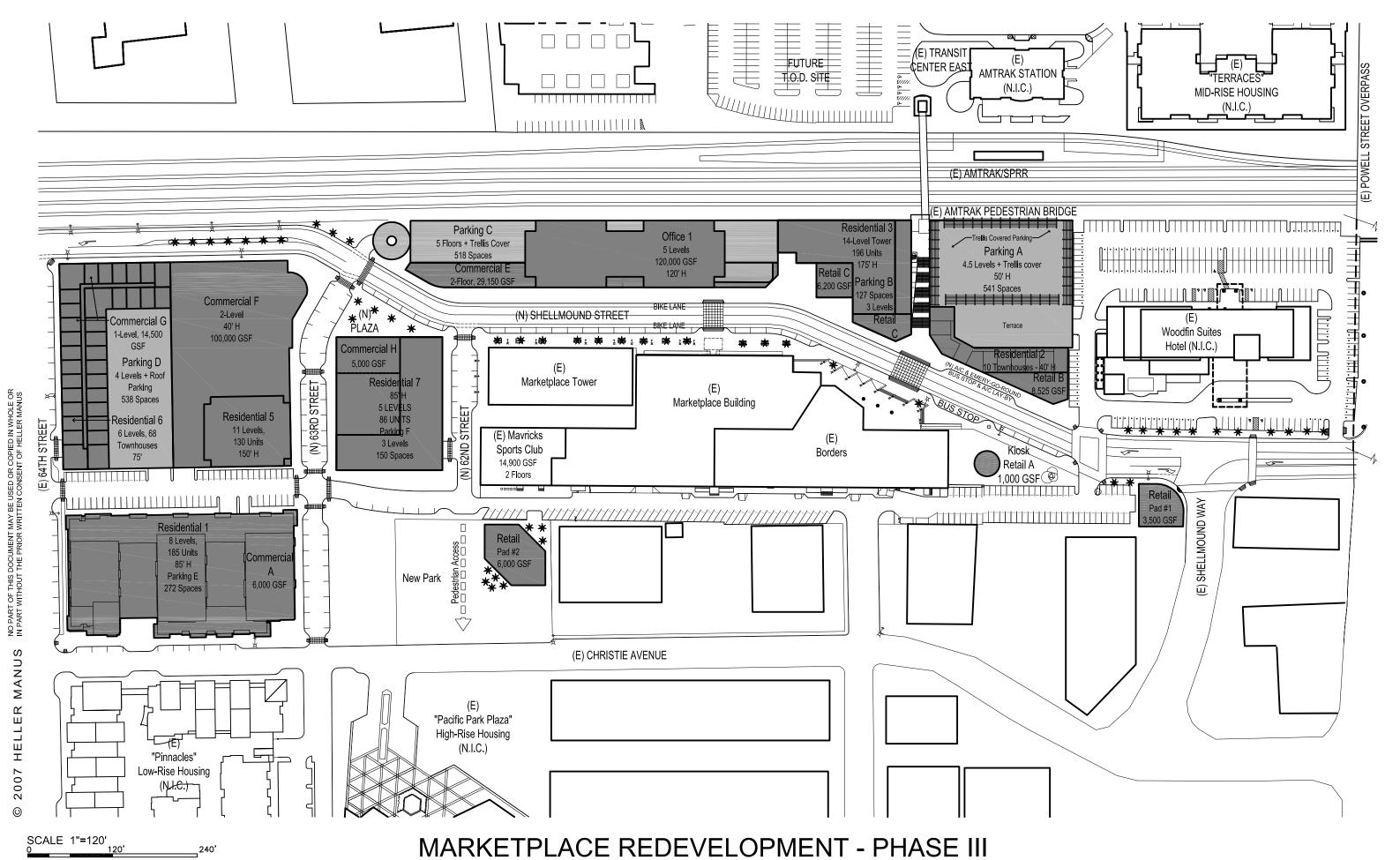


Page 1

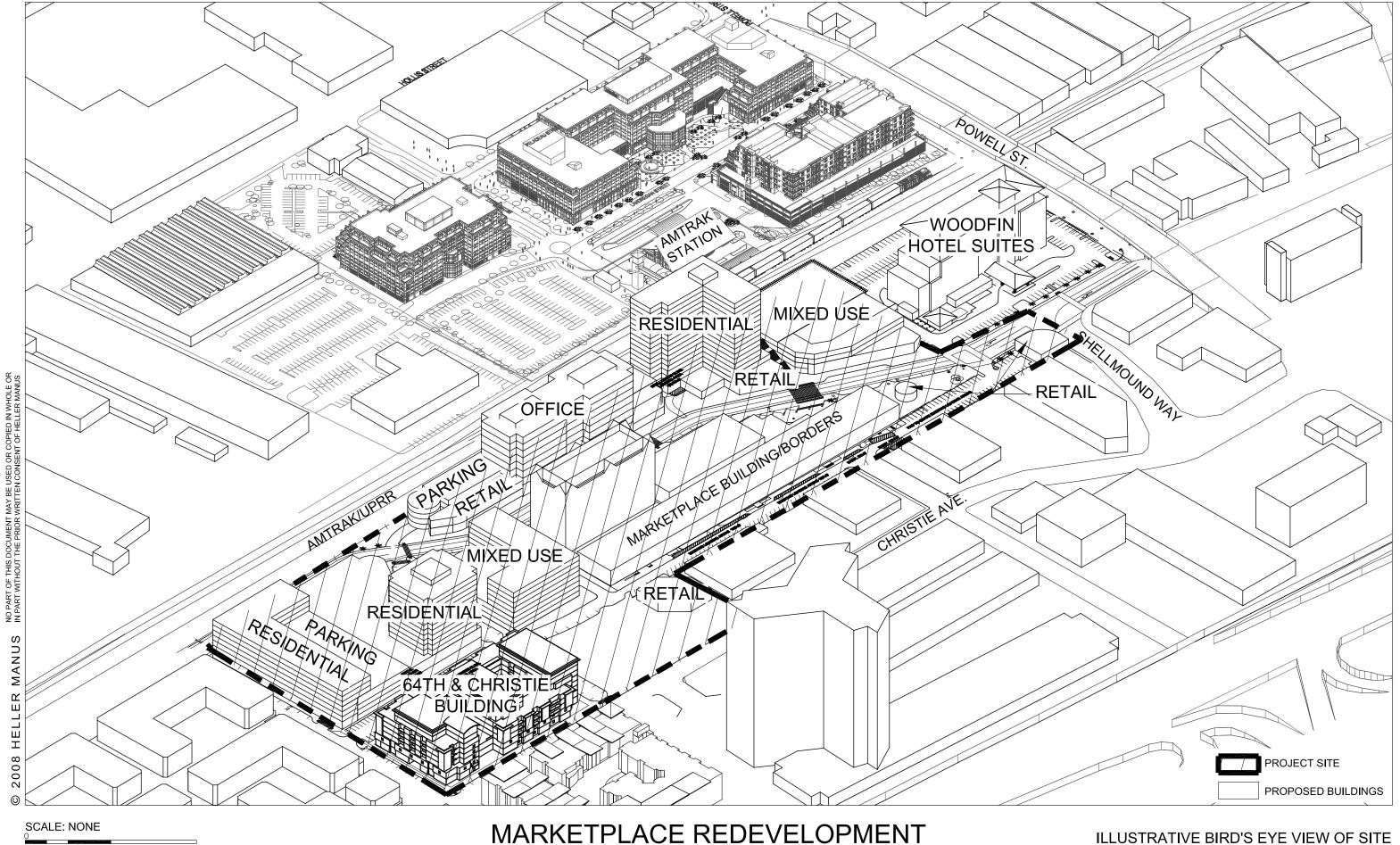


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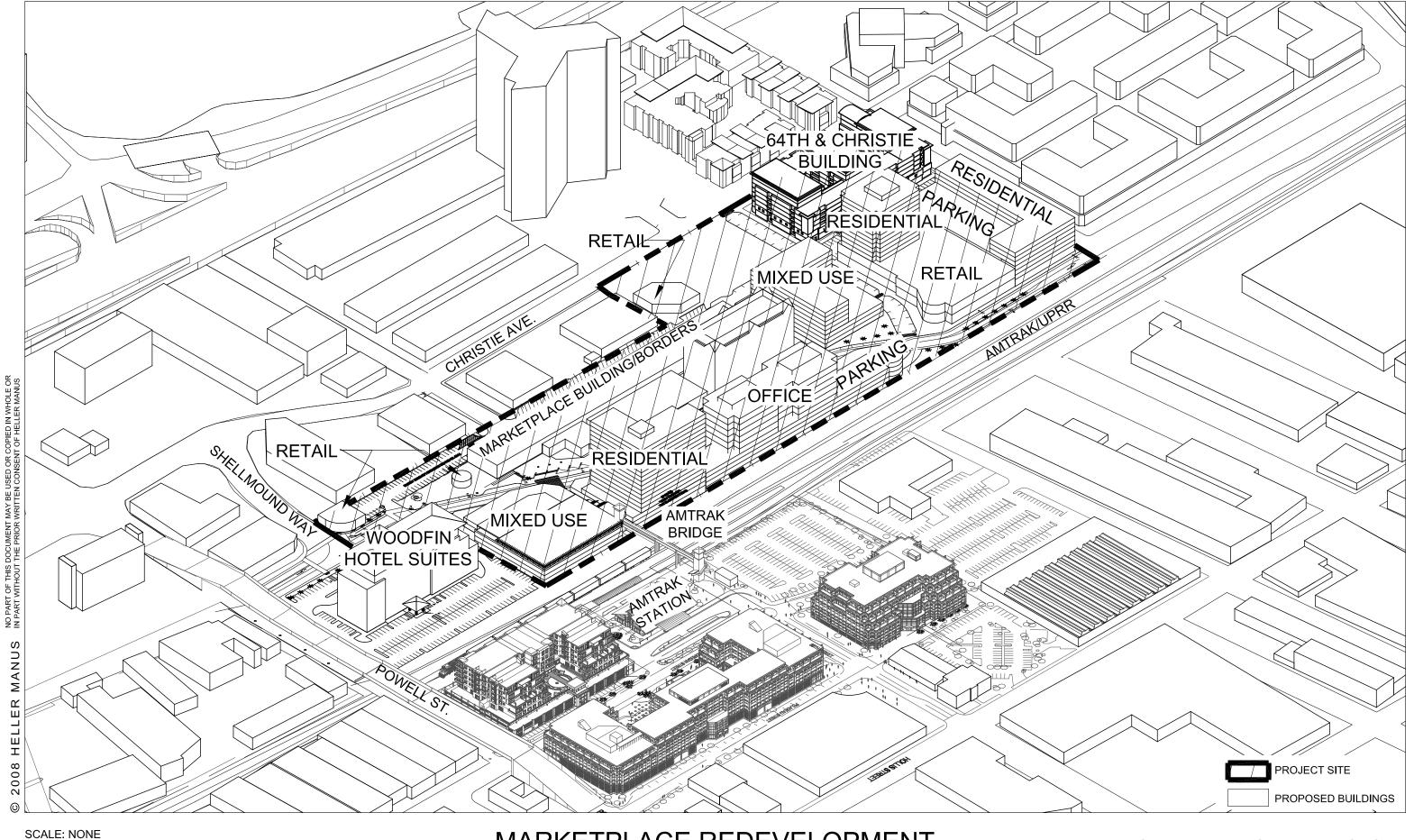
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Page 5



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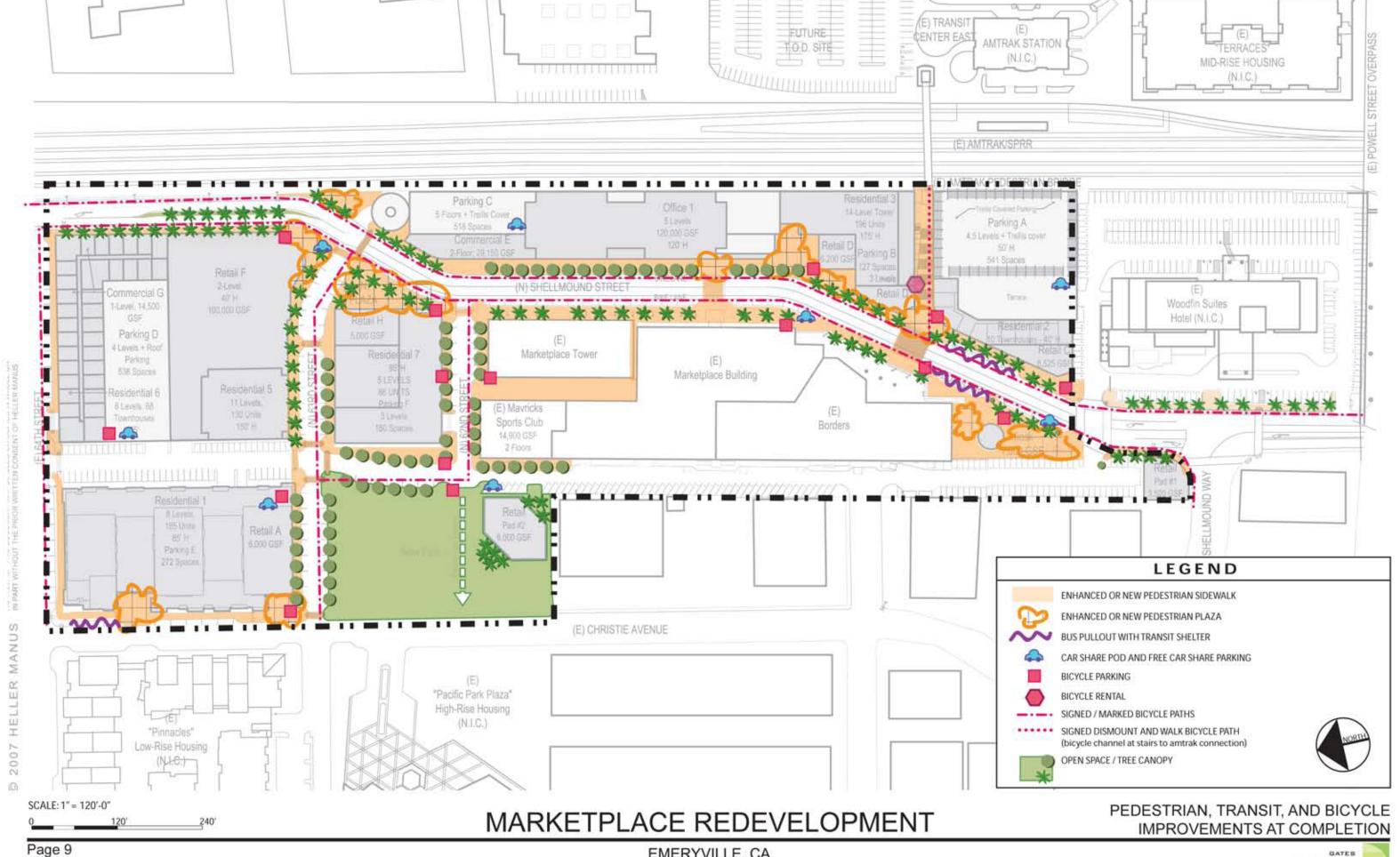


HELLER MANYOUTS ARCHITECTS APRIL 16, 2008

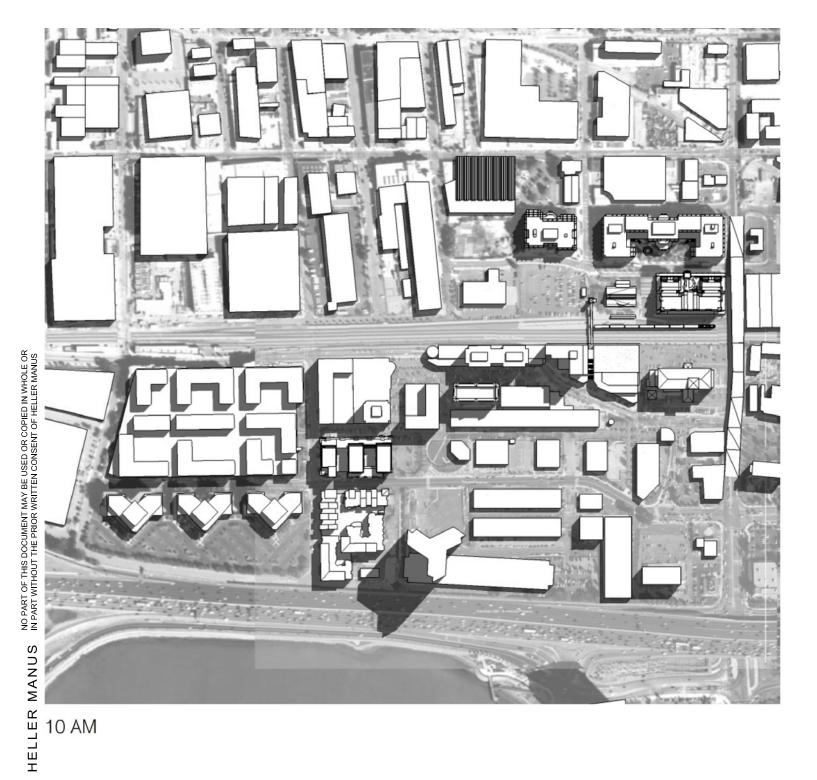
ILLUSTRATIVE BIRD'S EYE VIEW OF SITE

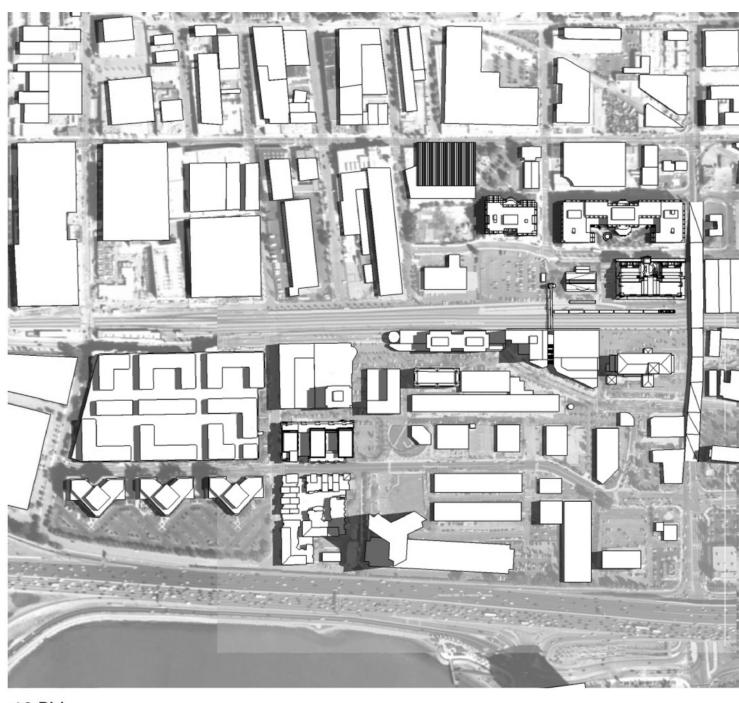
Emeryville Marketplace Reduced Main Street Alternative 4/16/2008

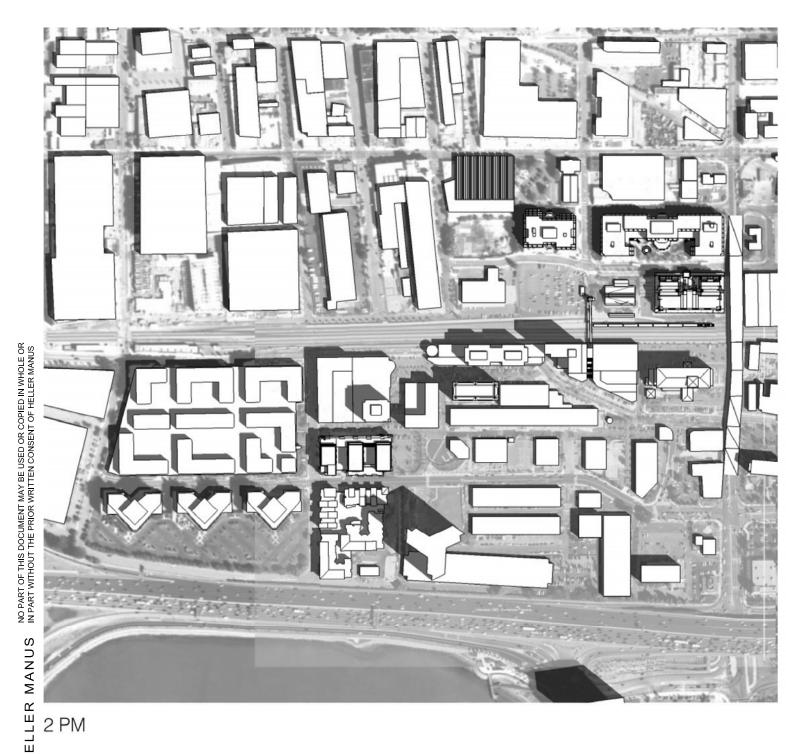
4/16/2008													1		
Project By Phase	22=	Phase I			IIA (Option			IIA (Option			Phase IIB	5		Phase III	
Existing Uses	GSF	Units Pa	rking	GSF	Units	Parking	GSF	Units	Parking	GSF	Units	Parking	GSF	Units	Parking
Marketplace Tower (E) Borders (E) Mavericks Sports Club (E) Marketplace Tower Retail (E) Marketplace (E) Restaurant (E) Billiards (E) UA Theater (E) Woodfin		OPA Require	A ment	06,400 29,500 18,000 14,860 36,206 5,034 9,000 40,000 12,500	Rec	OPA quirement	106,400 29,500 18,000 14,860 36,206 5,034 9,000	R	OPA equirement	106,400 29,500 18,000 14,860 36,206 5,034 9,000 212,500		OPA Requirement	106,400 29,500 18,000 14,860 36,206 5,034 9,000 212,500		OPA Requirement
Subtotal	259,000		1,067 25	59,000		1,067	219,000		1,067	219,000		1,067	219,000		1,067
OPA, Less Woodfin			862			862			862			862			862
New Uses Residential															
Residential 1 (64th & Christie Site) Residential 2 (Garage Town Houses) Residential 3 (Shellmound) Residential 5 (Tower on UA Site) Residential 6 (UA Town homes) Residential 7 (Plaza)	170,989 16,000 196,000	185 10 196	15	70,989 16,000 96,000	185 10 196	278 15 294	170,989 16,000 196,000 129,800 107,725	185 10 196 130 68	278 15 294 195 102	170,989 16,000 196,000 129,800 107,725	185 10 196 130 68	278 15 294 195 102	,	185 10 196 130 68 86	278 15 294 195 102 129
Subtotal	382,989	391	587 38	82,989	391	587	620,514	589	883	620,514	589	883	706,190	674	1,012
Office															
Office 1			12	20,000		288				120,000		288	120,000		288
Subtotal			12	20,000		288				120,000		288	120,000		288
Commercial															
Commercial A (64th and Christie) Retail A (Kiosk) Retail B (Shellmound Building) Retail C (Shellmound Building) Retail Pad #2 Commercial E (Shellmound) Commercial F (UA Site) Commercial G (UA Townhouses) Commercial H (Mixed Use Plaza Building) Retail Pad #1	6,000 1,000 8,525 6,200 3,500		19 3 27 20 11	6,000 1,000 8,525 6,200 3,500 29,150		19 3 27 20 11 93	6,000 1,000 8,525 6,200 3,500 100,000 14,500		19 3 27 20 11 320 46	6,000 1,000 8,525 6,200 3,500 29,150 100,000 14,500		19 3 27 20 11 93 320 46	1,000 8,525 6,200 3,500 29,150 100,000		19 3 27 20 11 93 320 46 16
Subtotal	25,225		81 5	54,375		174	139,725		447	168,875		540	179,875		576
Total, New Uses	408,214	391	667 55	57,364	391	1,049	760,239	589	1,330	909,389	589	1,712	1,006,065	674	1,875
400/ Charad Davids - Dadies'												4.510			1.000
10% Shared Parking Reduction	<u> </u>		600			944			1,197			1,540			1,688
Total, Project	667,214	391	1,462 81	16,364	391	1,806	979,239	589	2,059	1,128,389	589	2,402	1,225,065	674	2,550
Parking Provided															
Surface Parking Existing Stalls Less Woodfin Stalls Gained Through Restriping Stalls Lost for Shellmound Building Stalls Lost in Shellmound Relocation Stalls Lost in Front of Theater Stalls Lost Adjacent to Marketplace			1158 -205 29 -250			1158 -205 29 -250 -242			1158 -205 29 -250 -118			1158 -205 29 -250 -242 -118			1158 -205 29 -250 -242 -118
Subtotal, Surface Stalls			732			490			614			372			177
Structured Parking Parking A (Shellmound Garage) Parking B (Shellmound Tower) Parking C (Shellmound) Parking D (UA Site) Parking E (64th & Christie) Parking F (Plaza)			541 127 272			541 127 518 272			541 127 538 272			541 127 518 538 272			541 127 518 538 272 150
Subtotal, Structured Spaces			940			1,458			1,478			1,996			2,146
Total			1,672			1,436			2,092			2,368			2,146



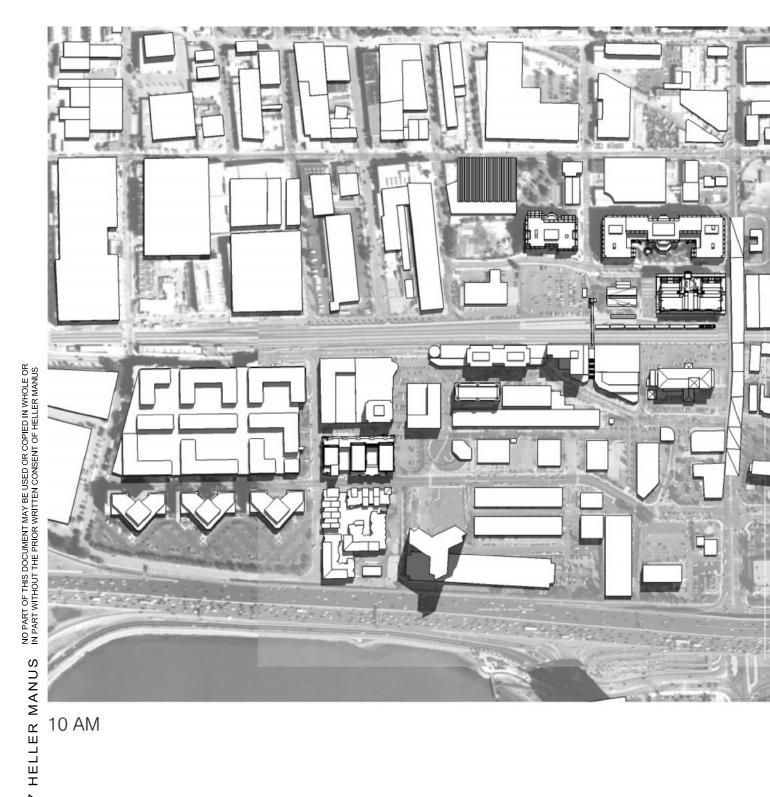
EMERYVILLE, CA

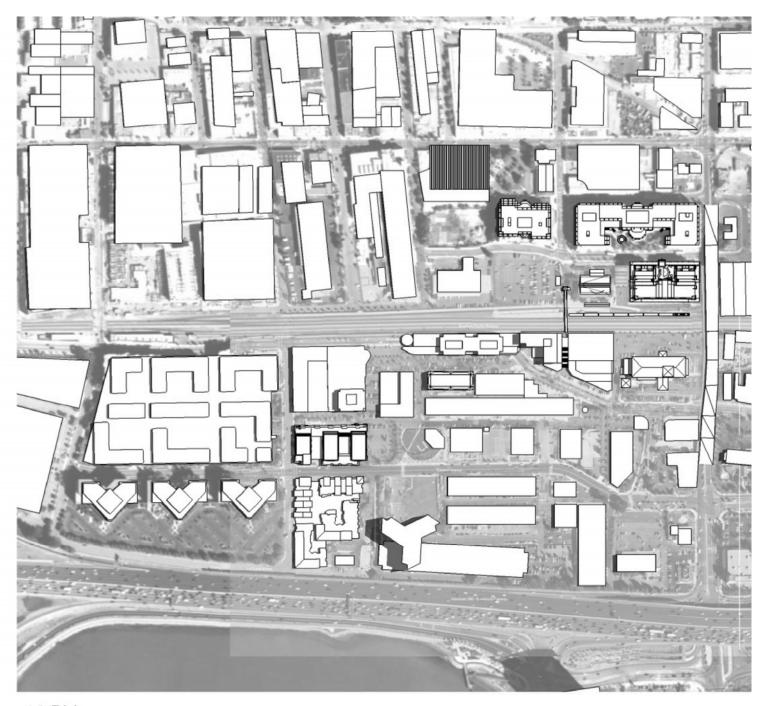


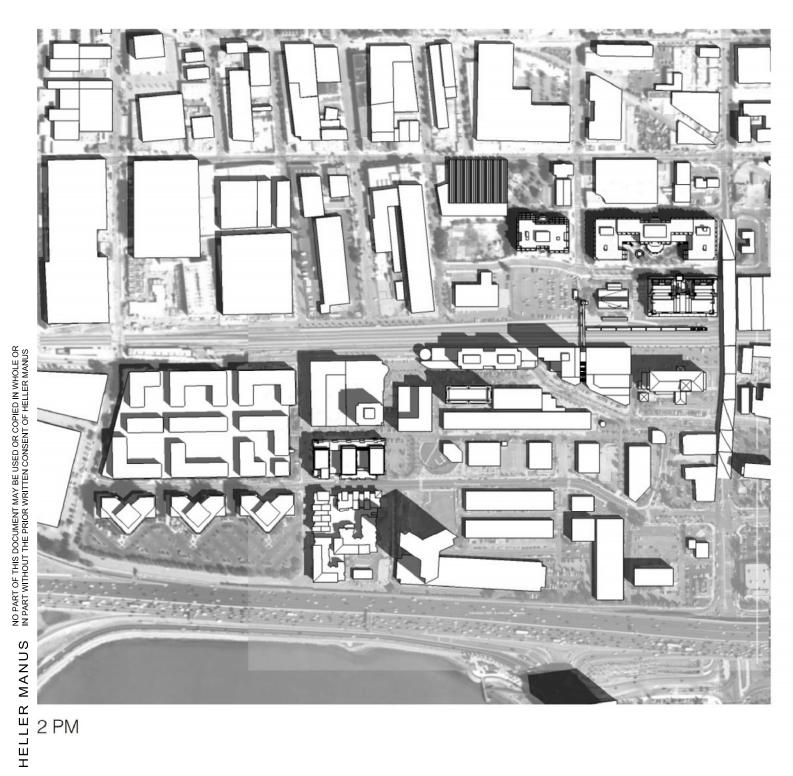






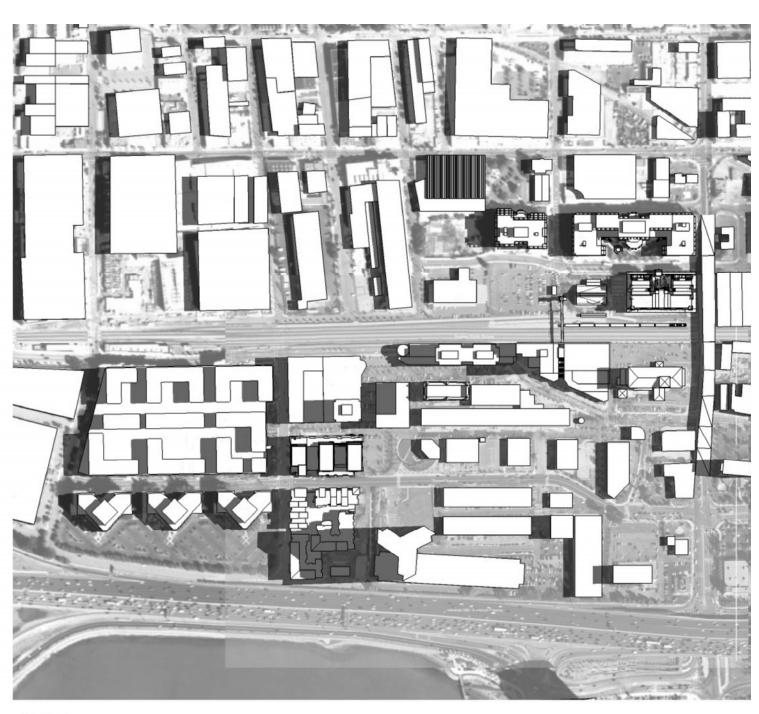












SCALE NTS

MARKETPLACE REDEVELOPMENT

WINTER SOLSTICE - DECEMBER 21





4 PM

Exhibit B

Examples of images provide by Appellant that were not part of legally binding approved plans

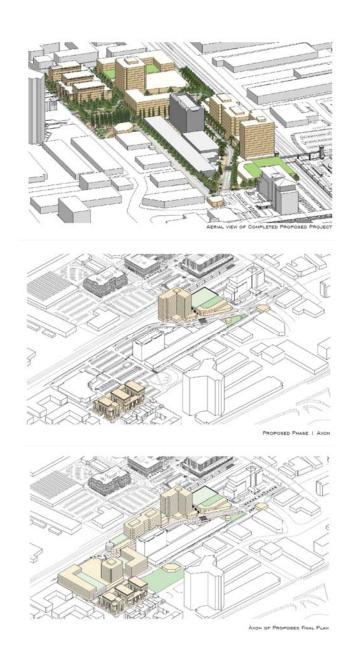


Exhibit C

Parcel B Artwork

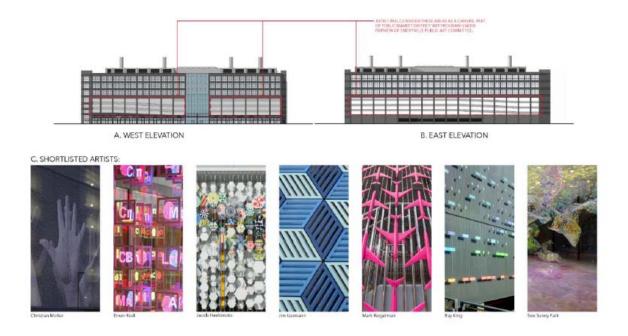


Exhibit D

Qualified Wind Consultant Review

Donald Ballanti

Consulting Meteorologist

1424 Scott Street El Cernito, CA 94530 (510) 234-6087

March 22, 2019

Mark Stefan AG-CCRP Public Market, L. P. 170 Grant Avenue, Sixth Floor San Francisco, CA 94108

Subject: Wind and Comfort Evaluation for the Emeryville Public Market Parcel B Project

Dear Mr. Stefan:

This letter-report summarizes my findings and recommendations concerning microclimate and wind conditions of the proposed Emeryville Public Market Parcel B Project. I have based this report on my analysis of the climate of the area, a site visit and a review of project plans and elevations. My purpose is to provide an evaluation of outdoor comfort conditions within the proposed facility, identify potential problems and, where possible, provide recommendations for improving on-site comfort conditions.

Existing Conditions

The closest source of long-term wind data to the project site is the former Alameda Naval Air Station, located about 5 miles southwest of the project site. Data from this site show that westerly winds are the most frequent and strongest winds during all seasons.¹ This is the primary wind direction during the spring and summer months when sea breezes predominate. A secondary maxima in wind direction frequency is evident for southeasterly winds, which is the wind direction associated with winter storms. While the average wind speed for southeasterly winds is not the highest of all wind directions, this is the likely wind direction of peak winds measured over the year. Calm winds occur about 10% of the time. The annual average wind speed at Alameda Naval Air Station is 8.6 miles per hour and annual average wind speed at the project site would be somewhat less than this.

Air Pollution Meteorology • Dispersion Modeling • Climatological Analysis

¹Wind direction refers to the direction from which the wind is moving. Thus, a westerly or west wind moves from west to east.

Mark Stefan March 22, 2019 Page 2

Wind conditions partly determine pedestrian comfort and safety on sidewalks and in other public areas. Large buildings can redirect wind flows around and down to street. The project site is occupied by a mixture of open areas and buildings up to eight stories in level, resulting in increased wind speed and turbulence at street level. The generally breezy character of Emeryville results from its flat, open land and exposure to persistent wind off of the San Francisco Bay.

The Emeryville Public Market development site is occupied by a mixture of open areas and buildings up to eight stories in height. Further west, a mixture of buildings from one to 30 stories in height offer some shelter from prevailing westerly winds off San Francisco Bay. Parcel B is located at the east edge of the Emeryville Public Market site and is partially sheltered from prevailing winds by the 2-story Public Market building, the 8-story Marketplace Tower and similar-sized buildings on Parcel C and D.

Building Aerodynamics

The construction of a building results in severe distortions of the wind field. The building acts as an obstacle to wind flow. The deceleration of wind on the upwind side of the structure creates an area of Increased atmospheric pressure, while an area of decreased atmospheric pressure develops on the downwind side. Accelerated winds generally occur on the upwind face of the building, particularly near the upwind comers and along the building sides. The downwind side has generally light, although variable, winds

The strength of ground-level wind accelerations near buildings is controlled by exposure, massing and orientation or the structure. Exposure is a measure of the extent that the building extends above surrounding structures into the wind stream. A building that is surrounded by taller structures is not likely to cause adverse wind accelerations at ground level, while even a small building can cause wind problems if it is freestanding and exposed.

Massing is important in determining wind impact because it controls how much wind is intercepted by the structure and whether building-generated wind accelerations occur above-ground or at ground level. In general, slab-shaped buildings have the greatest potential for wind problems. Buildings that have an unusual shape or utilize set-backs have a lesser effect. A general rule is that the less continuous a building's faces are (vertically or horizontally), the lesser the probable wind impact at ground level.

Orientation determines how much wind is intercepted by the structure, a factor that directly determines wind acceleration. In general, buildings that are oriented with their wide axis across the prevailing wind direction will have a greater impact on ground-level

winds than a building oriented with its long axis along the prevailing wind direction.

Evaluation of Project

The Parcel B site is bounded by the relocated Shellmound Street to the west and north; the UPRR train tracks to the east, and Parcel A to the south. The Parcel B development project proposes an new 8-story mixed-use building with an entry lobby, bike parking, retail and servicing areas at ground floor, 3-4 levels of structured parking for building users/Public Market district patrons and research lab space at the top 3 floors. The project site includes landscape and utilities improvements, and small landscaped open space areas at the north and south ends of the site. An access way at the south end of the site provides vehicle entry/exiting for both Parcel B and Parcel A.

The west side of the building is proposed to include public art mounted on the facade of the parking floors. The artwork could be two or three-dimensional, potentially illuminated and made of LEDs, metal mesh, aluminum, Kevlar, or fiber resin.

The proposed building would be partially sheltered from prevailing winds. The northern half of the building would be sheltered by the Marketplace Tower just across Shellmound Street, during west winds. The site is currently fairly exposed to southeast winds, but this exposure would be greatly reduced when the proposed building on the adjacent Parcel A is constructed.

The orientation of the proposed building reflects the shape of the parcel, with the long axis of the building aligned north/south. This would maximize interception of winds from the west, while minimizing the interception of winds from the southeast direction.

The massing of the building would have a profound effect on how the building changes the wind. Although the building has a rectangular footprint and would be considered slab-shaped, the lower half of the structure would be naturally-ventilated parking garage space, which makes all building faces discontinuous with respect to wind. Because the parking levels connect the upwind and downwind sides of the building, regardless of wind direction, the type of pressure differences between the up-wind and down-wind sides of the building that typically drive wind accelerations near the base of a building cannot occur, since the pressure difference would be relieved by air flowing through the garage floors. The proposed public art display on the west side of the building would allow air to flow through the garage floors and would have no effect on wind around the building.

In summary, the proposed Parcel B building is somewhat exposed to prevailing wind directions and is aligned across the important west wind direction. However, the

Mark Stefan March 22, 2019 Page 2

presence of naturally-ventilated parking garage space in the bottom half of the structure means that any upwind and downwind pressure differences generated at the top floors of the building would result in airflow through the parking garage floors and not wind accelerations at ground level. Based on the exposure, massing and orientation of the proposed building it would not have the potential to adversely affect ground-level winds near its base, at proposed landscaped open spaces areas at the north and south ends of the site, within adjacent Parcel A to the south, or at properties east of the site on the far side of the UPRR train tracks. Since the project does not have the potential to adversely affect wind, wind tunnel or computerized computational fluid dynamics testing would not be recommended for this project.

I hope that you find this report helpful. Please call if you have questions or would like more information.

Sincerely.

Donald Ballanti

Certified Consulting Meteorologist

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Exhibit E

RWDI Preliminary Report

PRELIMINARY RESULTS



EMERYVILLE PUBLIC MARKET – PARCEL B

EMERYVILLE, CA

PEDESTRIAN WIND STUDY RWDI # 1902969 May 13, 2019

SUBMITTED TO

Mark Stefan

City Center Realty Partners, LLC 170 Grant Avenue, Sixth Floor San Francisco, CA 94108 T: 415.655.7002

SUBMITTED BY

Rose Babaei, Ph.D. Technical Coordinator Rose.Babaei@rwdi.com

Hanqing Wu, Ph.D., P.Eng. Senior Technical Director / Principal Hanqing.Wu@rwdi.com

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RWDI

600 Southgate Drive Guelph, Ontario, Canada N1G 4P6 T: 519.823.1311 F: 519.823.1316





EXECUTIVE SUMMARY

The following document provides the preliminary results for the Pedestrian Wind Study conducted for the proposed Emeryville Public Market – Parcel B (Project) located in Emeryville, CA. The project site, photographs of the wind tunnel study model and the wind statistics recorded at a nearby airport with long-term, reliable meteorological data are shown in Images 1, 2A through 2C and 3, respectively. Since Emeryville does not have an adopted wind significance threshold, the City of Oakland planning code requirement which deals with pedestrian hazard as related to wind force was used. This criterion is also described to assist with the interpretation of the results presented. For information purposes, we also provide an assessment against applicable pedestrian wind comfort criteria.

The predicted wind hazard and comfort conditions pertaining to the three site and surrounding configurations assessed are graphically depicted on site plans in Figures 1A through 2C. These conditions and the associated wind speeds are presented in Tables 1 and 2. These results are presented in the attached results package and can be summarized as follows:

Wind Hazard Conditions:

- For the existing configuration (without the project), wind speeds at all locations are anticipated to comply with the wind hazard criterion except for a location on the east side of the railroad tracks near the pedestrian bridge tower.
- With the addition of the proposed building to the site (existing + project configuration), wind speeds at all locations are expected to meet the wind hazard criterion including the location on the east side of the railroad tracks near the pedestrian bridge tower.
- The wind hazard criterion is predicted to be met after adding the future buildings (5850 Shellmound Way and Parcel F) to the southwest of the project (project + cumulative configuration).

Wind Comfort Conditions:

- Wind speeds at 24 locations in the existing configuration (without the project) are expected to exceed the comfort criterion. Most of these locations are to the west of the project site and around the building east of Overland Avenue.
- With the addition of the proposed building to the site (existing + project configuration), wind conditions are expected to be moderated and the number of locations where wind speeds exceed the comfort criterion are predicted to be 15. In general, the addition of the proposed building has a positive effect on the wind conditions.
- For the project + cumulative configuration, wind comfort conditions are expected to be similar to those for the existing + project configuration, with 18 locations exceeding the comfort criterion.

rwdi.com AR2990





Image 1: Aerial View of Site and Surroundings (Photo Courtesy of Google™ Earth)



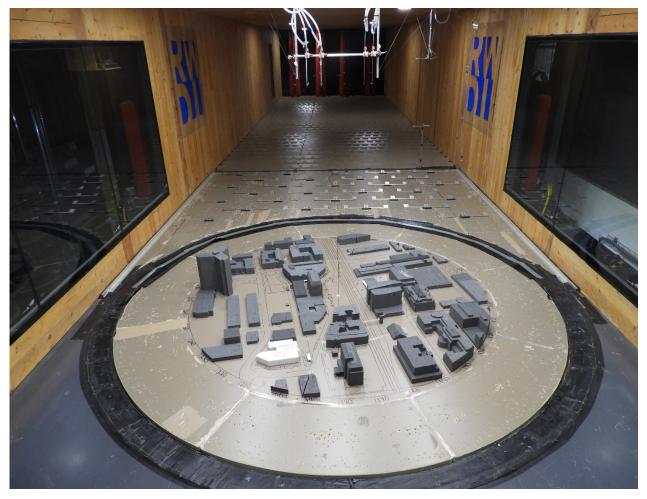






Image 2A: Wind Tunnel Study Model – Existing Configuration

rwdi.com AR2992 Page 2





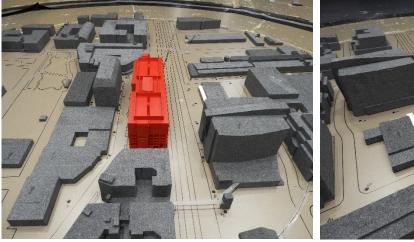




Image 2B: Wind Tunnel Study Model – Existing + Project Configuration

rwdi.com AR2993 Page 3





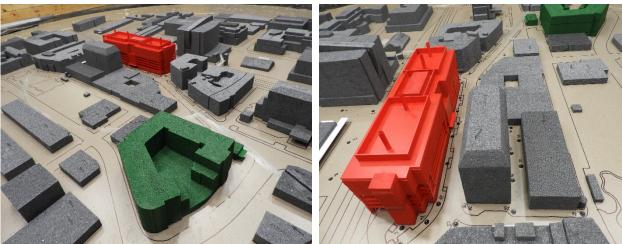


Image 2C: Wind Tunnel Study Model - Project + Cumulative Configuration

rwdi.com AR2994 Page 4



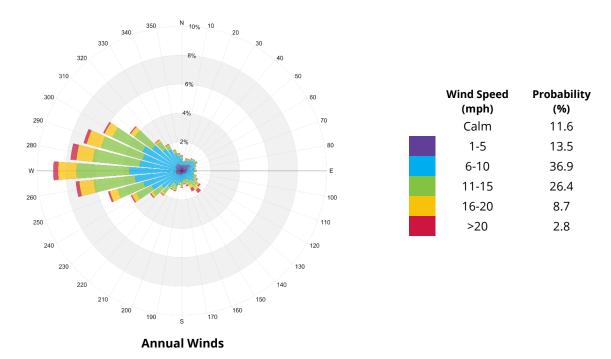


Image 3: Directional distribution of winds approaching Metropolitan Oakland International Airport from 1987 to 2017

rwdi.com AR2995 Page 5



Planning Code Requirements

Since the City of Emeryville does not have a wind significance threshold, the City of Oakland's requirements were considered. In Oakland, a wind analysis needs to be done if the height of the project is 100 feet or greater (measured to the roof) and one of the following conditions exists: (a) the project is located adjacent to a substantial water body (i.e. Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in the downtown. Since the proposed project (approximately 113 feet tall) exceeds 100 feet height and is adjacent to San Francisco Bay, it is subject to the thresholds of significance.

For the purposes of this study, the City of Oakland considers a significant wind impact to occur if a project were to "Create winds exceeding 36 mph for more than one hour during daylight hours of the year". The Planning Code defines these wind speeds in terms of equivalent wind speeds, and average wind speed (mean velocity), adjusted to include the level of gustiness and turbulence. Equivalent wind speeds were calculated according to the specifications in the City of Oakland Significant Wind Impact Criterion, whereby the mean hourly wind speed is increased when the turbulence intensity is greater than 15% according to the following formula:

$$EWS = V_m \times (2 \times TI + 0.7)$$

where **EWS** = equivalent wind speed

 V_m = mean pedestrian-level wind speed

TI = turbulence intensity

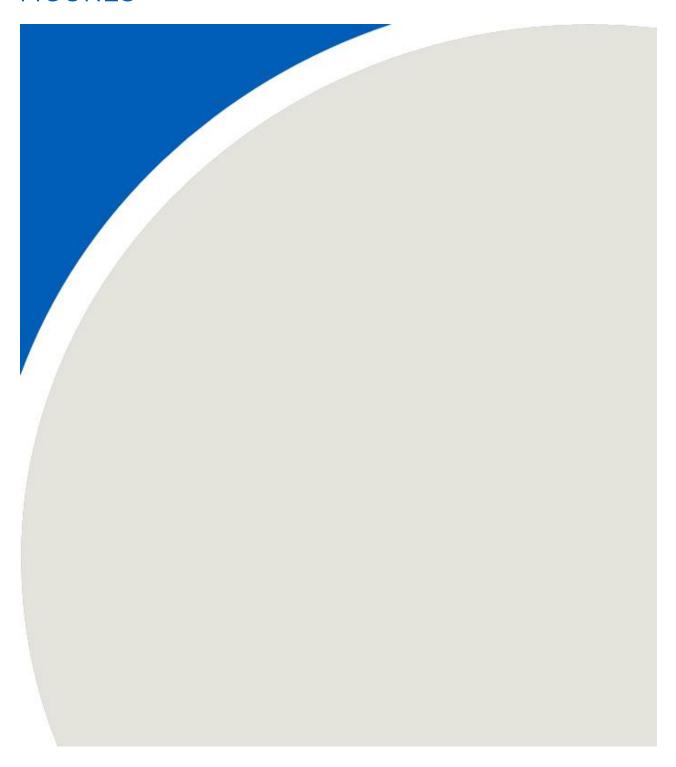
Pedestrian Comfort

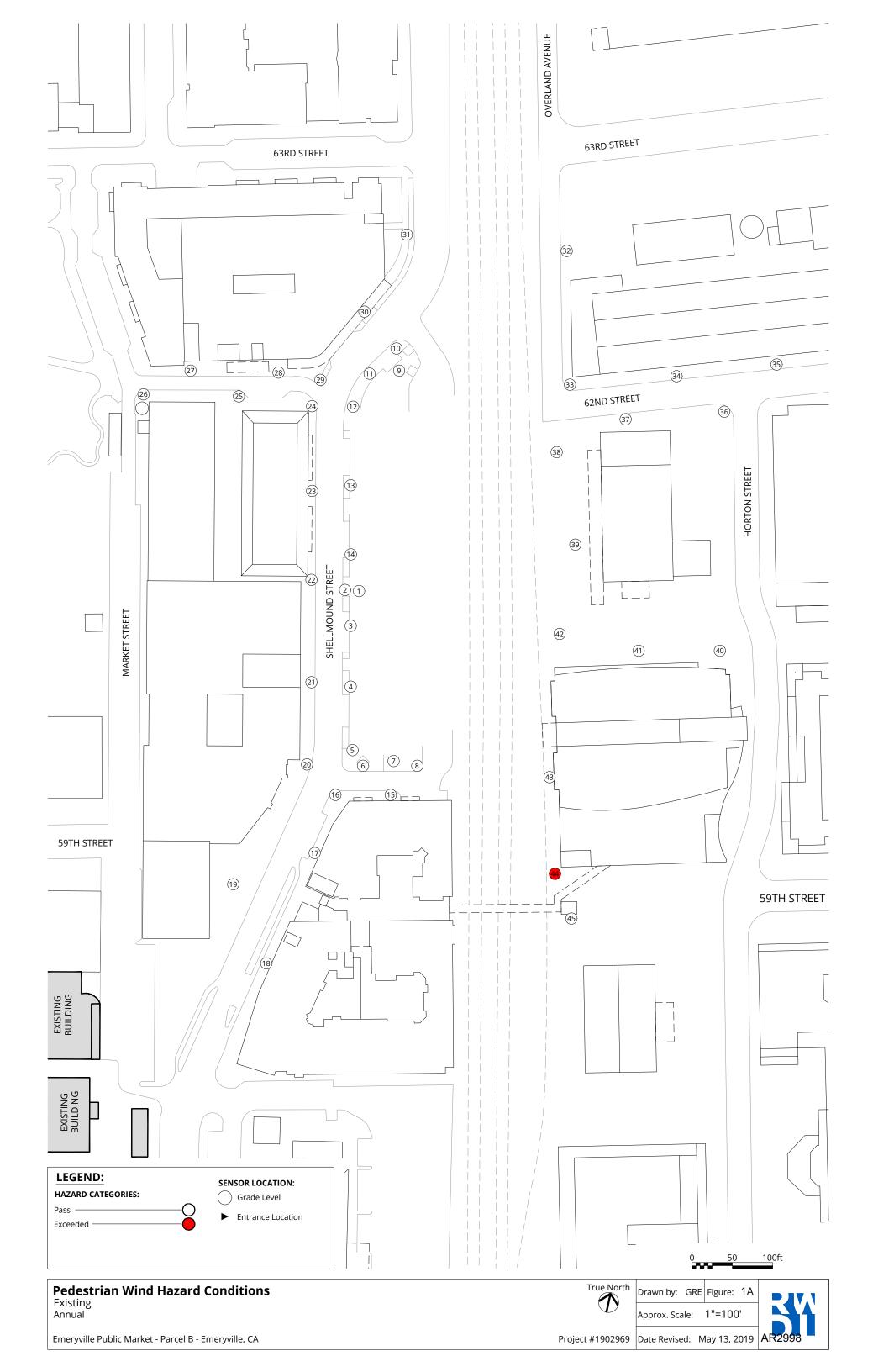
Although not applicable towards Significant Wind Impacts as defined by the City of Oakland, wind comfort speeds have been calculated for informational purposes. The comfort criteria are that wind speeds do not exceed 11 mph for more than 10% of the time during the year, when calculated for daylight hours, in substantial pedestrian use areas. A lower wind speed threshold of 7 mph may be considered for public seating areas where calmer wind conditions are ideal.

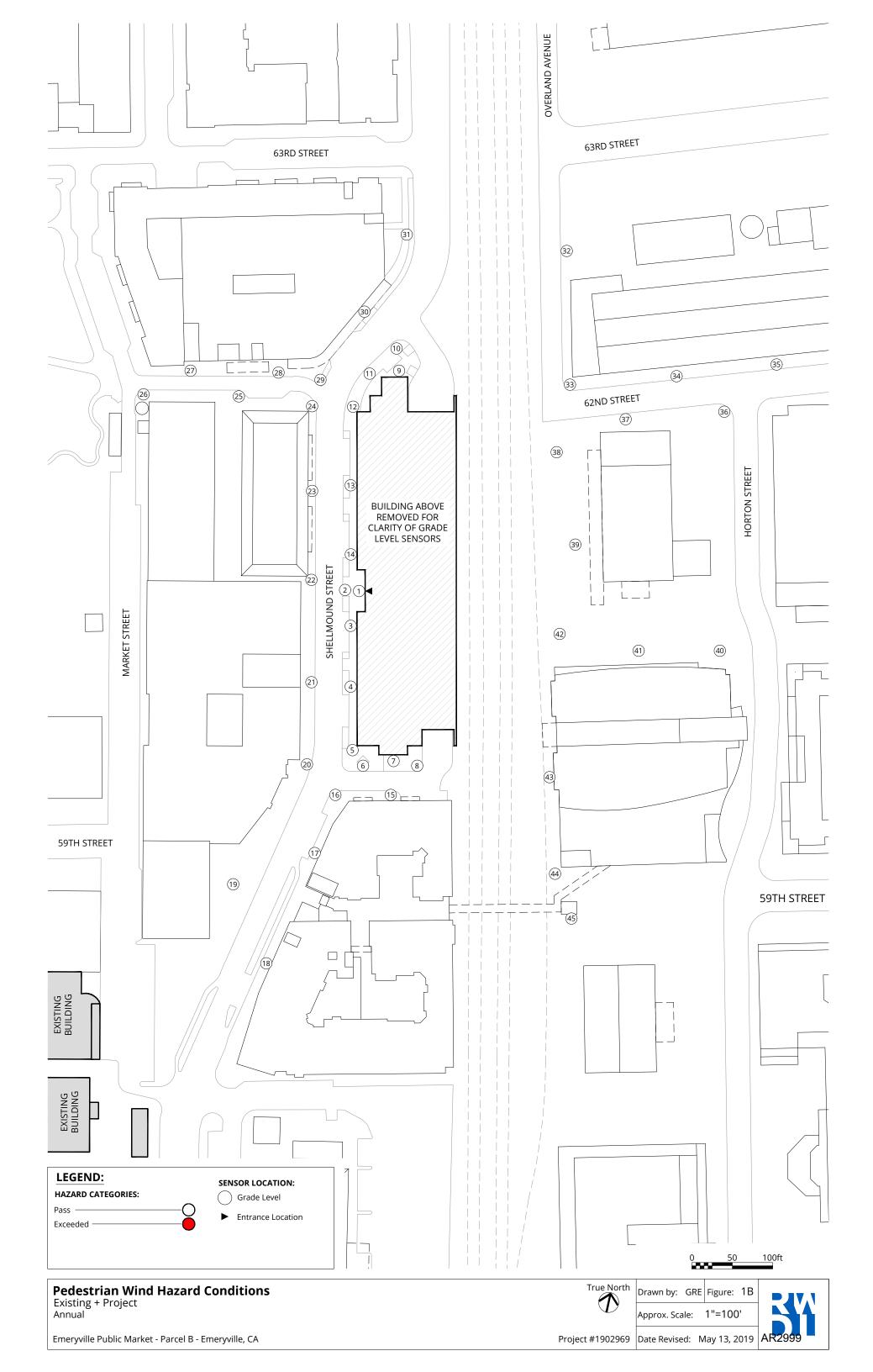
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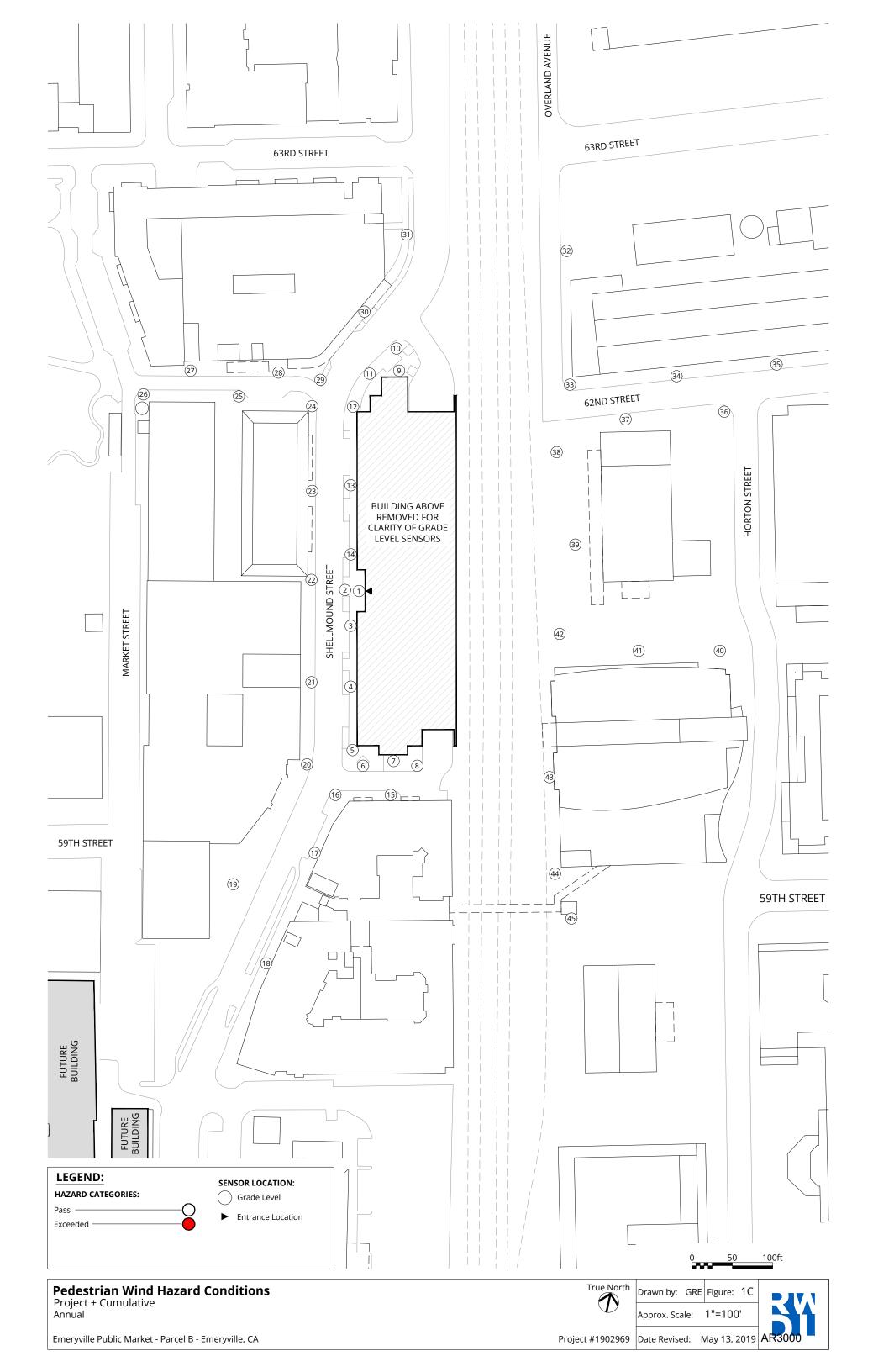


FIGURES

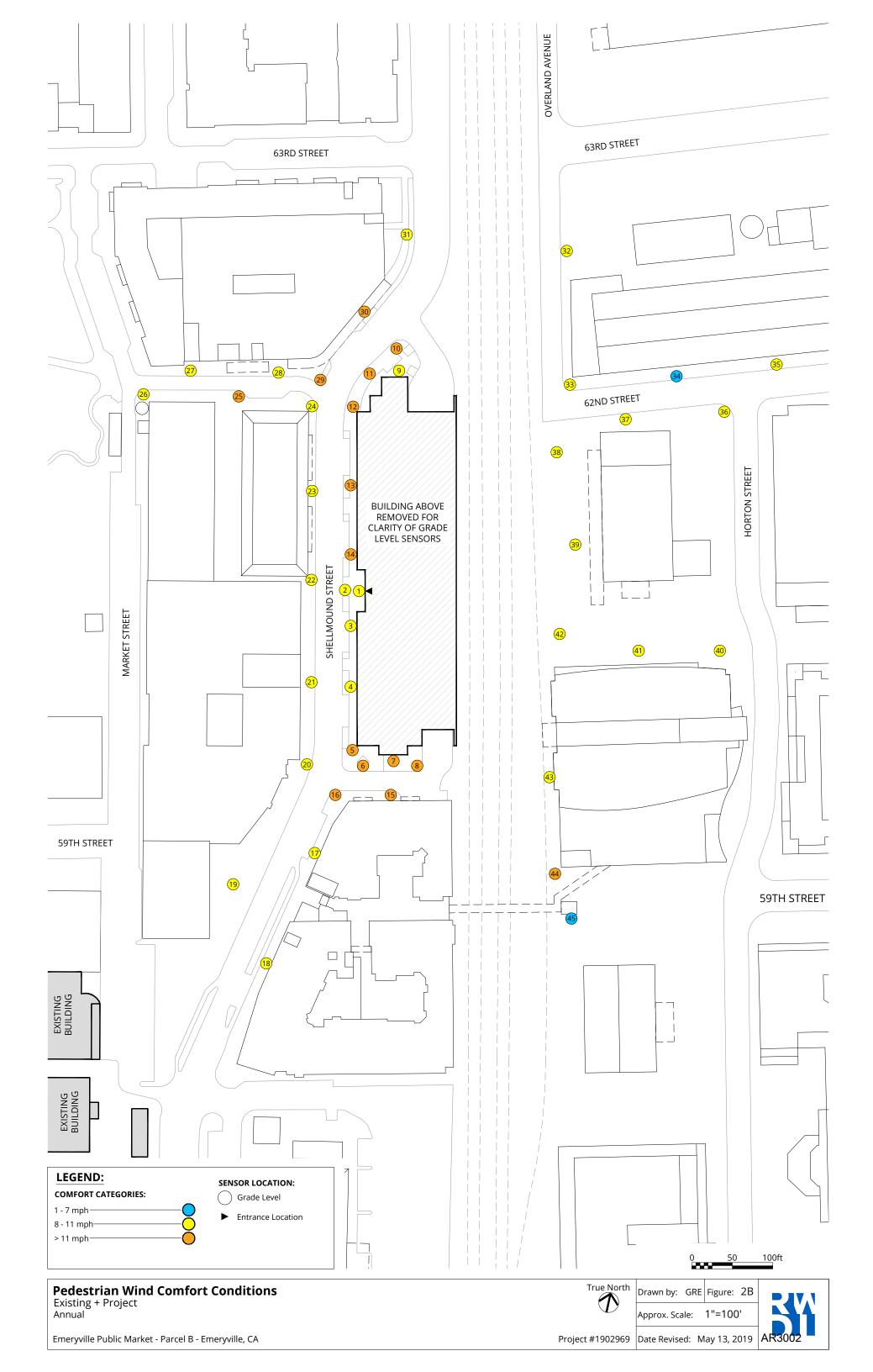


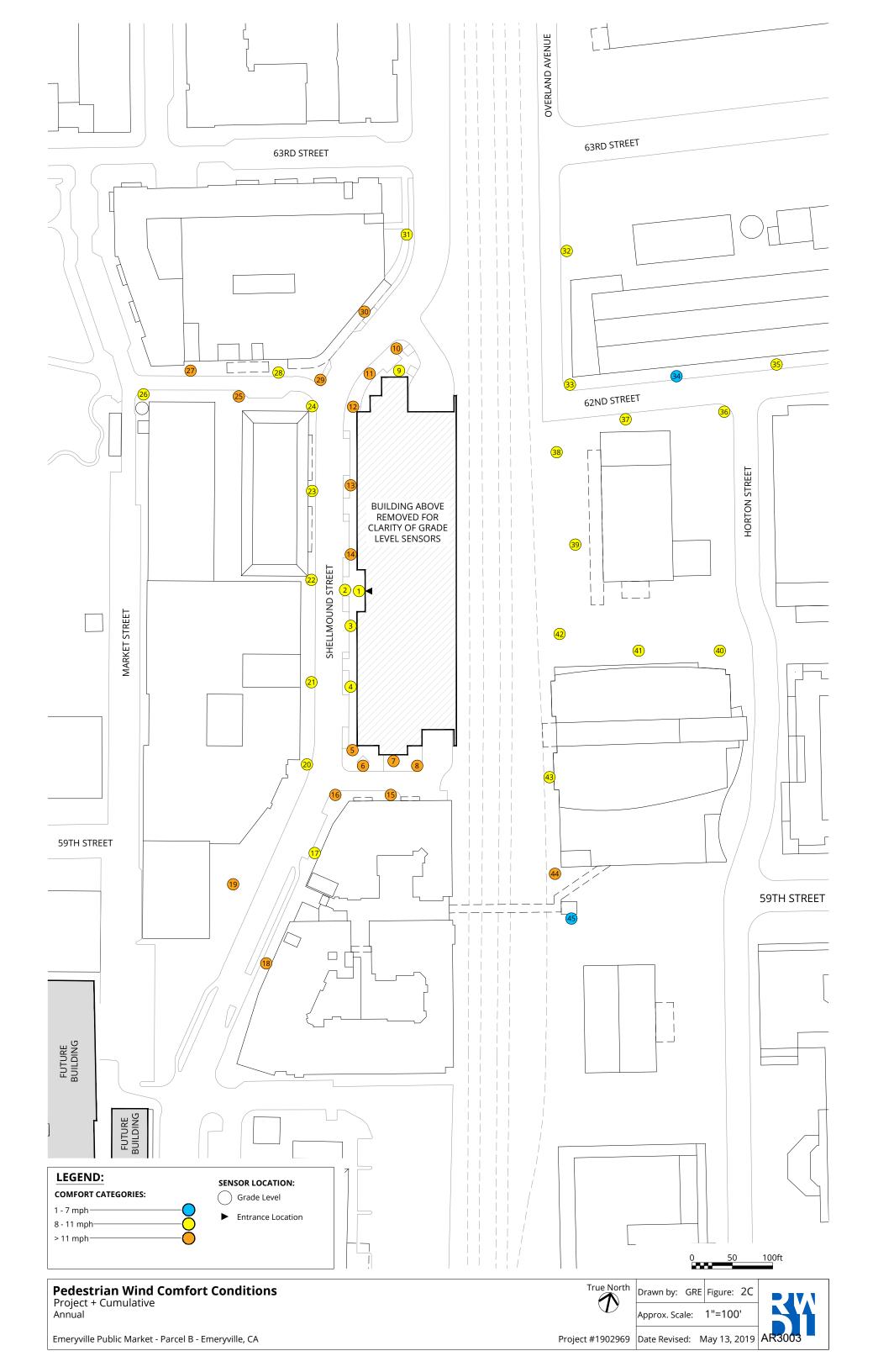














TABLES

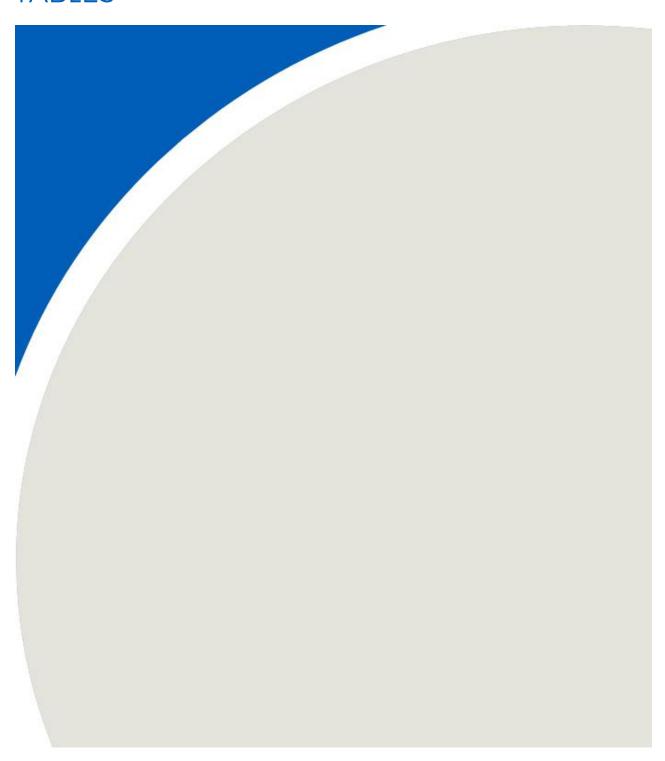




Table 1: Wind Hazard Conditions

	Ex	isting	Ex	isting + Pro	ject	Project + Cumulative					
Location	Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Hours Change Relative to Existing	Exceeds
1	28	0		25	0	0		25	0	0	
2	30	0		25	0	0		25	0	0	
3	27	0		23	0	0		22	0	0	
4	25	0		19	0	0		21	0	0	
5	31	0		26	0	0		27	0	0	
6	33	0		30	0	0		30	0	0	
7	32	0		31	0	0		31	0	0	
8	31	0		33	0	0		32	0	0	
9	24	0		20	0	0		21	0	0	
10	24	0		28	0	0		28	0	0	
11	27	0		32	0	0		32	0	0	
12	29	0		32	0	0		32	0	0	
13	30	0		29	0	0		29	0	0	
14	35	0		33	0	0		33	0	0	
15	28	0		33	0	0		33	0	0	
16	34	0		30	0	0		30	0	0	
17	24	0		21	0	0		21	0	0	
18	24	0		22	0	0		25	0	0	
19	25	0		24	0	0		27	0	0	
20	28	0		22	0	0		22	0	0	
21	29	0		20	0	0		21	0	0	
22	27	0		27	0	0		27	0	0	
23	23	0		26	0	0		25	0	0	
24	29	0		24	0	0		24	0	0	
25	34	0		33	0	0		33	0	0	
26	25	0		25	0	0		25	0	0	
27	28	0		28	0	0		28	0	0	
28	25	0		24	0	0		25	0	0	
29	34	0		29	0	0		30	0	0	
30	24	0		27	0	0		27	0	0	
31	25	0		24	0	0		24	0	0	
32	25	0		22	0	0		22	0	0	
33	22	0		27	0	0		26	0	0	
34	24	0		20	0	0		19	0	0	
35	21	0		21	0	0		22	0	0	
36	28	0		26	0	0		28	0	0	



Table 1: Wind Hazard Conditions

	Ex	isting		Ex	isting + Pro	ject		Proj	roject + Cumulative			
Location	Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Hours Change Relative to Existing	Exceeds	
37	21	0		22	0	0		22	0	0		
38	25	0		27	0	0		26	0	0		
39	24	0		25	0	0		24	0	0		
40	32	0		27	0	0		27	0	0		
41	32	0		27	0	0		27	0	0		
42	31	0		28	0	0		29	0	0		
43	30	0		28	0	0		28	0	0		
44	40	3	е	28	0	-3		28	0	-3		
45	19	0		17	0	0		17	0	0		

	Average (mph)	Total Hours	Total	Average (mph)	Total Hours	Hours Change	Total	Average (mph)	Total Hours	Hours Change	Total
SUMMARY	28	3	1 45	26	0	-3	0 45	26	0	-3	0 45



Table 2: Wind Comfort Conditions

	Ex	cisting		Ex	cisting + Pro	ject	Project + Cumulative				
Location	Wind Speed Exceeded 10% of Time (mph)	% of Time Wind Speed Exceeds 11 mph (%)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	% of Time Wind Speed Exceeds 11 mph (%)	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	% of Time Wind Speed Exceeds 11 mph (%)	Speed Change Relative to Existing (mph)	Exceeds
1	13	19	е	11	10	-2		11	10	-2	
2	13	18	е	10	6	-3		10	6	-3	
3	12	15	е	11	10	-1		10	6	-2	
4	12	14	е	9	4	-3		10	5	-2	
5	15	30	е	12	16	-3	е	13	19	-2	е
6	16	34	е	14	24	-2	е	14	27	-2	е
7	15	30	е	14	26	-1	е	15	26	0	е
8	14	24	е	15	31	1	е	15	31	1	е
9	10	7		8	3	-2		8	3	-2	
10	10	6		13	18	3	е	13	18	3	е
11	12	12	е	13	22	1	е	14	23	2	е
12	12	12	е	14	25	2	е	14	25	2	е
13	10	7		14	22	4	е	14	25	4	е
14	12	14	е	14	21	2	е	14	21	2	е
15	13	19	е	15	27	2	е	15	28	2	е
16	16	34	е	15	29	-1	е	14	27	-2	е
17	10	7		9	5	-1		9	4	-1	
18	11	10		10	7	-1		12	13	1	е
19	12	14	е	11	10	-1		12	16	0	е
20	12	17	е	10	6	-2		10	7	-2	
21	12	16	е	9	3	-3		9	3	-3	
22	10	6		11	10	1		11	10	1	
23	8	2		11	10	3		11	10	3	
24	10	7		11	10	1		11	10	1	
25	15	26	е	14	24	-1	е	15	26	0	е
26	10	5		9	5	-1		10	5	0	
27	12	12	е	11	10	-1		12	13	0	е
28	11	10		11	10	0		11	10	0	
29	15	23	е	13	17	-2	е	13	19	-2	е
30	9	5		13	17	4	е	13	18	4	е
31	9	5		11	10	2		11	10	2	
32	10	7		9	3	-1		9	3	-1	
33	11	10		11	10	0		11	10	0	
34	9	3		7	1	-2		7	1	-2	
35	10	7		9	4	-1		9	4	-1	
36	11	10		10	5	-1		10	5	-1	



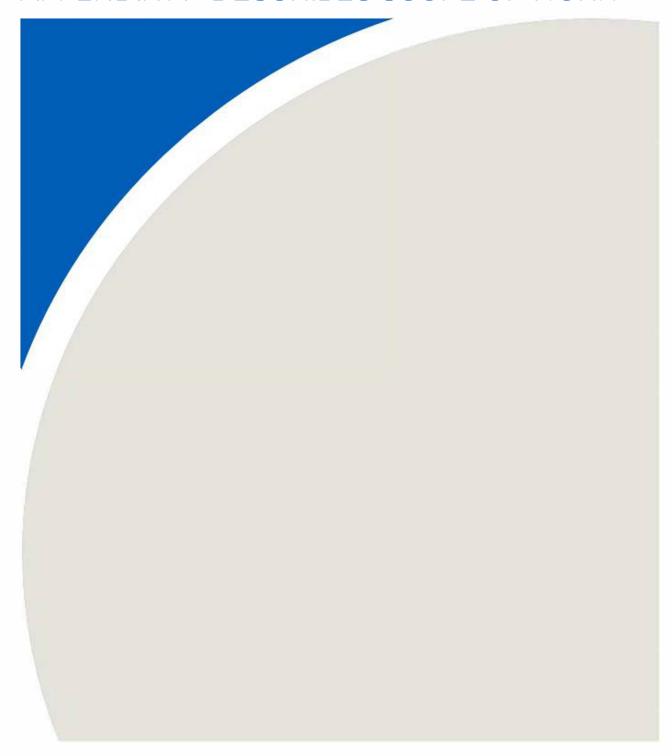
Table 2: Wind Comfort Conditions

	Ex	cisting		Ex	isting + Pro	ject		Proj	ect + Cumu	lative	
Location	Wind Speed Exceeded 10% of Time (mph)	% of Time Wind Speed Exceeds 11 mph (%)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Wind Speed	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	% of Time Wind Speed Exceeds 11 mph (%)	Speed Change Relative to Existing (mph)	Exceeds
37	8	2		9	3	1		9	4	1	
38	11	10		11	10	0		11	10	0	
39	11	10		10	7	-1		10	7	-1	
40	15	26	е	11	10	-4		11	10	-4	
41	15	26	е	11	10	-4		11	10	-4	
42	15	27	е	11	10	-4		11	10	-4	
43	14	22	е	9	5	-5		9	5	-5	
44	18	39	е	14	22	-4	е	13	21	-5	е
45	8	1		7	1	-1		7	1	-1	

	Average (mph)	Average (%)	Total	Average (mph)	Average (%)	Speed Change (mph)	Total	Average (mph)	Average (%)	Speed Change (mph)	Total
SUMMARY	12	15	24 45	11	12	-1	15 45	11	13	-1	18 45



APPENDIX A - DESCRIBES SCOPE OF WORK



PEDESTRIAN LEVEL WINDS



Pedestrian level wind services evaluate wind speeds and frequencies and how they impact the comfort and safety of people in outdoor spaces.

WIND TUNNEL TESTING

A scale replica of the redevelopment site and surroundings will be tested in a wind tunnel to simulate the winds approaching and interacting with the project site. This is the most advanced and accurate means of predicting wind speeds around buildings and structures.

Wind Climate Analysis

As required by the City of Emeryville, data describing the speed, direction and frequency of occurrence of wind gathered at Metropolitan Oakland International Airport between 1982 and 2012 will be used for this study.

Proximity Model

A proximity model of the existing buildings and relevant surroundings within an approximate 1600 foot radius of the center of the development site will be constructed at an approximate scale (i.e., 1:400 scale). The buildings immediately surrounding the study site will be modeled in more detail than buildings beyond this radius. The model will incorporate relevant topographic changes as applicable. Surroundings beyond the limits of the proximity model will be appropriately simulated by spires and roughness blocks situated on the wind tunnel floor upwind of the study model. This will provide an accurate representation of the wind speed and turbulence profiles of wind approaching the study model.

Scale Model Construction

A scale replica of the redevelopment site will be constructed. The scale will be selected so that it is appropriate for the size of the project, to capture the relevant architectural details and surroundings. A series of wind speed sensors that measure both mean and gusts will be installed on the model to measure wind conditions at key pedestrian areas. The sensors are meant to represent an average person's height, and we will work with the design team to locate sensors in all areas of interest. *The proposed test locations will be provided to the project team and City for review and comment prior to the testing.*

Wind Tunnel Testing

A boundary-layer wind tunnel will be used to simulate the natural wind speed and turbulence levels at the site. The wind tunnel is equipped with spires and dynamic roughness that will be used to simulate the approaching wind speed and turbulence profiles. The context of the surrounding buildings to include during the Cumulative test configuration (as described below) and the need for testing this configuration will be confirmed with the project team and the City in advance of testing.



PEDESTRIAN LEVEL WINDS



Pedestrian level wind services evaluate wind speeds and frequencies and how they impact the comfort and safety of people in outdoor spaces.

Two development configurations of the study site and surroundings will be tested:

- Existing: the existing surroundings, with any buildings currently on site, without the proposed development.
- Existing plus Project: the proposed development along with existing surroundings.

Optional, if required:

• **Existing plus Project plus Cumulative:** the proposed development, along with existing surrounding structures and surrounding future buildings.

Analysis

The data collected from the wind tunnel will be analyzed together with the the area's long-term meteorological statistics to predict how often selected wind speed ranges will occur at each location. Results will first be reviewed against the pedestrian wind comfort and safety criteria determined appropriate with the city. Results will be presented in a diagrammatic form, relating each measurement location with its resulting comfort/safety rating.

In the event that undesirable conditions are predicted, we will use our experience and judgment to suggest wind control strategies in an effort to improve conditions. If conditions are particularly severe in critical areas, we may recommend or the City may require additional testing to develop specific solutions and satisfy planning code requirements additional scope would be provided to accommodate this effort if required.

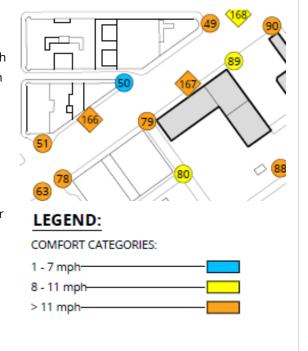


Exhibit F

RWDI Response Letter and Pedestrian Wind Study



600 Southgate Drive Guelph, ON N1G 4P6 Canada Tel: +1.519.823.1311 Fax: +1.519.823.1316

June 7, 2019

Mark Stefan

City Center Realty Partners, LLC 170 Grant Avenue, Sixth Floor San Francisco, CA 94108 T: 415.655.7002

Re: Emeryville Public Market – Parcel B RWDI Project 1902969

Dear Owners,

As per your request, this memo discusses the findings of the CPP qualitative report (Supplemental Consulting Report, Revision 1, CPP Project 13419, May 29, 2019), reviewing RWDI's quantitative wind tunnel results (Pedestrian Wind Study RWDI # 1902969, May 13, 2019).

First, RWDI's approach includes wind speed measurements around the project site for three different site and surrounding configurations, allowing the comparison between the wind conditions before and after the addition of project as well as in the future buildings. These measurements are then combined with local wind data to accurately predict the occurrence frequencies of different wind speeds. On the other hand, although desktop reviews are helpful in initial assessments of the impact of new developments on the wind environment, they are qualitative in nature and cannot provide accurate wind speeds and frequencies.

Since the City of Emeryville does not have a wind significance threshold, due to the proximity of the Emeryville and Oakland, the City of Oakland's requirements were used for the wind tunnel study carried out by RWDI. The City of Oakland considers a significant wind impact to occur if a project were to "create winds exceeding 36 mph for more than one hour during daylight hours of the year", these are referred to as Hazard exceedances. It is noted that the Marketplace EIR included the following significance threshold: If the exposure, orientation and massing of a proposed structure can be expected to substantially increase ground-level winds in pedestrian corridors or public spaces near the project site. Since the ambient wind (undisturbed by buildings) in Emeryville seldom exceeds 36 mph, a project must substantially increase winds for this threshold to be exceeded.

With respect to Comfort Criteria, only a few locations were considered in CPP's review without considering the existing wind conditions or the future wind conditions at all pedestrian areas around the development, therefore we don't believe the report to give the full picture.

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AR3013



When compared to the existing conditions, the addition of the study building reduces winds across the site (Table 2, Pedestrian Wind Study RWDI # 1902969, May 13, 2019). On average, without the study building in place, the average wind speed for the comfort criteria is 12 mph for an average of 15% of the time with a total of 24 of the 45 tested locations exceeding the 11 mph comfort criteria. Once the study building is in place, the average wind speed for the comfort criteria is reduced to 11 mph for an average of 12% of the time with the total number of exceedances reducing to 15 of the 45 tested locations.

For arguments sake, to focus on just the area that CPP focuses on in their report, the area between Parcels A and B (this area includes locations 5-8 and 15, Figure 2b of the RWDI report, Image 1 below) the average wind speed without the study building in place is 14.6 mph (Image 2 below). With the addition of the study building the average wind speed in this area is reduced to 14.0 mph. The difference is marginal but does show a decrease in wind speeds, once the study building is in place.

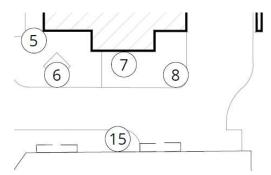


Image 1: Placement of listed sensors between Parcels A and B

Of more importance than the comfort conditions are the Hazard conditions, which show the same trend when the conditions for the site with the study building in place is compared to the conditions for the existing site. Across the entire site, the average wind speed that is exceeded for 1 hr/year on the existing site is 28 mph. this speed decreases to 26 mph with the study building in place. The total number of locations that exceeds the hazard criterion is also reduced from 1 to 0 with the addition of the study building (Table 1 of the RWDI report).

In the same area (Image 1) as discussed previously (Locations 1-8 and 15, Table 1 of the RWDI report, Image 3 below), there are no exceedances in any of these locations with or without the study building, and the average wind speed that is exceeded for 1 hr/year is decreased from 31.0 mph in the existing condition to 30.4 mph once the study building is in place.

Project #1902969 Page 2



	Ex	isting		Existing + Project							
Location	Wind Speed Exceeded 10% of Time (mph)	% of Time Wind Speed Exceeds 11 mph (%)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Wind Speed	Speed Change Relative to Existing (mph)	Exceeds				
5	15	30	е	12	16	-3	е				
6	16	34	е	14	24	-2	е				
	15	30	e	14	26	-1	1 200				
7	13	50	-				e				

Image 2: Extract of Table 2 – Comfort Conditions - from RWDI report showing wind speeds at the areas between Parcels A and B

	Ex	isting		Ex	isting + Pro	oject	
Location	Wind Speed Exceeded 1hr/year (mph)	Year Wind Speed Exceeds Hazard Criteria		Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Hours Change Relative to Existing	Exceeds
5	31	0		26	0	0	
6	33	0		30	0	0	
7	32	0		31	0	0	
8	31	0		33	0	0	
15	28	0		33	0	0	

Image 3: Extract of Table 1 – Hazard Conditions - from RWDI report showing wind speeds at the areas between Parcels A and B

In our wind tunnel test, we modeled the Final Development Plan (FDP) with an open parking structure, according to the drawings and information received on March 22, 2019. As indicated in the report and

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the memo, the addition of the building to the site does not negatively affect the wind conditions around the site, and it actually improves the conditions by eliminating the hazard exceedance at location 44. With regard to comfort, it also does not worsen the conditions as detailed in the memo.

Please note that the open structure is a positive design feature in moderating the accelerated winds, but the extent of its effectiveness can only be evaluated by testing both closed and open versions and comparing the results.

Closing

In conclusion, to review the full site, or just the area between Parcels A and B, wind conditions are improved with the addition of the study building when compared to the conditions on the site as it exists today. Accordingly, the project does not increase winds and is considered to have a less than significant impact.

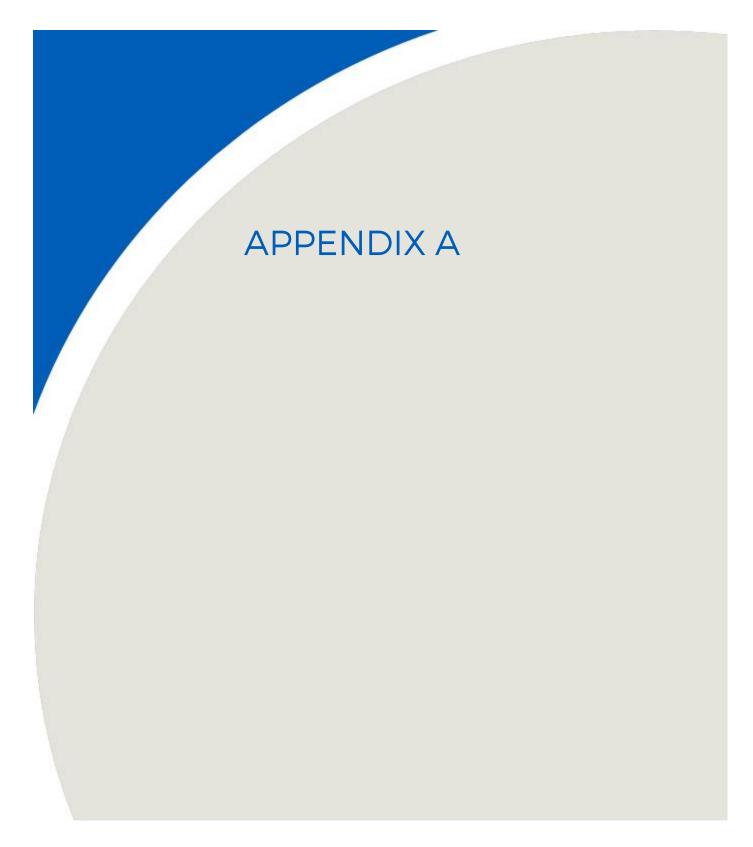
We trust this memo satisfies your current needs. If you have additional questions, please do not hesitate to contact us.

Yours truly,

Raisa Lalui, M.Eng Project Manager

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REPORT



EMERYVILLE PUBLIC MARKET – PARCEL B

EMERYVILLE. CA

PEDESTRIAN WIND STUDY RWDI # 1902969 May 14, 2019

SUBMITTED TO

Mark Stefan

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EXECUTIVE SUMMARY

RWDI was retained to conduct a pedestrian wind assessment for the proposed Emeryville Public Market - Parcel B development in Emeryville, CA (Image 1). Based on our wind tunnel testing of the proposed development under the Existing, Existing + Project and Project + Cumulative configurations (Images 2A through 2C), and the local wind records (Image 3), the potential wind hazard and comfort conditions are predicted as shown on site plans in Figures 1A through 2C, while the associated wind speeds are listed in Tables 1 and 2. These results can be summarized as follows:

Wind Hazard Conditions:

- For the existing configuration (without the project), wind speeds at all locations are anticipated to comply with the wind hazard criterion except for a location on the east side of the railroad tracks near the pedestrian bridge tower.
- With the addition of the proposed building to the site (existing + project configuration), and the
 future buildings (5850 Shellmound Way and Parcel F) to the southwest of the project (project +
 cumulative configuration), wind speeds at all locations are expected to meet the wind hazard
 criterion including the location on the east side of the railroad tracks near the pedestrian bridge
 tower.

Wind Comfort Conditions:

- Wind speeds at 24 locations in the existing configuration (without the project) are expected to
 exceed the comfort criterion. Most of these locations are to the west of the project site and
 around the building east of Overland Avenue.
- For the existing + project configuration and the project + cumulative configuration, wind conditions are expected to be moderated and the numbers of locations where wind speeds exceed the comfort criterion are predicted to be 15 and 18, respectively.

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PEDESTRIAN WIND STUDY EMERYVILLE PUBLIC MARKET - PARCEL B

RWDI #1902969 May 14, 2019



LIST OF FIGURES

Figure 1A: Wind Hazard Conditions – Existing

Figure 1B: Wind Hazard Conditions – Existing + Project
Figure 1C: Wind Hazard Conditions – Project + Cumulative

Figure 2A: Wind Comfort Conditions – Existing

Figure 2B: Wind Comfort Conditions – Existing + Project
Figure 2C: Wind Comfort Conditions – Project + Cumulative

LIST OF TABLES

Table 1: Wind Hazard Conditions
Table 2: Wind Comfort Conditions

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1 INTRODUCTION

RWDI was retained to conduct a pedestrian wind assessment for the proposed Emeryville Public Market – Parcel B development in Emeryville, CA. This report presents the project objectives, background, RWDI's approach and a discussion of the results.

1.1 Project Description

The project (site shown in Image 1) is located on the east side of Shellmound Street between 63th Street to the north and Powell Street to the south. The proposed development consists of an 8-story, approximately 113 ft tall, building with retail stores on grade level, parking spaces on Levels 2 through 5 and research laboratories on Levels 6 through 8.

1.2 Objectives

The objective of the study was to assess the effect of the proposed development on local wind conditions in pedestrian areas on and around the study site and provide recommendations for minimizing adverse effects, if needed. This quantitative assessment was based on wind speed measurements on a scale model of the project and its surroundings in one of RWDI's boundary-layer wind tunnels. These measurements were combined with the local wind records and compared to appropriate criteria for gauging wind comfort and safety in pedestrian areas. The assessment focused on critical pedestrian areas, including building entrances and adjacent/nearby public sidewalks and walkways.



Image 1: Aerial View of Site and Surroundings (Photo Courtesy of Google™ Earth)

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PEDESTRIAN WIND STUDY EMERYVILLE PUBLIC MARKET - PARCEL B

RWDI #1902969 May 14, 2019



2 BACKGROUND AND APPROACH

2.1 Wind Tunnel Study Model

To assess the wind environment around the proposed project, a 1:300 scale model of the project site and surroundings was constructed for the wind tunnel tests of the following configurations:

A - Existing: Existing site with existing surroundings (Image 2A)

B – Existing + Project: Proposed project with existing surroundings (Image 2B)

C – Project + Cumulative: Proposed project with future surroundings (Image 2C)

The wind tunnel model included all relevant surrounding buildings and topography within an approximately 1200 ft radius of the study site. The wind and turbulence profiles in the atmospheric boundary layer beyond the modelled area were also simulated in RWDI's wind tunnel. The wind tunnel model was instrumented with 45 specially designed wind speed sensors to measure mean and gust speeds at a full-scale height of approximately 5 ft above local grade in pedestrian areas throughout the study site. Wind speeds were measured for 36 directions in a 10-degree increment. The measurements at each sensor location were recorded in the form of ratios of local mean and gust speeds to the mean wind speed at a reference height above the model. The placement of wind measurement locations was based on our experience and understanding of the pedestrian usage for the site and reviewed by the project team.

rwdi.com AR3023 Page 2







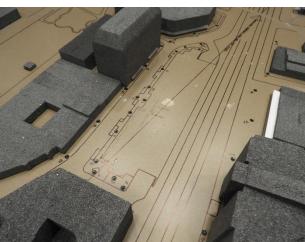


Image 2A: Wind Tunnel Study Model – Existing Configuration

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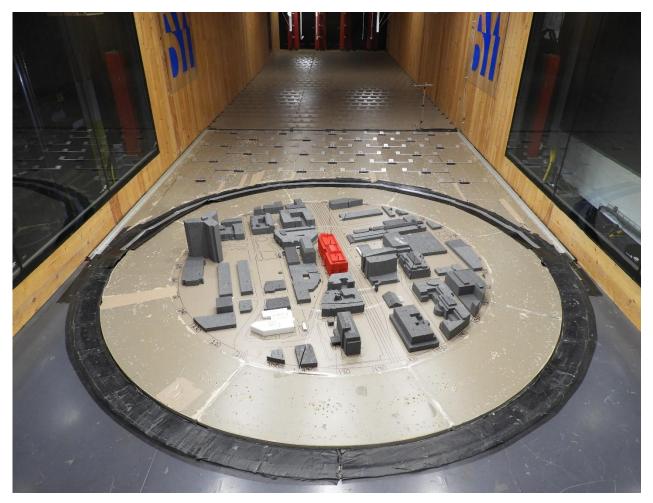






Image 2B: Wind Tunnel Study Model – Existing + Project Configuration

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Image 2C: Wind Tunnel Study Model – Project + Cumulative Configuration

rwdi.com AR3026 Page 5



2.2 Meteorological Data

Wind statistics recorded at Metropolitan Oakland International Airport between 1987 and 2017, inclusive, were analyzed for annual wind conditions. Image 3 graphically depicts the directional distribution of the annual wind frequencies and speeds. Winds are frequent from the northwest through west-southwest directions throughout the year, as indicated by the annual wind rose. Strong winds of a mean speed greater than 15 mph measured at the airport (at an anemometer height of 30 feet) occur 11.5% of the time annually.

Wind statistics were combined with the wind tunnel data to predict the frequency of occurrence of full-scale wind speeds. The full-scale wind predictions were then compared with the appropriate criteria for pedestrian comfort and safety.

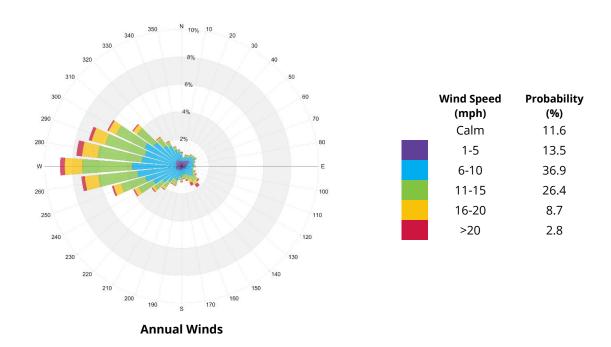


Image 3: Directional Distribution of Winds Approaching Metropolitan Oakland International Airport from 1987 to 2017

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2.3 Planning Code Requirements

Since the City of Emeryville does not have a wind significance threshold, the City of Oakland's requirements were considered. In Oakland, a wind analysis needs to be done if the height of the project is 100 feet or greater (measured to the roof) and one of the following conditions exists:

- The project is located adjacent to a substantial water body (i.e. Oakland Estuary, Lake Merritt or San Francisco Bay).
- The project is in downtown.

Since the proposed project (approximately 113 feet tall) exceeds the 100 feet height and is adjacent to San Francisco Bay, it is subject to the thresholds of significance.

For the purposes of this study, the City of Oakland considers a significant wind impact to occur if a project were to "create winds exceeding 36 mph for more than one hour during daylight hours of the year". The Planning Code defines these wind speeds in terms of equivalent wind speeds (the average wind speeds (mean velocity) adjusted to include the level of gustiness and turbulence). Equivalent wind speeds were calculated according to the specifications in the City of Oakland Significant Wind Impact Criterion, whereby the mean hourly wind speed is increased when the turbulence intensity is greater than 15% according to the following formula:

$$EWS = V_m \times (2 \times TI + 0.7)$$

where EWS = equivalent wind speed

 V_m = mean pedestrian-level wind speed

TI = turbulence intensity

Pedestrian Comfort

Although not applicable towards Significant Wind Impacts as defined by the City of Oakland, wind comfort speeds have been calculated for informational purposes. The comfort criteria are that wind speeds do not exceed 11 mph for more than 10% of the time during the year, when calculated for daylight hours, in substantial pedestrian use areas. A lower wind speed threshold of 7 mph may be considered for public seating areas where calmer wind conditions are ideal.

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PEDESTRIAN WIND STUDY EMERYVILLE PUBLIC MARKET - PARCEL B

RWDI #1902969 May 14, 2019



3 RESULTS AND DISCUSSION

This section presents the wind tunnel test results analyzed in terms of the equivalent wind speeds (EWS) as defined in the previous section. Within the text of this report, the equivalent wind speeds are simply referred to as wind speeds.

The wind hazard conditions for the configurations tested are graphically depicted on site plans in Figures 1A through 1C located in the "Figures" section of this report. Table 1, located in the "Tables" section, numerically presents these results and lists the predicted wind speed to be exceeded one hour per year. The predicted number of hours per year that the wind hazard criterion (one minute wind speed of 36 mph) is exceeded is also provided. A letter "e" in the last column of each configuration indicates the wind hazard exceedance.

The wind comfort results for the configurations tested are graphically depicted on site plans in Figures 2A through 2C, where locations have been color-coded according to the criteria of the 7 mph and 11 mph comfort categories explained in the Planning Code Requirements. This data is numerically presented in Table 2. For all the measurement points, the equivalent wind speeds exceeded 10% of time are listed (please note that wind speeds will be below these values for 90% of the time). Each location is marked as a comfort exceedance if the 11 mph threshold is exceeded. A letter "e" in the last column of each configuration indicates a wind comfort exceedance.

The following is a detailed discussion of the suitability of the predicted wind conditions for each area of interest.

3.1 Existing Configuration

For the existing configuration, the 1-hour per year wind hazard criterion is expected to be met at all test locations. Exception is Location 44 on the east side of the railroad tracks near the pedestrian bridge tower (Figure 1A). For all locations tested, the average wind speed which is exceeded for 1 hour per year is 28 mph (Table 1).

For all the 45 test locations, the average wind speed for 90% of the time is below 12 mph (Table 2). Wind speeds at 24 test locations exceed the Planning Code's pedestrian comfort criterion of 11 mph (see Figure 2A). On average, winds exceed the comfort criterion 15% of the time when all test locations are considered.

3.2 Existing + Project Configuration

With the addition of the proposed development, wind speeds are expected to meet the hazard criterion at all test locations. The hazard exceedance at Location 44 in the existing configuration would be eliminated after the addition of the project (Figure 1B). For all locations tested, the average wind speed exceeded for 1 hour per year is 26 mph, which is 2 mph lower than the existing configuration (Table 1).

For all the 45 test locations, the average wind speed for 90% of the time is below 11 mph (Table 2). Wind speeds at 15 test locations exceed the Planning Code's pedestrian comfort criterion of 11 mph (see Figure 2B). On average, winds exceed the comfort criterion 12% of the time when all test locations are considered. These results, in general, indicate the positive effect of the project on the wind conditions around the site.

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3.3 Project + Cumulative Configuration

The addition of the approved cumulative developments (5850 Shellmound Way and Parcel F) in the surrounding area would provide wind speeds similar to those for the existing + project configuration. The wind hazard criterion is met at all locations (Figure 1C) and the average wind speed exceeded for 1 hour per year is 26 mph (Table 1). Wind speeds at 18 test locations exceed the Planning Code's pedestrian comfort criterion of 11 mph (see Figure 2C). The average 90% wind speed for the 45 test locations is below 11 mph (Table 2) and winds exceed the comfort criterion 13% of the time (Table 2).

4 APPLICABILITY OF RESULTS

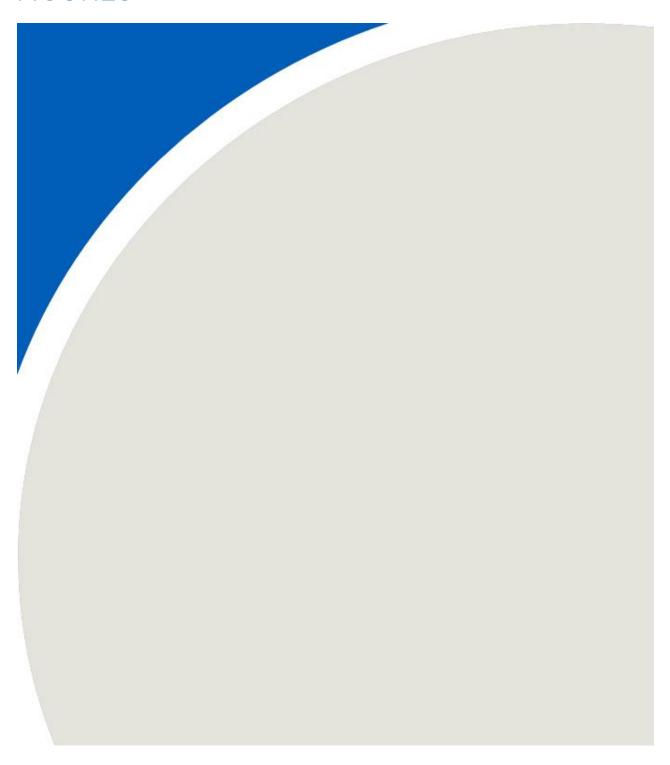
The drawings and information listed below were received from Hart Howerton and were used to construct the scale model of the proposed Emeryville Public Market – Parcel B development. The wind conditions presented in this report pertain to the proposed project as detailed in the architectural design drawings listed in the table below. Should there be any design changes that deviate from this list of drawings, the wind condition predictions presented may be affected. Therefore, for any changes in the design, it is recommended that RWDI be contacted and requested to review their potential impact on wind conditions.

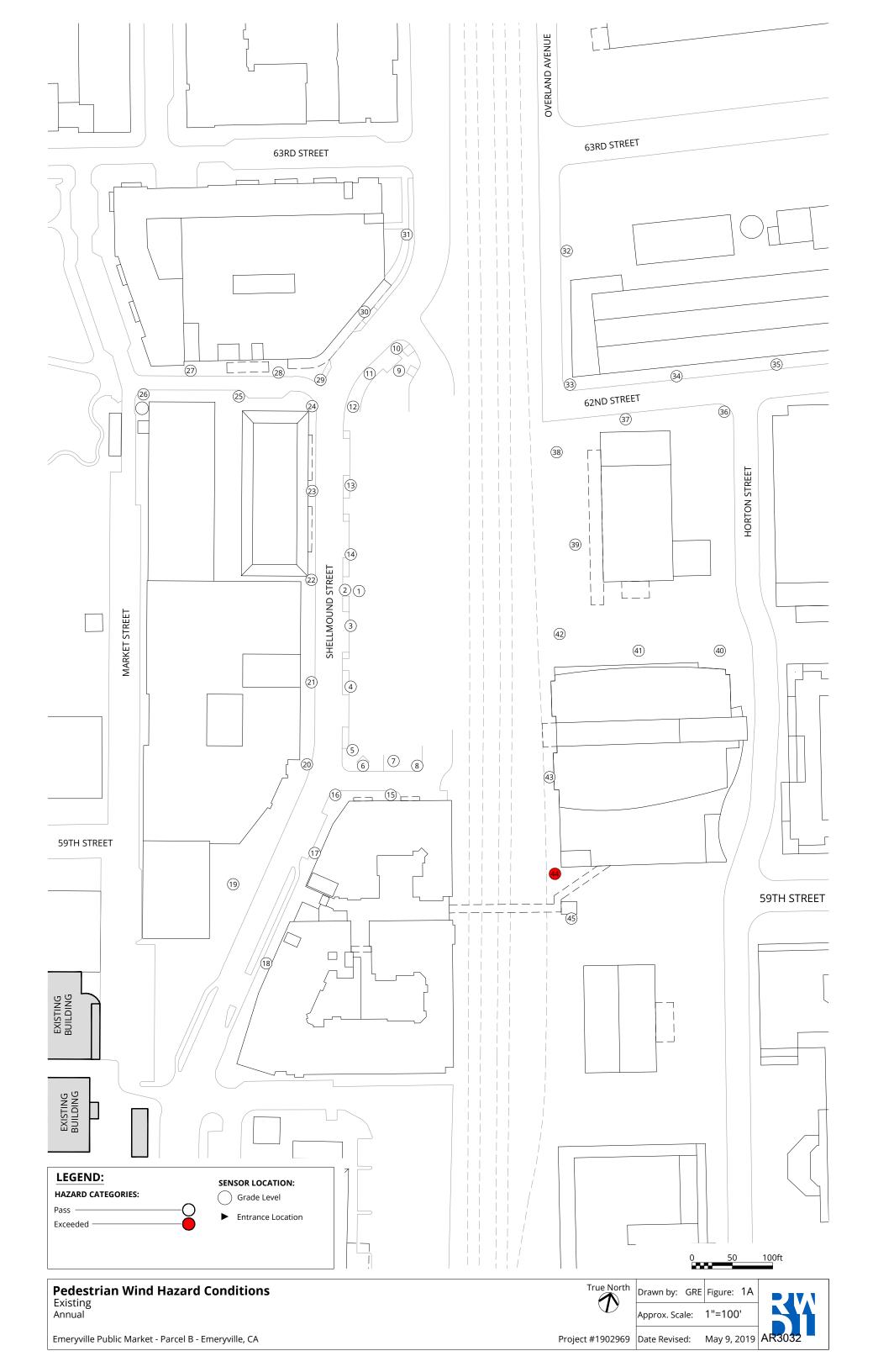
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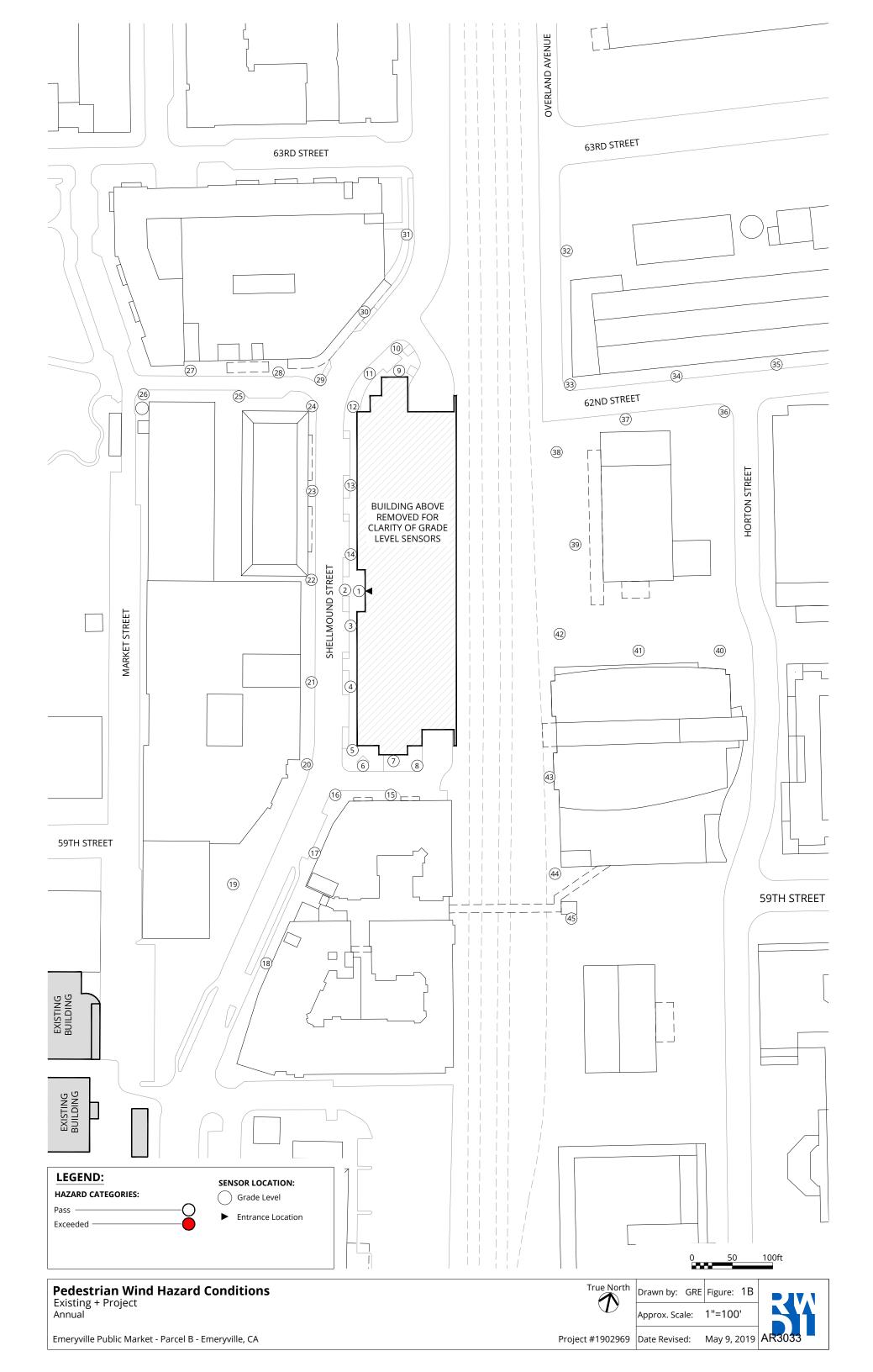
rwdi.com AR3030 Page 9

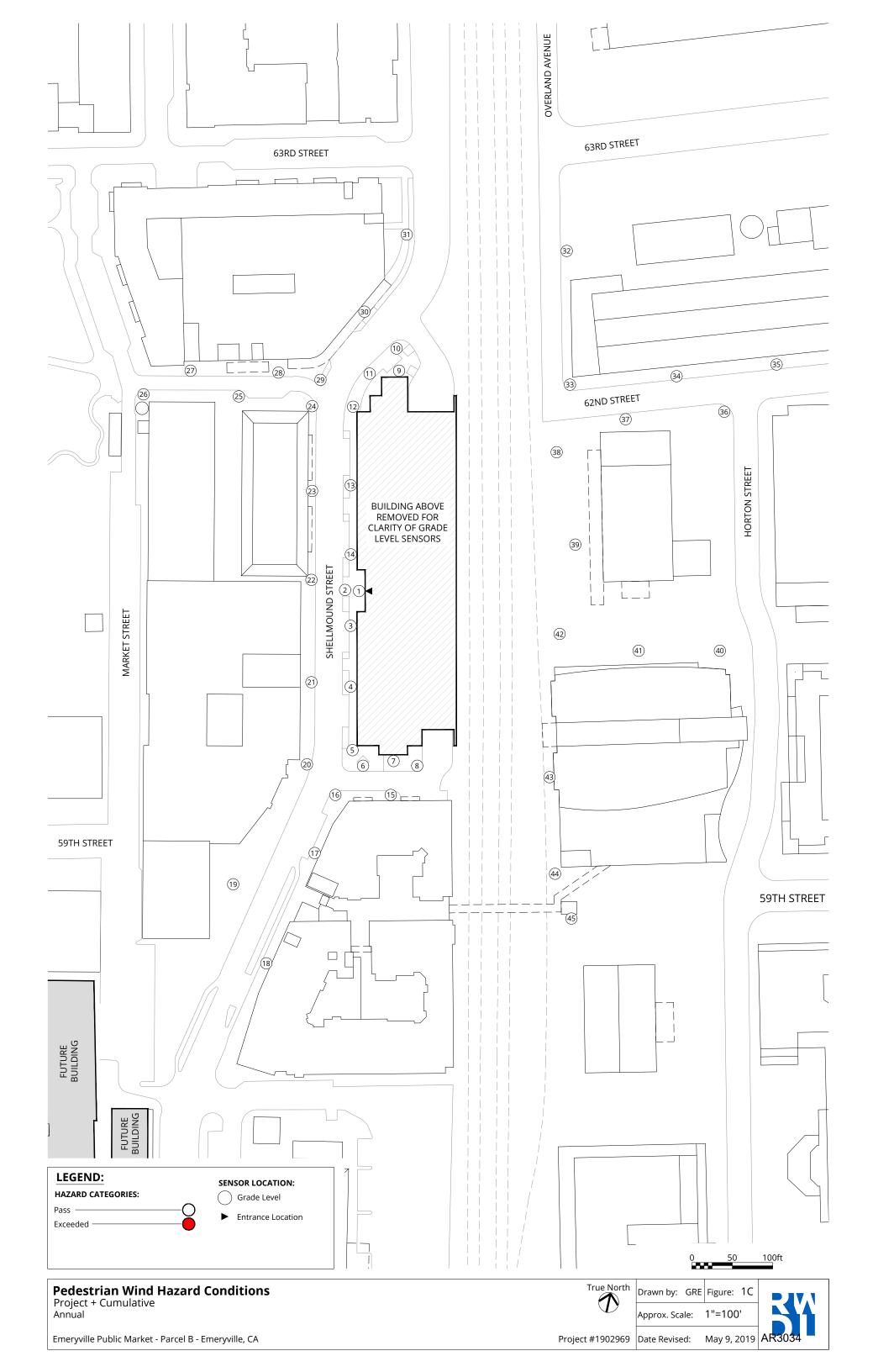


FIGURES

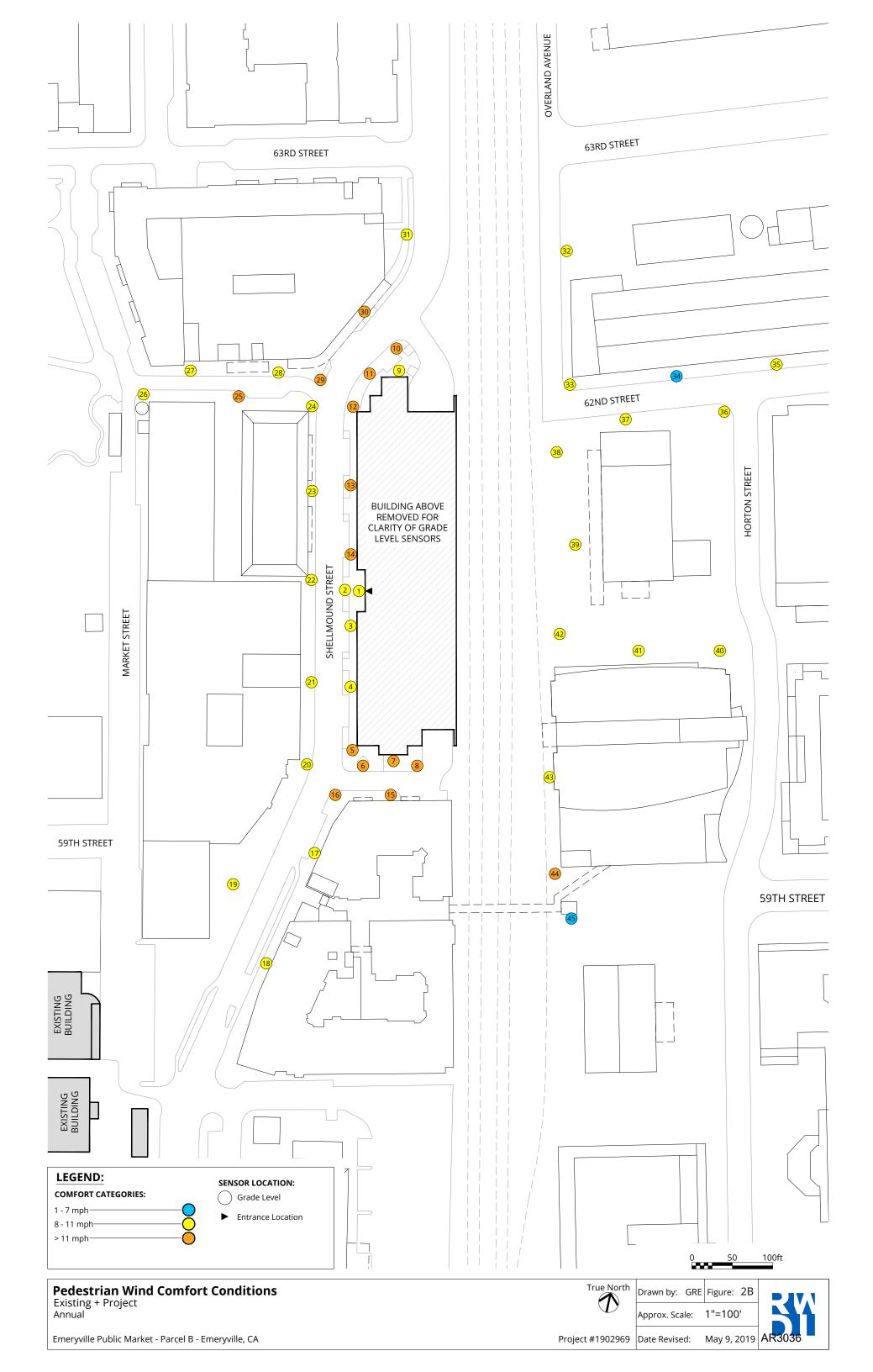


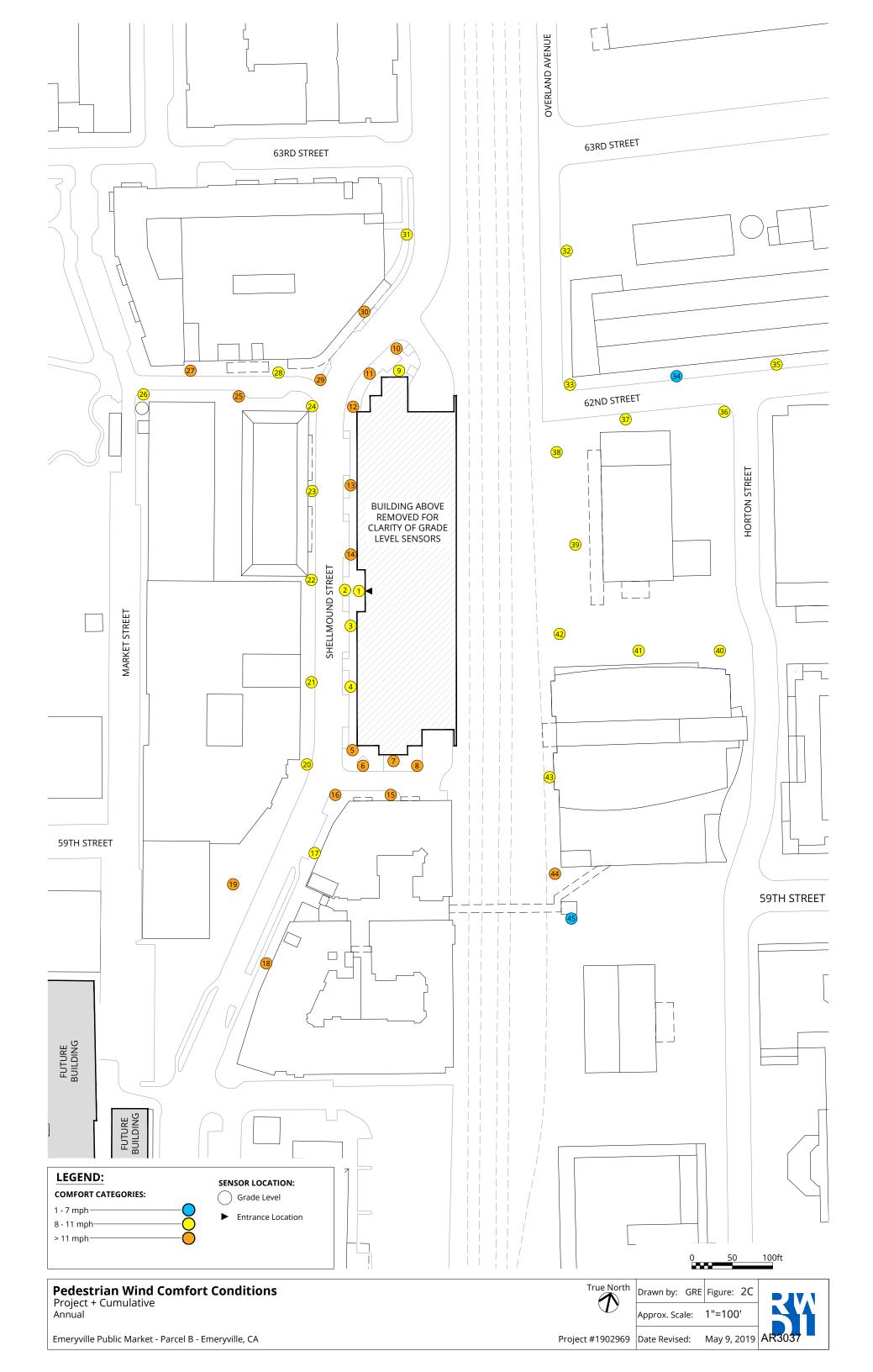














TABLES

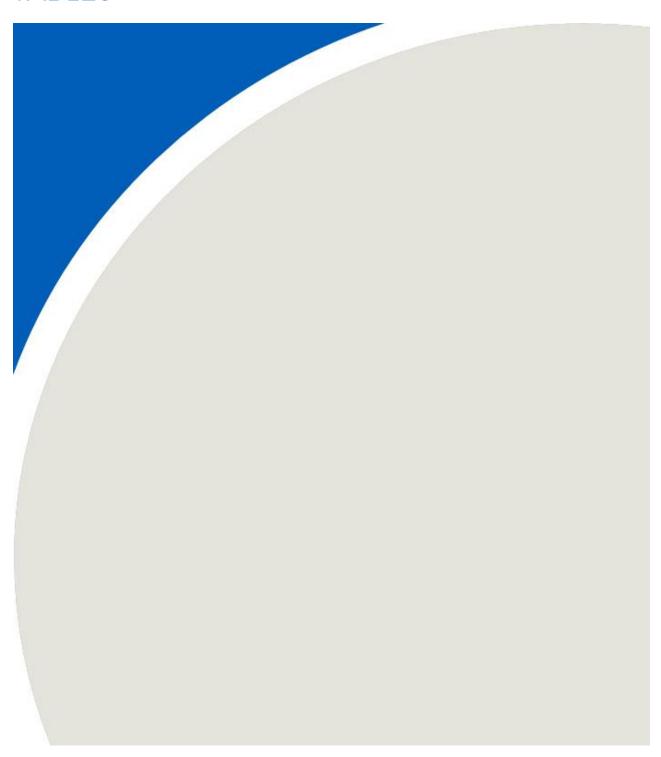




Table 1: Wind Hazard Conditions

	Ex	isting		Ex	isting + Pro	ject		Proj	ect + Cumu	llative	
Location	Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Hours Change Relative to Existing	Exceeds
1	28	0		25	0	0		25	0	0	
2	30	0		25	0	0		25	0	0	
3	27	0		23	0	0		22	0	0	
4	25	0		19	0	0		21	0	0	
5	31	0		26	0	0		27	0	0	
6	33	0		30	0	0		30	0	0	
7	32	0		31	0	0		31	0	0	
8	31	0		33	0	0		32	0	0	
9	24	0		20	0	0		21	0	0	
10	24	0		28	0	0		28	0	0	
11	27	0		32	0	0		32	0	0	
12	29	0		32	0	0		32	0	0	
13	30	0		29	0	0		29	0	0	
14	35	0		33	0	0		33	0	0	
15	28	0		33	0	0		33	0	0	
16	34	0		30	0	0		30	0	0	
17	24	0		21	0	0		21	0	0	
18	24	0		22	0	0		25	0	0	
19	25	0		24	0	0		27	0	0	
20	28	0		22	0	0		22	0	0	
21	29	0		20	0	0		21	0	0	
22	27	0		27	0	0		27	0	0	
23	23	0		26	0	0		25	0	0	
24	29	0		24	0	0		24	0	0	
25	34	0		33	0	0		33	0	0	
26	25	0		25	0	0		25	0	0	
27	28	0		28	0	0		28	0	0	
28	25	0		24	0	0		25	0	0	
29	34	0		29	0	0		30	0	0	
30	24	0		27	0	0		27	0	0	
31	25	0		24	0	0		24	0	0	
32	25	0		22	0	0		22	0	0	
33	22	0		27	0	0		26	0	0	
34	24	0		20	0	0		19	0	0	
35	21	0		21	0	0		22	0	0	
36	28	0		26	0	0		28	0	0	



Table 1: Wind Hazard Conditions

	Ex	isting		Ex	isting + Pro	ject		Proj	ect + Cumເ	llative	
Location	Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours per Year Wind Speed Exceeds Hazard Criteria	Hours Change Relative to Existing	Exceeds
37	21	0		22	0	0		22	0	0	
38	25	0		27	0	0		26	0	0	
39	24	0		25	0	0		24	0	0	
40	32	0		27	0	0		27	0	0	
41	32	0		27	0	0		27	0	0	
42	31	0		28	0	0		29	0	0	
43	30	0		28	0	0		28	0	0	
44	40	3	е	28	0	-3		28	0	-3	
45	19	0		17	0	0		17	0	0	

	Average (mph)	Total Hours	Total	Average (mph)	Total Hours	Hours Change	Total	Average (mph)	Total Hours	Hours Change	Total
SUMMARY	28	3	1 45	26	0	-3	0 45	26	0	-3	0 45



Table 2: Wind Comfort Conditions

	Ex	cisting		Ex	cisting + Pro	ject		Proj	ject + Cumu	lative	
Location	Wind Speed Exceeded 10% of Time (mph)	% of Time Wind Speed Exceeds 11 mph (%)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	% of Time Wind Speed Exceeds 11 mph (%)	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	% of Time Wind Speed Exceeds 11 mph (%)	Speed Change Relative to Existing (mph)	Exceeds
1	13	19	е	11	10	-2		11	10	-2	
2	13	18	е	10	6	-3		10	6	-3	
3	12	15	е	11	10	-1		10	6	-2	
4	12	14	е	9	4	-3		10	5	-2	
5	15	30	е	12	16	-3	е	13	19	-2	е
6	16	34	е	14	24	-2	е	14	27	-2	е
7	15	30	е	14	26	-1	е	15	26	0	е
8	14	24	е	15	31	1	е	15	31	1	е
9	10	7		8	3	-2		8	3	-2	
10	10	6		13	18	3	е	13	18	3	е
11	12	12	е	13	22	1	е	14	23	2	е
12	12	12	е	14	25	2	е	14	25	2	е
13	10	7		14	22	4	е	14	25	4	е
14	12	14	е	14	21	2	е	14	21	2	е
15	13	19	е	15	27	2	е	15	28	2	е
16	16	34	е	15	29	-1	е	14	27	-2	е
17	10	7		9	5	-1		9	4	-1	
18	11	10		10	7	-1		12	13	1	е
19	12	14	е	11	10	-1		12	16	0	е
20	12	17	е	10	6	-2		10	7	-2	
21	12	16	е	9	3	-3		9	3	-3	
22	10	6		11	10	1		11	10	1	
23	8	2		11	10	3		11	10	3	
24	10	7		11	10	1		11	10	1	
25	15	26	е	14	24	-1	е	15	26	0	е
26	10	5		9	5	-1		10	5	0	
27	12	12	е	11	10	-1		12	13	0	е
28	11	10		11	10	0		11	10	0	
29	15	23	е	13	17	-2	е	13	19	-2	е
30	9	5		13	17	4	е	13	18	4	е
31	9	5		11	10	2		11	10	2	
32	10	7		9	3	-1		9	3	-1	
33	11	10		11	10	0		11	10	0	
34	9	3		7	1	-2		7	1	-2	
35	10	7		9	4	-1		9	4	-1	
36	11	10		10	5	-1		10	5	-1	



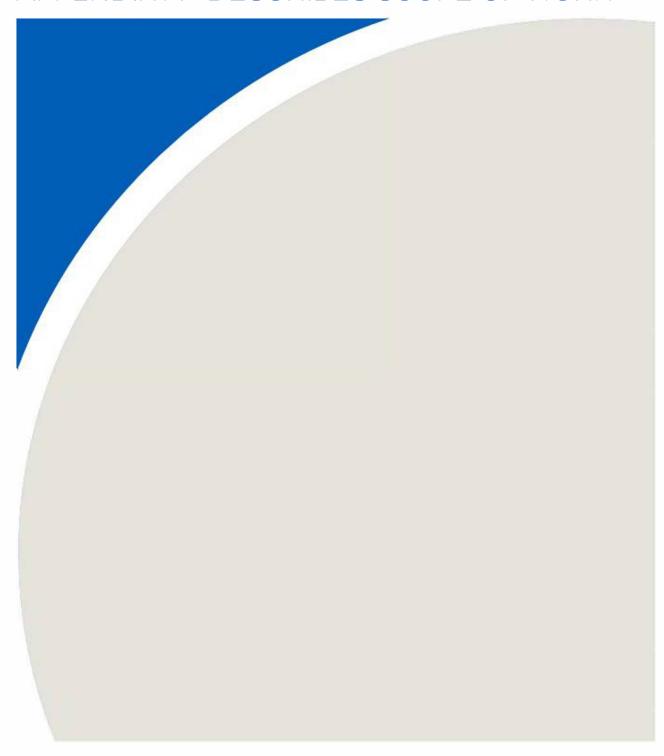
Table 2: Wind Comfort Conditions

	Ex	cisting		Ex	isting + Pro	ject		Proj	ect + Cumu	lative	
Location	Wind Speed Exceeded 10% of Time (mph)	Wind Speed	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Wind Speed	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Wind Speed	Speed Change Relative to Existing (mph)	Exceeds
37	8	2		9	3	1		9	4	1	
38	11	10		11	10	0		11	10	0	
39	11	10		10	7	-1		10	7	-1	
40	15	26	е	11	10	-4		11	10	-4	
41	15	26	е	11	10	-4		11	10	-4	
42	15	27	е	11	10	-4		11	10	-4	
43	14	22	е	9	5	-5		9	5	-5	
44	18	39	е	14	22	-4	е	13	21	-5	е
45	8	1		7	1	-1		7	1	-1	

	Average (mph)	Average (%)	Total	Average (mph)	Average (%)	Speed Change (mph)	Total	Average (mph)	Average (%)	Speed Change (mph)	Total
SUMMARY	12	15	24 45	11	12	-1	15 45	11	13	-1	18 45



APPENDIX A - DESCRIBES SCOPE OF WORK



PEDESTRIAN LEVEL WINDS



Pedestrian level wind services evaluate wind speeds and frequencies and how they impact the comfort and safety of people in outdoor spaces.

WIND TUNNEL TESTING

A scale replica of the redevelopment site and surroundings will be tested in a wind tunnel to simulate the winds approaching and interacting with the project site. This is the most advanced and accurate means of predicting wind speeds around buildings and structures.

Wind Climate Analysis

As required by the City of Emeryville, data describing the speed, direction and frequency of occurrence of wind gathered at Metropolitan Oakland International Airport between 1982 and 2012 will be used for this study.

Proximity Model

A proximity model of the existing buildings and relevant surroundings within an approximate 1600 foot radius of the center of the development site will be constructed at an approximate scale (i.e., 1:400 scale). The buildings immediately surrounding the study site will be modeled in more detail than buildings beyond this radius. The model will incorporate relevant topographic changes as applicable. Surroundings beyond the limits of the proximity model will be appropriately simulated by spires and roughness blocks situated on the wind tunnel floor upwind of the study model. This will provide an accurate representation of the wind speed and turbulence profiles of wind approaching the study model.

Scale Model Construction

A scale replica of the redevelopment site will be constructed. The scale will be selected so that it is appropriate for the size of the project, to capture the relevant architectural details and surroundings. A series of wind speed sensors that measure both mean and gusts will be installed on the model to measure wind conditions at key pedestrian areas. The sensors are meant to represent an average person's height, and we will work with the design team to locate sensors in all areas of interest. *The proposed test locations will be provided to the project team and City for review and comment prior to the testing.*

Wind Tunnel Testing

A boundary-layer wind tunnel will be used to simulate the natural wind speed and turbulence levels at the site. The wind tunnel is equipped with spires and dynamic roughness that will be used to simulate the approaching wind speed and turbulence profiles. The context of the surrounding buildings to include during the Cumulative test configuration (as described below) and the need for testing this configuration will be confirmed with the project team and the City in advance of testing.



PEDESTRIAN LEVEL WINDS



Pedestrian level wind services evaluate wind speeds and frequencies and how they impact the comfort and safety of people in outdoor spaces.

Two development configurations of the study site and surroundings will be tested:

- **Existing:** the existing surroundings, with any buildings currently on site, without the proposed development.
- Existing plus Project: the proposed development along with existing surroundings.

Optional, if required:

• **Existing plus Project plus Cumulative:** the proposed development, along with existing surrounding structures and surrounding future buildings.

Analysis

The data collected from the wind tunnel will be analyzed together with the the area's long-term meteorological statistics to predict how often selected wind speed ranges will occur at each location. Results will first be reviewed against the pedestrian wind comfort and safety criteria determined appropriate with the city. Results will be presented in a diagrammatic form, relating each measurement location with its resulting comfort/safety rating.

In the event that undesirable conditions are predicted, we will use our experience and judgment to suggest wind control strategies in an effort to improve conditions. If conditions are particularly severe in critical areas, we may recommend or the City may require additional testing to develop specific solutions and satisfy planning code requirements additional scope would be provided to accommodate this effort if required.

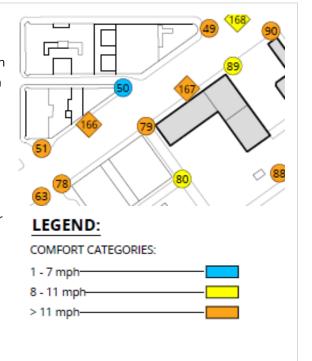


Exhibit G

Kimley Horn Analysis

Kimley » Horn

February 21, 2019

Mark Stefan AG-CCRP Public Market, LP 170 Grant Avenue, Sixth Floor San Francisco, CA 94108 (transmitted via email)

RE: Emeryville Public Market Parcel B – Traffic Response to Appeal Letter

Dear Mr. Stefan:

For the proposed Parcel B project in the Emeryville Public Market, an appeal letter from Wareham Development dated February 8, 2019 was submitted to the Mayor and City Council of Emeryville. As it pertains to traffic, Comment #4 states:

The traffic timing and impacts of the proposed office use are very different than those of retail. Office use primarily creates heavy commute-time trips while retail trips re much more dispersed throughout the day. The fact that the staff report says that total traffic counts are slightly less than the prior approval disregards the very real timing impact of those trips. The change of uses proposed with the latest Parcel B proposal deserves such detailed analysis.

Kimley-Horn Response: You are correct that the vehicle trips for an office use occur at different times than for a retail use. However, the trip generation analysis that was conducted in the *Emeryville Public Market Parcel B – Trip Generation Evaluation Final Letter*, dated December 12, 2018 (Attachment A) accounts for these differences. While only focusing on the peak hour of traffic in the AM and PM periods, the previous 2008 EIR (which includes 120,000 sf of office and 29,150 sf of retail) and the proposed Parcel B (which includes 181,100 sf of research and development center and 14,100 sf of retail) were compared using trip generation rates from the industry standard Institute of Transportation Engineers (ITE) *Trip Generation Manual*. The trip generation rates are developed based on surveys collecting traffic counts during the AM and PM periods of adjacent street traffic at various sites throughout the country based on the square footage and land use. This evaluation concluded that the proposed Parcel B project would generate fewer AM and PM peak hour trips.

Sincerely.

Ben Huie, P.E.

California Professional Engineer #C76682

Attachments

Attachment A - Emeryville Public Market Parcel B - trip Generation Evaluation Final Letter

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Attachment A

Kimley » Horn

December 12, 2018

Mark Stefan AG-CCRP Public Market, LP 170 Grant Avenue, Sixth Floor San Francisco, CA 94108 (transmitted via email)

RE: Emeryville Public Market Parcel B – Trip Generation Evaluation

Final Letter

Dear Mr. Stefan:

A development plan is being proposed for Parcel B in the Emeryville Public Market in Emeryville, CA. Kimley-Horn will conduct an analysis that considers the proposed plans in relation to the 2008 Environmental Impact Report (EIR). The following discusses the methodology, analysis, and results of the traffic and parking assessment.

BACKGROUND

In August 2008, the City of Emeryville approved the Marketplace Preliminary Development Plan (PDP). The PDP planned for 120,000 square feet of office and 29,150 square feet of commercial, and parking. Parcel B is now being proposed to include research and development center square footage instead of office square footage and less retail square footage than before. An updated project description was provided in December 2018 and includes a summary of the new uses for the Parcel B site. It should be noted that the project description includes square footages for servicing and vertical circulation in the gross square footage of the building. Table 1 summarizes these land uses for Parcel B, as well as the change from the 2008 PDP. The office and research and development center land uses are listed as gross floor area and the retail land use is listed as gross leasable area because those are the metrics used for trip generation purposes. To determine the gross square footage for the research and development center use, the vertical circulation and servicing areas were proportionally assigned to the research and development center and retail components of the project. It should be noted that the during the project programming during the EIR process, it was the intent to list the office square footage as leasable office area and not gross square footage.

Table 1 - 2008 EIR and 2018 Proposed Parcel B Land Use Summary

Land Use	2008 PDP	2018 Proposed	Difference
Office Land Use including Research and Development Use (Gross Floor Area)	120,000 SF	181,100 SF	+61,100 SF
Retail Land Use (Gross Leasable Area)	29,150 SF	14,100 SF	-15,050 SF
Total	149,150 SF	195,200 SF	+46,050 SF

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PARCEL B TRIP GENERATION COMPARISON

Trip generation is typically estimated by using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition'. This is the standard reference in the industry for determining trip generation for potential projects. The land use that bests represents the proposed research and development use is Research and Development Center (Land Use 760) and Shopping Center (Land Use 820) for the retail use. The retail use is consistent with the previous trip generation comparisons for this project in the *Emeryville Public Market Trip Generation Evaluation* letter by Kimley-Hom dated October 21, 2013. The average rate for each land use was used to estimate the project trips.

Other trip generation considerations were reviewed. Internal capture reductions, which account for the interaction among different uses in a multi-use development, were determined to be relevant for Parcel B because the project has a mix of retail and office uses. The internal capture reductions follow the methodology stated in the ITE *Trip Generation Handbook, 3rd Editional*. This methodology uses the National Cooperative Highway Research Program (NCHRP) 684 Internal Trip Capture Estimation Tool. This tool uses the raw trip generation calculations for the individual uses from the ITE *Trip Generation Manual* and applies proximity adjustment factors and unconstrained internal trip capture rates to determine the demand between the land uses and then balances these values to estimate the number of external trips for each use.

In addition, the Marketplace Transportation Assessment memorandum by Fehr and Peers, dated May 18, 2015, used a trip reduction of 15 percent for external walk/bike trips and a 10 percent reduction for external transit trips. A 30 percent pass-by trip reduction was assumed for the retail uses. To be consistent with this study, the same trip reductions were assumed for this study. Table 3 shows the expected vehicle trips for the previous 2008 EIR project and Table 4 shows the expected vehicle trips for the proposed 2018 project.

Table 5 summarizes the difference between the 2008 EIR project trip generation and the 2018 proposed project trip generation. The proposed project is expected to generate 36 fewer AM peak hour trips and 54 fewer PM peak hour trips when compared to the EIR use.

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Trip Generation Manual, 10th Edition, Institute of Transportation Engineers, Washington, D.C., 2017.

² Trip Generation Handbook, 3rd Edition, Institute of Transportation Engineers, Washington, D.C., 2017.



Table 3 - Previous 2008 EIR Parcel B Project Trips

ITE Land Use Code ¹	Land Use	Size	Units	AM Peak				PM Peak			
	Later Cont.			Rate	Total	in	Out	Rate	Total	In	Out
710	General Office Building	120	KSF	1.16	139	120	19	1,15	138	22	116
820	Shopping Center	29.150	KSF	0.94	27	17	10	3.81	111	53	58
Total Project Trips				166	137	29		249	75	174	
Internal Capture Reduction ²				-10	-8	-8		-10	-5	-5	
External Walk/Bike Trip Reduction [®] (15%)				-25	-21	4		-37	-11	-20	
E)	External Transit Trip Reduction*(15%)				-17	-14	-3		-25	-8	-17
Total External Trips				109	95	14		177	51	126	
Pass-By Trip Reduction* (30%)				-32	-28	4		-53	-15	-38	
Net New Project Trips				77	67	10		124	36	88	

¹ Based on ITE Trip Generation Manual, 10th Edition

Table 4 - Proposed 2018 Parcel B Project Trips

-											
ITE Land Use Code ¹	Land Use	Size	Units		AM P	eak			PM Peak		
	Latin Made			Rate	Total	lin.	Out	Rate	Total	ln .	Out
760	Research and Development Genter	191.100	KSF	0.42	76	57	19	0.49	89	13	78
820	Shopping Center	14.100	KSF	0.94	13	8	5	3.81	53	25	28
Total Project Trips			- 0	89	65	24	F 10	143	39	104	
Internal Capture Reduction ²			-9	4	4	8 8	-8	-3	-3		
External Walk/Bike Trip Reduction® (15%)			-14	-10	+	D 2	-22	-8	-16		
External Transit Trip Reduction ⁴ (15%)				-9	-7	-2	7 - 6	-14	4	-10	
Total External Trips				58	44	14	3 3	101	26	75	
Fass-By Trip Reduction* (30%)				-17	-13	4	0 8	-31	-8	-23	
Net New Project Trips				41	31	10		70	18	52	

¹ Based on ITE Trip Generation Manual, 10th Edition

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Based on ITE Trip Generation Handbook, 3rd Edition

Based on MXD+ model from Marketplace Transportation Assessment memorandum from Fehr and Peers.

^{*} Based on MXD+ model from Marketplace Transportation Assessment memorandum from Fehr and Peers

Based on Markelplace Transportation Assessment memorandum from Fehr and Peers

³ Based on ITE Trip Generation Handbook, 3rd Edition
³ Based on MXD+ model from Marketplace Transportation Assessment memorandum from Fehr and Peers

⁴ Based on MXD+ model from Marketplace Transportation Assessment memorandum from Fehr and Peers

^{*} Based on Marketplace Transportation Assessment memorandum from Fehr and Peers



Table 5 - Parcel B Trip Generation Comparison

Scenario	1	AM Peak			PM Peal	k
SCEIMIN	Total	In	Out	Total	In	Out
2008 EIR	77	67	10	124	36	88
2018 Proposed	41	31	10	70	18	52
Difference	-36	-36	0	-54	-18	-36

PUBLIC MARKET LAND USE COMPARISON

In addition to the Parcel B trip generation evaluation, the Public Market, as a whole, was compared with the new proposed Parcel B land uses. Table 6 shows the land uses for the Public Market, as approved in the PDP in August 2008. As time has passed, Final Development Plans (FDP) have been approved for the various parcels. Table 6 shows the approved land uses for the Public Market, including the proposed Parcel B project, as of 2018. As shown, with the proposed Parcel B project, the Public Market would consist of 29 fewer residential dwelling units, 108,775 fewer square feet of retail use, 120,000 fewer square feet of office use, and 181,100 additional square feet of research and development center when compared to the approved PDP.

Table 6 - Public Market Land Use Comparison

Parcel	Land Use	Units	Approved PDP (in 2008)	Approved FDP with Parcel B (in 2018)	Difference
Α	Residential	Dwelling Units	206	157	-39
	Retail	Square Feet	14,725	14,000	-725
	Retail	Square Feet	29,150	14,100	-15,050
В	Office	Square Feet	120,000	0	-120,000
	R&D Center	Square Feet	D	181,100	+181,100
	Residential	Dwelling Units	86	66	-20
С	Retail	Square Feet	5,000	30,000	+25,000
<u>=2</u> //	Residential	Dwelling Units	198	223	+25
D	Retail	Square Feet	114,500	0	-114,500
-	Residential	Dwelling Units	D	0	0
E	Retail	Square Feet	3,500	6,000	+2,500
a distance of the	Residential	Dwelling Unite	185	190	+5
64 th /Christie	Retail	Square Feet	6,000	٥	-6,000
Retail Pads	Retail	Square Feet	7,000	7,000	0
	Residential	Dwelling Units	675	646	-29
Public Market	Retail	Square Feet	179,875	71,000	-108,775
Total	Office	Square Feet	120,000	0	-120,000
	R&D Center	Square Feet	0	181,100	+181,100

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A trip generation evaluation was conducted to determine if the increase in research and development land use is offset by the decrease in residential, retail, and office uses. The latest ITE *Trip* Generation Manual was used to estimate the difference in vehicle trips based on the differences in units for each land use between the approved PDPs in the EIR and the approved FDPs with the proposed Parcel B shown in Table 6. The residential uses were assumed to be ITE *Trip Generation Manual* land use code 221a, multifamily housing (mid-rise) in a dense multi-use urban area. The retail and office uses were assumed to be the same land uses as above for the Parcel B analysis. Table 7 shows the expected difference in vehicle trips. As shown, the total Public Market trip generation with the proposed Parcel B project would result in 171 fewer AM peak hour trips and 468 fewer PM peak hour trips when compared to the approved PDP in 2008.

Table 7 - Difference in Public Market Trip Generation

Land Use Code ¹		120000	Units	AM Peak				PM Peak			
	Land Use	Size		Rate	Total	In	Out	Rate	Total	ln .	Out
221a	Multifamily Housing (Mid-Rise)	-29	DU	0.20	-6	-1	.5	0.18	-5	-4	-1
710	General Office Building	-120.00	KSF	1.16	-139	-120	-19	1.15	-138	-22	-116
760	Research and Development Center	181.10	KSF	0.42	76	57	19	0.49	89	13	76
820	Shopping Center	-108.775	KSF	0.94	-102	-63	-39	3.81	414	-199	-218
- 3	Net Difference in P	roject Trips			-171	-127	-44		468	-212	-256

¹ Based on ITE Trip Generation Manual, 10th Edition

CONCLUSIONS

The land uses in Parcel B are expected to generate 36 fewer AM peak hour trips and 54 fewer PM peak hour trips when compared to the EIR use in 2008. In addition, the total Public Market trip generation with the proposed Parcel B project would result in 171 fewer AM peak hour trips and 468 fewer PM peak hour trips when compared to the approved PDP in 2008. Therefore, the proposed land uses in Parcel B should not result in any additional impacts than the impacts identified in the EIR.

Sincerely,

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