CITY OF OAKLAND

AGENDA REPORT

TO: Sabrina B. Landreth
City Administrator

FROM: Darin Ranelletti
Interim Director, DPB

SUBJECT: 285 and 301 12th Street Appeal

DATE: November 7, 2016

City Administrator Approval

Date: 11/17/16

RECOMMENDATION

Staff Recommends That The City Council Conduct A Public Hearing And Upon Conclusion Consider Adopting A Resolution Denying Appeals By Both Oakland Residents For Responsible Development And The W12 Benefits Coalitions, And Thus Upholding The Planning Commission's Approval Of A Proposal To Construct Two 7-Story Mixed Use Buildings Containing A Total Of 416 Dwelling Units And Approximately 26,200 Square Feet Of Commercial Located At 285 And 301 12th Street, Oakland CA (Project Case No. PLN16133), Including Adopting CEQA Exemptions (15183 & 15183.3) And Addendum (Relying On The Previously Certified 2014 Lake Merritt Station Area Plan EIR).

EXECUTIVE SUMMARY

On August 17, 2016, the Oakland Planning Commission approved case number PLN16-133, a proposal to construct two 7-story mixed use buildings with a total of 416 units and approximately 26,200 square feet of ground floor commercial space ("Project").

The item was originally heard at the August 3, 2016 Planning Commission meeting; and the associated staff report is included as ***Attachment A***. Planning Commission voted to approve the project at their August 17, 2016 meeting. Following Planning Commission action, two appeals were filed challenging the approval of the Project. The first appeal (PLN16-133-A01) was filed by a group opposed to the project solely on the claim that the proposal violates the California Environmental Quality Act (CEQA) (***Attachment B***). The second appeal (PLN15-133-A02) was filed by a group opposed to the Project largely on the claim that the proposal is inconsistent with the goals and policies of the Lake Merritt Station Area Plan ***(Attachment C)***. Staff recommends the City Council deny both appeals and uphold the Planning Commission decision to approve the Project.

Item: _____
City Council
November 29, 2016

BACKGROUND / LEGISLATIVE HISTORY

W12, LLC filed an application with the Bureau of Planning to develop a mixed use project at 285 and 301 12th Streets that would consist of two new seven story buildings containing approximately 26,200 square feet of ground floor commercial space and 416 dwelling units. Building 1 would be located within one full block at 301 12th Street (between 11th, 12th, Webster and Harrison Streets) and contain 339 units with approximately 24,600 square feet of ground floor commercial, replacing an existing warehouse building. Building 2 would be located within one quarter of a block at 285 12th Street (at the southeast corner of 12th and Harrison Streets) and contain 77 units with approximately 1,600 square feet of ground floor commercial on an existing undeveloped lot. The Project site is located within the Lake Merritt Station Area Plan (LMSAP) area.

On June 22, 2016, the proposal appeared before the Planning Commission's Design Review Committee, during which the Committee recommended the item move forward to the full Planning Commission for decision with various recommendations for design modifications to the Project.

On August 3, 2016, the Project was presented to the Planning Commission, incorporating changes in response to the Design Review Committee's comments and other stakeholder comments. At that date, the Planning Commission recommended the item return to the Planning Commission on August 17, 2016 to provide the applicant and community members with more time to attempt to reach a compromise on outstanding issues of concern. On August 17, 2016, a further revised Project was presented to the Planning Commission and was approved (3 – 2 vote) with a voluntary Condition of Approval, as proposed by the applicant, identifying additional Project contributions that were responsive to community stakeholder requests. See ***Attachment E*** for a copy of the decision letter, which contains the voluntary condition of approval, starting on page 16 of that document.

On August 26, 2016, Laura Horton, on behalf of *Oakland Residents for Responsible Development*, and on August 29, 2016, Alvina Wong, on behalf of the *W12 Benefits Coalition*, filed appeals (PLN16-133-A01 and A02, respectively) of the Planning Commission approval of the Project.

ANALYSIS AND POLICY ALTERNATIVES

The appellants raise a number of issues identified below. The appellants' full submitted arguments are included as ***Attachments B and C*** to this report.

I. Oakland Residents for Responsible Development Appeal (PLN16-133-A01)

The appellants raise the issues identified below. The appellant's full submitted arguments are included as ***Attachment B*** to this report. More detailed responses to the appellate issues are contained in the ESA memorandum, ***Attachment D*** to this report.

A. *Consistency with the CEQA Addendum and Exemption Requirements*

Appellant Argument: The appellant asserts that the City may not rely on previous environmental analysis for project approval. Specifically, the appeal letter asserts that the Project is not consistent with CEQA Addendum and Exemption requirements. Therefore, the Project allegedly would result in new or more severe significant impacts than were analyzed in the Lake Merritt Station Area Plan Environmental Impact Report (LMSAP EIR).

Staff Response: The LMSAP EIR analyzed the environmental impacts of the adoption and implementation of the LMSAP at full build out and provided project-level review for reasonably foreseeable development, such as the Project. The City Council certified the LMSAP EIR in accordance with CEQA in November 2014 and the analysis now is presumptively valid under California law. Since that certification, the City has created and relied upon a framework for analyzing projects within the LMSAP area called "CEQA Analysis," which separately and independently provides a basis for CEQA compliance. This framework relies on the applicable streamlining and tiering sections of CEQA: Community Plan Exemption, Qualified Infill Exemption and/or Addendum, as detailed in the CEQA section of the August 3, 2016 Planning Commission Report (see ***Attachment A***).

As outlined in detail, the assumptions and conclusions in the Project's CEQA Analysis are supported by substantial evidence in accordance with CEQA, while none of the assertions presented by the appellant provide credible, persuasive, or substantial evidence that the Project would result in a new, peculiar, significant environmental impact or a substantial increase in the severity of an environmental impact than determined in the LMSAP EIR. In fact, they make numerous misinterpretations of applicable CEQA thresholds for determining significance, and misrepresent many material facts about the Project to justify its conclusions.

As the CEQA Analysis correctly concludes, none of the provisions from CEQA Section 15162 are triggered that would require preparation of a supplemental or subsequent EIR apply to the Project. Therefore, an Addendum is appropriate.

Staff believes that the conclusions in the CEQA Analysis are valid and preparation of an EIR is not warranted. The Planning Commission appropriately relied on the CEQA Analysis to support its approval of the Project.

Please also see the City's detailed CEQA response found in ***Attachment D*** to this document, as a memorandum dated August 12th, 2016, which was previously published as Attachment B to the Supplemental Memo for the August 17th Planning Commission meeting.

B. *Adequacy of the On-Site Hazards Analysis and Mitigation*

Appellant Argument: The appellant asserts that the CEQA Analysis did not adequately address on-site contamination analysis and mitigation.

Staff Response: The Addendum discloses that the Phase I Environmental Site Assessment for the Project identified recognized environmental conditions (RECs) at the Project site. The LMSAP EIR fully analyzed the potential hazards impacts of such contaminated sites, and it

determined that state regulatory programs and SCAs will reduce those impacts to a less than significant level. In particular, as detailed in the LMSAP EIR, the applicant will need to comply with regulatory programs established by the Department of Toxic Substances Control (DTSC), including by applying for permits, conducting further investigation, and performing cleanup and remediation actions, as dictated by the regulations and the agencies. The remediation of the site is being overseen by DTSC, which oversees cleanup of releases of hazardous substances pursuant to statutes, regulations and related programs of general application (see below-referenced documents). Under these authorities, DTSC ensures that risks to human health and the environment, including potential risks cited by the appellant to the health of construction workers and future project occupants, is appropriately addressed.

Because the City requires compliance with all applicable state, federal and regulatory requirements prior to commencing construction, as set forth under the City's standard conditions of approval (SCAs), specifically SCA HAZ-2 and condition of approval number 40, the applicant will be obligated to comply with the regulatory standards and requirements established for contaminants. Thus, the City's SCAs will ensure that potential impacts are mitigated to a less than significant level.

The applicant is pursuing independent actions with DTSC (the "301 12th Street" cleanup project) and the City (the "285 and 301 12th Street" project or "W12" project). Pursuant to the authorities cited above, DTSC oversees cleanup of releases of hazardous substances, and is the agency with the subject matter expertise and the statutory mandate to compel cleanup of the existing contamination whether or not the W12 project proceeds as proposed. By comparison, the City is the agency charged with regulation of land use and planning within its jurisdictional boundaries consistent with the Charter of the City of Oakland. The lead agencies for the W12 project and the 301 12th Street cleanup project are distinct, and no evidence suggests that the two are cooperating to deny meaningful environmental review by segmenting analysis to minimize impacts. In addition to having different lead agencies, the two projects have distinct purposes and objectives. Further, the City retains unfettered discretion to approve, approve with conditions, or deny the W12 project regardless of the 301 12th Street cleanup project status. While it is reasonable to assume that some development would be proposed on the site, the W12 project would not be a direct consequence of the cleanup. No improper segmentation has occurred.

Therefore, staff believes that the conclusions in the CEQA Analysis are valid and preparation of an EIR is not warranted. The Planning Commission appropriately relied on the CEQA Analysis to support its approval of the Project.

Please also see the City's detailed CEQA response found in ***Attachment D*** to this document, as a memorandum dated August 12th, 2016, which was previously published as Attachment B to the Supplemental Memo for the August 17th Planning Commission meeting.

C. *Adequacy of the Project-Specific Health Risk from Diesel Particulate Matter (DPM) Analysis and Mitigation*

Appellant Argument: The appellant asserts that the CEQA Analysis fails to assess the health risk impacts from construction-related DPM emissions. The letter also states that the LMSAP

EIR deferred the assessment of construction-related health risks to a stage where Project-specific impacts and mitigation measures could be determined.

Staff Response: The LMSAP EIR analyzed construction-related health risks (see Impact AIR-3) and determined impacts to be less than significant with implementation of SCA A (referred to as SCA AIR-1 in the CEQA Analysis). As stated on page 3.3-39 of the LMSAP EIR, "...SCA A would implement construction-related Best Management Practices to substantially reduce construction-related impacts to a less-than-significant level." There is nothing in the LMSAP EIR indicating that a stand-alone HRA for construction-related impacts is required on a project-by-project basis. Likewise, the CEQA Guidelines do not mandate a lead agency prepare a HRA, nor do they identify methods or parameters for the analysis of receptor exposure to substantial pollutant concentrations. Preparing a construction-related HRA would result in unnecessary and duplicative studies that would ultimately reach the same conclusions and control measures established in the LMSAP EIR.[1] Moreover, the Project site's proximity to sensitive receptors is typical of other project sites in the LMSAP area and other urban areas. Therefore, there would be nothing unique or peculiar about the Project's proximity to sensitive receptors.

As stated above, the LMSAP EIR specifies that the construction health risks would be minimized through application of SCA-AIR-1 (former SCA A), which indicates that diesel emissions would be minimized through the application of various measures. Specifically, subsections (g) and (h) of SCA-AIR-1 minimize idling; subsection (i) ensures that construction equipment is running in proper condition; subsection (j) specifies that portable equipment would be powered by electricity if available; subsection (u) requires that equipment meet emissions and performance requirements; subsection (v) requires the use of low volatile organic compound coatings; subsection (w) requires that equipment and diesel trucks be equipped with Best Available Control Technology; and subsection (x) requires that off-road heavy diesel engines meet the California Air Resources Board's most recent certification standard.

The Project sponsor would ensure that construction equipment would meet Tier 4 emissions standards in order to comply with subsections (w) and (x); this equipment is considered the best available technology and, despite appellant's assertion to the contrary, ESA has confirmed that the technology is readily available—and therefore feasible—for the Project.

Construction associated with the Project would not result in a more severe impact than what was previously disclosed in the LMSAP EIR. Further, there is no evidence that the Project would have peculiar or unusual impacts or impacts that are new or more significant than previously

[1] As discussed in the CEQA Analysis prepared for the Project, the Project is consistent with the development density established by zoning, community plan, specific plan, or general plan policies. Contrary to appellant's assertion, construction associated with the Project (and other projects in the LMSAP area) would not result in a more severe impact than what was previously disclosed in the LMSAP EIR. Appellant offers no credible evidence that the Project would have peculiar or unusual impacts or impacts that are new or more significant than previously analyzed in the LMSAP EIR. Therefore, the Project is consistent with the applicable CEQA streamlining provisions (i.e., Public Resources Code Section 21083.3 and State CEQA Guidelines Section 15183, Public Resources Code Section 21094.5 and State CEQA Guidelines Section 15183.3, and Public Resources Code Section 21094.5 and State CEQA Guidelines Section 15183.3) and the CEQA Analysis is appropriately tiered from the LMSAP EIR and streamlined environmental review is allowed for the Project.

analyzed in the LMSAP EIR. Consequently, the construction health risk has been adequately addressed by the planning-level review and the Project's conditions of approval. Therefore, staff believes that the conclusions in the CEQA Analysis are valid and preparation of an EIR is not warranted. The Planning Commission appropriately relied on the CEQA Analysis to support its approval of the Project.

Please also see the City's detailed CEQA response found in ***Attachment D*** to this document, as a memorandum dated August 12th, 2016, which was previously published as Attachment B to the Supplemental Memo for the August 17th Planning Commission meeting.

II. W12 Benefits Coalition Appeal (PLN16-133-A02)

A. Insufficient Neighborhood Outreach

Appellant argument: The appellant argues that there was insufficient neighborhood outreach ahead of the August Planning Commission meetings, which violates public process and trust.

Staff response: Although the Planning Code does not require the applicant to outreach to the neighborhood, the applicants for the project have been engaged with community stakeholders starting as early as fall 2015, when City staff joined members of the Chinatown Coalition for a small meeting at Lincoln Recreation Center, long before a formal application was submitted to the City in May 2016. Since that time, staff is aware of numerous community correspondences and stakeholder meetings that were held to discuss the project. In addition, the applicant held a large community meeting at Pacific Renaissance Center on June 27, 2016 for interested community members, which was well attended, and included a Chinese language interpreter. The Project also appeared before the Design Review Committee in July 2016 and two Planning Commission Hearings in August 2016, all of which were duly noticed.

B. Notice Requirements

Appellant Argument: The appellant argues that the August 17th Special Planning Commission meeting was not properly noticed and that the notice on site for the Project was not updated with that hearing date.

Staff response: The Planning Commission continued its discussion of the Project that was properly noticed for the August 3rd meeting to a date certain of August 17th in accordance with the City's Zoning Ordinance. Because the item was continued to a date certain in a publicly noticed meeting, the August 17th meeting did not require re-noticing or an update to the Project's on-site notice. However, staff did send emails out to interested parties to confirm the action on August 3rd and the second Planning Commission date.

Appellant Argument: The appellant argues that the notice for the August 3rd Planning Commission meeting should have been translated into Chinese.

Staff response: The on-site notice was posted in accordance with the City's Zoning Ordinance with general information, including a depiction of the proposed project and a contact number for interested parties. The City's Planning and Building Department has interpretation services, including Mandarin, Cantonese, Vietnamese speakers who would have been able to assist

members of the public who do not speak English if they had contacted the phone number on the notice.

C. Non-Conformance with LMSAP

Appellant Argument: The appellant argues that the Project does not conform to the LMSAP's targets, goals, and guidelines because of its lack of affordable housing.

Staff Response: The Planning Commission found the Project to be consistent with the LMSAP. The LMSAP is a 25-year plan focused on the area within a half-mile around the Lake Merritt BART Station. The LMSAP includes the goal of encouraging 15 to 28 percent of all new units built in the Plan Area to be affordable. None of these goals are a requirement or obligation under the LMSAP. However, to achieve the affordable housing goals, the Plan identifies various *actions*, One of those actions was for the City to complete a nexus study in order to implement an affordable housing impact fee to be paid by private development. In fact, following LMSAP adoption, the City Council adopted an Affordable Housing Impact Fee in April 2016, and the W12 project will be subject to the Impact Fee. The LMSAP also identifies other mechanisms for achieving affordable housing, such as pursuing grants and loans. Just last month, California Strategic Growth Council announced that the State of California's Cap and Trade funds will be awarded to two important projects in the LMSAP area: 91 affordable units as part of the Lakehouse Commons project, and the rehabilitation and preservation for affordable housing of two historic SROs (Empyrean and Harrison Hotels). In addition, this November, the residents of Oakland and Alameda County voted to approve City and County measures that will raise millions of dollars in funding opportunities for affordable housing projects in Oakland.

The goals of the Plan are not meant to be achieved via development projects alone. Developers alone cannot implement the vision of the Plan. The actions need to be implemented by many different players and funded via many different sources. The combination of LMSAP's numerous action items will help achieve the goals of the Plan over the next 25 years.

D. Regional Housing Needs Allocation

Appellant Argument: The appellant makes a general statement about the Regional Housing Needs Allocation (RHNA) process and affordable housing. The statement ends with a comment about using the Conditional Use Permit process to obtain more affordable units.

Staff Response: The City recognizes its obligations relative to the RHNA process. However, that process (in whatever planning cycle) has no regulatory overlap with the LMSAP. The appellants misunderstand the conceptual difference between the enacting zoning for the LMSAP (that does not require affordable units) and the LMSAP's stated "target" for affordable units. As noted above, in April 2016, the City Council formalized its policy decision as to the City's priority for addressing its affordable housing issues and adopted a City-wide approach as a resolution.

E. *Publicly Accessible Open Space*

Appellant Argument: The appellant argues that the Project does not follow the LMSAP guideline (Page 5-12) to include publicly accessible open space for new development over half

a block in size, in violation of LMSAP Section 1.2, which requires new development to follow the guidelines in the plan.

Staff Response: The Project complies with the open space requirements in the Zoning Ordinance. The appellant chooses to disregard the language directly below the open space recommendation on Page 5-12, which states: "[N]ew development *could provide this open space voluntarily*. However, establishment of a public open space requirement may require a nexus study, which is beyond the scope of this Plan" (emphasis added). Consequently, the open space recommendation is not a requirement that was ignored by the applicant or the City and the Project remains fully consistent with the applicable goals and policies of the LMSAP.

F. *LMSAP Guidance*

Appellant Argument: The appellant states that the City did not properly use the LMSAP to guide the review of the Project in violation of public process and trust.

Staff Response: The LMSAP does guide all development within the Lake Merritt area, contrary to appellant's narrow view of Section 1.2 of the LMSAP. The Project squarely conforms to the goals and policies of the LMSAP, as well as the zoning requirements. Appellant cites Section 1.2 of the LMSAP as requiring all new development to "follow the policies, programs and guidelines set forth in this Plan." (Page 1-5.) Appellant incorrectly interprets this statement to mean that new development must follow **all** policies and guidelines in the LMSAP—this is simply a false premise. It is an important, longstanding principle of land use policy interpretation that individual projects should not be evaluated against broader plans on a policy by policy basis. Rather, the policies of the broader plan policies should be read in harmony, and individual projects evaluated in that light. As a practical matter, it would be impossible for all projects to follow all guidelines when the LMSAP contemplates many different mixes of uses that naturally will align with certain policies, while not satisfying others. The Oakland General Plan, as well as Specific Plans, contains many differing and often competing goals. For example if a Goal or Policy states that office development should be encouraged within the Downtown core, a project would not be inconsistent solely on the basis that office space is not being included in a development proposal. Again, the appellant appears to be misinterpreting the purpose of the LMSAP as a land use tool that is properly guiding development in the Lake Merritt area.

G. *Inconsistency with the Conditional Use Permit*

Appellant Argument: The appellant argues that the proposed development is inconsistent with the Conditional Use criteria because of concerns raised by members of the public. The appellant also claims that the proposal is inconsistent with the Conditional Use criteria because the proposal does not include affordable housing, or provide publicly accessible open space.

Staff Response: With regard to the argument about the inclusion of affordable housing and publicly accessible open space, please see staff responses to these issues above.

H. *Violation of the Federal Fair Housing Act*

Appellant Argument: The appellant includes a section of their appeal document that describes elements of the Federal Fair Housing Act and insinuates that the severe shortage of affordable housing in Oakland may be a violation of the Act.

Staff Response: The Federal Fair Housing Act, codified at 42 U.S.C. 3601-3619, prohibits discrimination in the sale or rental of housing on the basis of race, color, religion, national origin, sex, disability or family status. The sale or rental of any units in the Project will be subject to the Fair Housing Act. Therefore, the approval of the Project does not (and cannot) violate the Fair Housing Act as the action itself does not involve the sale or rental of any housing units.

Similarly, the California Fair Employment and Housing Act (FEHA), codified at California Government Code Section 12900 – 12996, makes it unlawful for the owner of any housing accommodation to discriminate against or harass any person because of the race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, familial status, source of income, disability, or genetic information of that person. The sale or rental of any units in Project will be subject to FEHA. Therefore, the approval of the Project does not (and cannot) violate FEHA as the action itself does not involve the sale or rental of any housing units. Moreover, the protections in FEHA that prohibit discriminatory land use decisions involve, among other actions, the denial of use permits, that make housing opportunities unavailable (See California Government Code Section 12955 (l).) Here, the action that is subject of this appeal is an approval of housing opportunities—not a denial—and, thus, this section of FEHA is not applicable to the Project.

Policy Alternatives

The following options are available to the City Council:

1. Deny the appeal, uphold the Planning Commission's decision, and allow the project to proceed as approved by the Planning Commission or apply Conditions of Approval solely related to the appellate issues;

2. Grant the appeal, reverse the Planning Commission's decision, and thereby deny the project. Under this option, the matter would return to the City Council at a future meeting for adoption of appropriate findings. The applicant would have the option of not pursuing the project or of submitting a new application to the Bureau of Planning;

3. Continue the item to a future meeting for further information or clarification, solely related to the appellate issues; or

4. Refer the matter back to the Planning Commission for further consideration on specific issues/concerns of the City Council, solely related to the appellate issues. Under this option, the appeal would be forwarded back to the City Council for final decision.

FISCAL IMPACT

The Project involves a private development and does not request or require public funds and has no direct fiscal impact on the City of Oakland. If constructed, the project would provide a

positive fiscal impact through increased property taxes, sales taxes, utility user taxes, and business license taxes, while at the same time increasing the level of municipal services that must be provided.

PUBLIC OUTREACH / INTEREST

This item has appeared before one community meeting and public hearings on multiple occasions. Moreover, staff understands that the applicant has held numerous additional meetings with community stakeholders between January and November 2016. The project appeared before the City Planning Commission Design Review Committee on June 22, 2016, and the full Planning Commission on August 3, 2016 and then again for decision on the development application on August 17, 2016.

COORDINATION

The Agenda report on the appeal has been reviewed by the City Attorney's Office and the Budget Office.

SUSTAINABLE OPPORTUNITIES

Economic: The development of the Project would increase the sales tax base, raise the property tax for the site due to the proposed improvements, and provide temporary construction jobs, as well as future permanent jobs within the new retail stores.

Environmental: Developing in already urbanized environments reduces pressure to build on agricultural and other undeveloped land. Sites near mass transit enable residents to reduce dependency on automobiles and further reduce adverse environmental impacts.

Social Equity: The Project benefits the community by adding increased commercial and housing opportunities in the City of Oakland, as well as temporary jobs during the construction of the project and permanent jobs too. In addition, the project will generate funds for affordable housing via the Affordable Housing Impact Fee.

CEQA

The LMSAP Environmental Impact Report analyzed the environmental impacts of adoption and implementation of the LMSAP and, where the level of detail available was sufficient to adequately analyze the potential environmental effects, provided a project-level CEQA review for reasonably foreseeable development. This project-level analysis allows the use of CEQA streamlining and/or tiering provisions for projects developed under the LMSAP.

Applicable CEQA streamlining and/or tiering code sections are described below, each of which, separately and independently, provide a basis for CEQA compliance.

(1) The proposed project qualifies for an exemption per CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning);
(2) The proposed project qualifies for streamlining provisions of CEQA under Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3 (Streamlining for Infill Projects); and
(3) The proposed project qualifies for an addendum pursuant to CEQA Guidelines Section 15164 (Addendum to an EIR) as none of the conditions requiring a supplemental or subsequent EIR, as specified in Public Resources Code section 21166 and CEQA Guidelines Sections 15162 (Subsequent EIRs) and 15163 (Supplement to an EIR), are present.

The proposed project would be required to comply with the applicable mitigation measures and City of Oakland Standard Conditions of Approval (SCAs) identified in the 2014 LMSAP EIR and presented in Attachment B to this document. With implementation of the applicable mitigation measures and SCAs, the proposed project would not result in a substantial increase in the severity of previously identified significant impacts in the 2014 LMSAP EIR, the applicable Prior EIRs, or in any new significant impacts that were not previously identified in any of those Previous CEQA Documents.

The City Council was previously provided a copy of the 2014 LMSAP EIR and the July 2016 CEQA Analysis Document was provided under separate cover for review and consideration by the City Council, and is available to the public at the Bureau of Planning office at 250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 and on the City's website at: http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak059795.pdf

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council adopt a resolution denying the appeals from Oakland Residents for Responsible Development and the W12 Benefits Coalition, and upholding the Planning Commission's approval of a proposal to construct 416 dwelling units over approximately 26,000 square feet of retail located at 285 and 301 12th Street, Oakland CA (Project Case No. PLN16-133), including adopting CEQA Exemptions (15183 & 15183.3) and Addendum (Relying on the previously certified 2014 Lake Merritt Station Area Plan EIR)

For questions regarding this report, please contact Christina Ferracane, Planner III, at (510) 238-3903.

Respectfully submitted,

Darin Ranelletti
Interim Director, Department of Planning & Building

Reviewed by:
Robert Merkamp, Development Manager

Prepared by:
Christina Ferracane, Planner III
Bureau of Planning

Attachments:

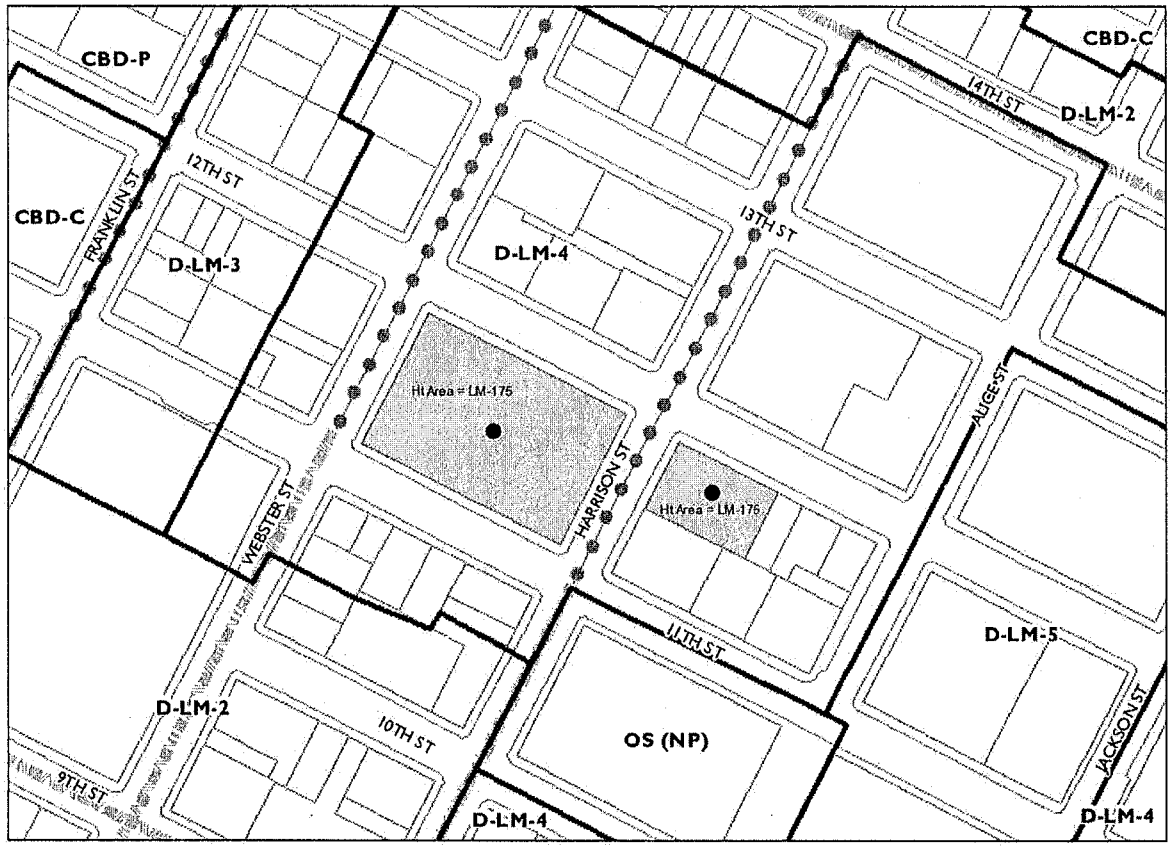
A. August 3, 2016 Planning Commission Staff report
B. August 26, 2016 Appeal by Oakland Residents for Responsible Development
C. August 29, 2016 Appeal by W12 Benefits Coalition
D. November 7, 2016 and August 12, 2016 ESA Memorandums
E. August 22, 2016 PLN16133 Decision Letter

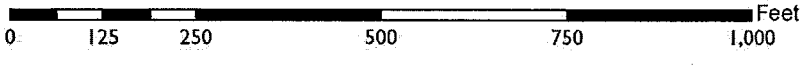
Oakland City Planning Commission — STAFF REPORT

Case File Number: PLN16133 — **August 3, 2016**

Location:	**301 12th Street (full block) and 285 12th Street (quarter block)** *See map on reverse.*
Assessor's Parcel Numbers:	002 -0063-006-00 and 002 -0069-003-01
Proposal:	Construct two 7-story mixed use developments. Building 1 would be located within one full block at 301 12th Street and contain 339 units with approximately 24,600 square feet of ground floor commercial, replacing an existing warehouse building. Building 2 would be located within one quarter of a block at 285 12th Street and contain 77 units with approximately 1,600 square feet of ground floor commercial on an existing undeveloped lot.
Applicant:	W12, LLC – Steven Kay, esq. and David Martin
Contact Person/Phone Number:	Justin Osler (415) 429- 6044
Owners:	Richard S. Cochran and Susan L. Cochran Family Trust, et al.
Planning Permits Required	Regular Design Review for new construction; Major Conditional Use Permit for a development with more than 100,000 square feet of floor area in a D-LM zone, Minor Conditional Use Permit to allow a building base height of up to 85 feet; Tentative Parcel Map for new condominiums
Case File Number:	PLN16133
General Plan:	Central Business District /Lake Merritt Station Area Plan
Zoning:	D-LM-4 Zone, LM-175 Height, Intensity and Bulk Area, Webster and Harrison Streets are designated as Transitional Commercial Corridors
Environmental Determination:	A detailed CEQA Analysis was prepared for this project which concluded that the proposed project satisfies each of the following CEQA provisions: 15183 - Projects consistent with a community plan, general plan, or zoning; 15183.3 – Streamlining for in-fill projects; and/or 15164 – Addendum to the 2014 certified Lake Merritt Station Area Plan EIR; Each of which provides a separate and independent basis for CEQA compliance. The CEQA Analysis document may be reviewed at the Bureau of Planning at 250 Frank Ogawa Plaza, 2nd Floor or online at http://www2.oaklandnet.com/Government/o/PBN/OurServices/Application/DOWD009157
Historic Status:	No historic properties.
Service Delivery District:	Metro
City Council District:	2
Action to be Taken:	Decision on application based on Staff Report
Finality of Decision:	Appealable to City Council
For Further Information:	Contact case planner **Christina Ferracane** at **510-238-3903** or **cferracane@oaklandnet.com**

CITY OF OAKLAND PLANNING COMMISSION





Legend
Lake Merritt Corridors
Commercial Corridor
Transitional Commercial Corridor

Case File:	PLN16133
Applicant:	W12, LLC
Address:	301 12th Street and 285 12th Street
Zone:	D-LM-4
Height Area:	LM-175 / with CUP: LM-275 (3 buildings)

SUMMARY

The Planning Department has received an application to construct two seven-story mixed use buildings (see ***Attachment A*** for Project Plans). Building 1 would be located on a full block at 301 12th Street and contain 339 residential units with approximately 24,600 square feet of ground floor commercial space. Building 2 would be located on one quarter of a block at 285 12th Street (across the street from Building 1) and contain 77 residential units with approximately 1,600 square feet of ground floor commercial space. On June 22, 2016, the proposal appeared before the Design Review Committee, and was forwarded to the full Planning Commission. Staff recommends approval of the project, subject to the attached findings and conditions of approval (**see *Attachments B and C***, respectively).

PROJECT SITE AND SURROUNDINGS

As shown in ***Attachment A***, the project would be located on two sites. Site 1, located at 301 12th Street, is a 60,000 square foot warehouse building, utilized as public parking and a charter school. Site 2, located at 285 12th Street (across Harrison Street from Site 1), is a 15,000 square foot undeveloped piece of land, utilized as recreation space for the charter school. The project is not in an historic district, but the King Block, designated by the Oakland Cultural Heritage Survey as an historic district of Primary Importance is across 12th Street from Site 1. The sites are located 2 blocks from the 12th Street BART Station and 6 blocks from the Lake Merritt BART Station. Bus Rapid Transit (BRT) lines, expected to be operational in early 2018, will run along 11th and 12th Streets, with stops across the street from Site 1. The project is two blocks away from the center of Chinatown's cultural and commercial heart at 9th and Webster Streets. Lincoln Recreation Center is located catty-corner from Site 1, across the intersection of 11th and Harrison Streets.

PROJECT DESCRIPTION

The two seven-story buildings include one level of underground parking; a double-height ground level of parking wrapped by ground floor commercial space, residential lobby/ amenity space, utilities and parking/loading entrances; and upper levels with residential units and residential open space in the form of balconies, rooftop open space, amenity rooms, and a courtyard on the podium level (level 3).

Building 1 includes ground floor commercial spaces along each of its frontages, varying in size from 3,100 to 8,000 square feet. The 12th Street and Webster Street facades have the most significant amount of commercial presence, in response to the existing levels of commercial on those corridors in adjacent blocks and/or across the street. Building 2 includes 1,600 square feet of commercial space at the corner of 12th and Harrison Streets.

The main lobby for Building 1 is located on the corner of 11th and Webster Streets, while the lobby for Building 2 in located on Harrison Street. For Building 1, the parking entrance is located on 11th Street and loading is off of Harrison Street and 12th Street. For Building 2, loading and parking entrance are located on 12th Street.

GENERAL PLAN ANALYSIS

The subject properties are located within the Central Business District (CBD) General Plan Land Use Classification. The intent of this classification is to encourage, support, and enhance Downtown as a high density, mixed-use urban center of regional importance and a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation in Northern California. The CBD classification includes a mix of large-scale offices, commercial, urban high-rise residential, institutional, open space, cultural, educational, arts, entertainment, service, community facilities and visitor uses.

Among the General Plan Land Use and Transportation policies applicable to the proposed Project are the following (summarized here):

Policy D3.1 Promoting Pedestrians – Pedestrian friendly commercial areas should be promoted.

Policy D6.1 Developing Vacant Lots – Construction on vacant lands should be encouraged.

Policy D10.1 Encouraging Housing – Housing in the Downtown should be encouraged.

Policy D10.5 Designing Housing – Housing in the Downtown should be safe and attractive, of high quality design, and respect the Downtown's distinct neighborhoods and its history.

Policy D10.6 Infill Housing – Infill housing that respect surrounding development and the streetscape should be encouraged in the Downtown to strengthen or create distinct districts.

Policy D11.1 Promoting Mixed-Use Developments – Mixed use development should be encouraged in the Downtown.

Construction of the proposed mid-rise, mixed-use buildings is consistent with these policies and the intent of the General Plan.

Furthermore, the subject properties are located within the boundaries of the Lake Merritt Station Area Plan (LMSAP). The LMSAP provides the framework for future growth and development in the area surrounding the Lake Merritt BART Station. Among the LMSAP goals and policies applicable to the proposed Project are the following:

Goal 1: Create an active, vibrant and safe district.

Goal 3: Encourage equitable, sustainable and healthy development.

Goal 4: Encourage non-automobile transportation.

Goal 5: Increase and diversify housing.

Goal 6: Encourage job creation and access.

Goal 7: Provide services and retail options.

LMSAP Policy LU-2 - High intensity development potential. Support transit-oriented development and accommodate regional growth projections by promoting high intensity and high density development in the Planning Area.

LMSAP Policy LU-4 - Active ground floor uses. Encourage active uses in new buildings on key streets in neighborhood hubs in order to transform key streets into activated pedestrian connections over time and expand the vibrancy and activity that already exists in some areas, as shown in Figure 4.2.

LMSAP Policy LU-13 - Complementary uses. Complement existing government and institutional uses - including the Oakland Museum of California, Kaiser Auditorium, County Courthouse, Main Public Library - with new residential uses and by promoting active ground floor commercial uses in new development.

The Project, new, mixed use development with high density housing and an active commercial ground floor in close proximity to BART Stations, is consistent with these goals and policies.

ZONING ANALYSIS

The project site is located in the Lake Merritt Station Area Mixed Commercial Zone (D-LM-4) and the LM-175 Height, Bulk, and Intensity Area. Webster Street and Harrison Street are designated as Transitional Commercial Corridors. The intent of the D-LM-4 Zone is to designate areas of the Lake Merritt Station Area Plan District appropriate for a wide range of Residential, Commercial, and compatible Light Industrial Activities. The LM-175 Height, Bulk and Intensity Area is meant to allow for high-density, transit-oriented development. The intent of the Transition Commercial Corridor is to extend already established commercial corridors when new buildings are constructed by inclusion of ground floor commercial spaces.

The project meets the development standards required within the D-LM-4, LM-175 and Transition Commercial Corridor designations. Key standards are summarized in the table below:

Development Standard	Zoning Requirement	Proposed Project
Density (Max. Units)	681	**416**
Total Height (Max. Feet)	175	**84**
Base Height (Max. Feet)	45 to 85 (with CUP)	**84**
Open Space (Min. Square Feet)	31,200	**50,500**
Auto Parking (Min.)	312	**317**
Bicycle Parking (Min. Short-term)	26	**26**
Bicycle Parking (Min. Long-term)	107	**288**
Loading (Min.)	4	**4**
Ground Floor Transparency (Min. for Main Commercial Frontage)	55%	**55%, 65%, 70%**

It's worth noting that the project is considerably below the maximum density allowed for the site, and also significantly exceeds the minimum amount of open space for residents, the amount of long-term (resident and employee) bicycle parking and the amount of ground floor transparency and height, while meeting all other development standards.

The project requires four planning permits, including Regular Design Review for new construction, a Major Conditional Use Permit (CUP) for new buildings containing a floor area over 100,000 square feet in a D-LM zone, a minor CUP for increasing the base height to 85 feet and a Tentative Parcel Map for creating condominium units.

In addition to the required development standards, the project must meet the general criteria for Conditional Use Permit and Design Review; the Lake Merritt Station Area Plan Conditional Use Permit criteria; and the Tentative Map criteria. These findings, listed in ***Attachment B***, need to be made prior to a final decision by the Planning Commission.

Conditional Use Permit for 85-foot Base Height

As noted in the table above, the zoning standards allow for a 45 foot base height, or an 85 foot base height with the granting of a Conditional Use Permit. Staff believes that the project meets the criteria for granting a Conditional Use Permit, including the additional findings for the Lake Merritt Station Area Plan. The area surrounding the project includes numerous other buildings that rise to similar heights with bases that are over 85 feet in height or have no bases, including the EBMUD building at 383 11th Street, Hotel Travelers at 392 11th Street and the University of California building at 1111 Jackson Street.

DESIGN REVIEW

Staff feels that the proposed project is a well-designed pair of mid-rise buildings that fit well into the existing context. The proposed design is consistent with the Lake Merritt Station Area Plan Design Guidelines by creating a mixed use development that establishes a strong pedestrian oriented commercial ground floor and lobby with well-designed upper residential stories.

As noted in the Summary, this item appeared before the Design Review Committee on June 22, 2016. Based on the feedback received at the meeting from the Commission and public speakers, the applicant has modified the project in the following ways:

- Simplified the façade of Building 1 by aligning and connecting bay windows and removing rounded corners (they were previously offset and popped out individually).
- Further simplified the facades in both buildings by reducing the variety in balcony materials, and aligning their placement.
- Adjusted the thickness of the white painted aluminum frames that define each of the corners of Building 1 to soften the look.
- Removed corner language and bay windows from Building 2 to make the design distinct, yet complementary, from Building 2, and further differentiated the buildings via different placement of color.
- Incorporated streetscape elements to match those in the hearth of Chinatown (such as the same style of street lights, wayfinding signage and colored sidewalk paving).
- Added maroon red color to signal the building's function as an extension of the Chinatown commercial district.

Staff believes these refinements further enhance the design of the project and allow it to further contribute to the cultural and architectural aesthetics of the surrounding neighborhood.

KEY ISSUES

Overall, staff feels like the proposed design is of a high quality, the buildings are well related to the surrounding neighborhood character, and the proposal conforms to the Lake Merritt Station Area Plan and Design Guidelines. Staff acknowledges that the applicant has worked to refine the project, in response to comments from City staff, Planning Commissioners and other stakeholders.

The applicants for the project have been engaged with community stakeholders starting as early as fall 2015, when City staff joined members of the Chinatown Coalition for a small meeting at Lincoln Recreation Center, long before a formal application was submitted to the City in May 2016. Since that time, community stakeholders and the applicant have involved staff in numerous correspondence and additional community meetings to discuss the project. While the project is welcomed by some community stakeholders, others have outstanding concerns, mostly regarding aspects of the project that are outside the purview of the Planning Commission, such as community benefit agreements and agreements with existing tenants. See ***Attachment D*** for written public comments received by the Bureau of Planning.

Existing Tenants

Oakland Charter Middle School and High School are current tenants at Site 1 (full block). At the June DRC meeting, Commissioners heard from parents, teachers and students about concerns regarding the timing of their eventual relocation. Public speakers did not want a move to happen in the middle of a school, because of the disruption this would cause. While the leasing agreements between the property owner and the existing tenants are private agreements outside of the Planning Commission's authority, it is staff's understanding that the applicant, the current property owner, and the school's administration are continuing to work on a solution that meets everyone's goals.

Community Benefits

Community stakeholders are concerned about existing citywide and neighborhood issues, including the great need for affordable housing, affordable retail spaces, living wages, support of small businesses, and preservation of the cultural and recreational resources in Chinatown.

Community based organizations and individual stakeholders have requested that the applicant sign a Community Benefits Agreement in order to provide additional community benefits beyond those already being provided as part of the project. However, Community Benefit Agreements are private agreements between developers and community members and outside of both the purview of the City of Oakland Planning Commission and City Staff to enforce.

In order to address citywide concerns related to issues brought up by community stakeholders, the City prepared a Nexus Study and adopted Impact Fees to help pay for affordable housing, transportation improvements and capital improvement projects. The applicant will be subject to these recently adopted Impact Fees and is expected to pay approximately $2.29 million towards affordable housing, $312,000 towards capital projects and $321,000 towards transportation projects, in addition to approximately $500,000 (one percent of expected construction costs) in

art fees and additional school fees.

Furthermore, the applicant and City staff believes the project itself will benefit the neighborhood and Oakland as a whole by meeting demand for new residential units and by providing new services in the form of ground floor retail. The project will help support existing retail and improve safety from crime by increasing eyes on the street, since it will generate new foot traffic from the residents and the new retail spaces. The project's implementation of public right of way improvements, described earlier in this report, including new pedestrian-oriented lighting and wayfinding signage, will also directly benefit new and existing residents.

Tree Removal: Heron Rookeries Relocation

The sidewalk along the quarter block site is currently planted with four very large little-leaf fig street trees that provide nesting habitat (or a rookery) for Black-crowned Night Herons and Snowy Egrets, collectively referred to as "herons". These rookeries provide perennial nesting habitat for the birds and nesting colonies of herons. The Migratory Bird Treaty Act, as well as California Fish and Game Code, afford protection to these nesting native bird species.

Construction of the new building would result in significant root and canopy loss of these street trees, which is anticipated to greatly compromise their health. Therefore, the project is proposing removal of the existing street trees (and replacing them with new street trees). However, the presence of the heron rookery raised issues with regard to the tree removal and the potential impact on the nesting habitat.

The CEQA Analysis prepared for the project identified that the City's Standard Condition of Approval would address any potential harm to the herons by limiting any tree removal to periods outside of the nesting season. Therefore, the impact under CEQA would be less than significant. However, in order to implement the Condition of Approval, the City's environmental consultant biologist, in conjunction with Golden Gate Audubon Society and City staff, prepared a Project-Specific Condition of Approval that requires the applicant to obtain a biologist to put together a plan to provide new habitat for the herons that would encourage them to relocate to a less disturbed urban setting (e.g. Lake Merritt). This Condition would be implemented in conjunction with the proposed development project at 226 13th Street, which also includes little-leaf fig street trees with active rookeries.

ENVIRONMENTAL DETERMINATION

The LMSAP Environmental Impact Report analyzed the environmental impacts of adoption and implementation of the LMSAP and, where the level of detail available was sufficient to adequately analyze the potential environmental effects, provided a project-level CEQA review for reasonably foreseeable development. This project-level analysis allows the use of CEQA streamlining and/or tiering provisions for projects developed under the LMSAP.

Applicable CEQA streamlining and/or tiering code sections are described below, each of which, separately and independently, provide a basis for CEQA compliance.

(1) The proposed project qualifies for an exemption per CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning);

(2) The proposed project qualifies for streamlining provisions of CEQA under Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3 (Streamlining for Infill Projects); and

(3) The proposed project qualifies for an addendum pursuant to CEQA Guidelines Section 15164 (Addendum to an EIR) as none of the conditions requiring a supplemental or subsequent EIR, as specified in Public Resources Code section 21166 and CEQA Guidelines Sections 15162 (Subsequent EIRs) and 15163 (Supplement to an EIR), are present.

The proposed project would be required to comply with the applicable mitigation measures and City of Oakland Standard Conditions of Approval (SCAs) identified in the 2014 LMSAP EIR and presented in ***Attachment B*** to this document. With implementation of the applicable mitigation measures and SCAs, the proposed project would not result in a substantial increase in the severity of previously identified significant impacts in the 2014 LMSAP EIR, the applicable Prior EIRs, or in any new significant impacts that were not previously identified in any of those Previous CEQA Documents.

CONCLUSION

Staff believes that the proposed project is well-designed and helps to implement the vision of the Lake Merritt Station Area Plan by bringing transit-oriented residential development with active ground floor uses.

RECOMMENDATIONS

1. Affirm staff's environmental determination and adopt the attached CEQA findings and Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCAMMRP).
2. Approve the Major Conditional Use, Design Review and Vesting Tentative Parcel Map subject to the attached findings and conditions (including the Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCAMMRP)) contained in this Staff Report.

Prepared by:

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Bureau of Planning

Reviewed by:

ROBERT MERKAMP
Development Planning Manager
Bureau of Planning

DARIN RANELETTI
Deputy Director
Bureau of Planning

Approved for forwarding to the
City Planning Commission:

RACHEL FLYNN
Director
Planning and Building Department

ATTACHMENTS:

A. Proposed Project Plans (dated July 21, 2016)
B. Findings for Approval
C. Conditions of Approval and SCAMMRP
D. Public Comment

Attachment A - August 3, 2016 Planning Commission Staff report

City of Oakland Planning Commission

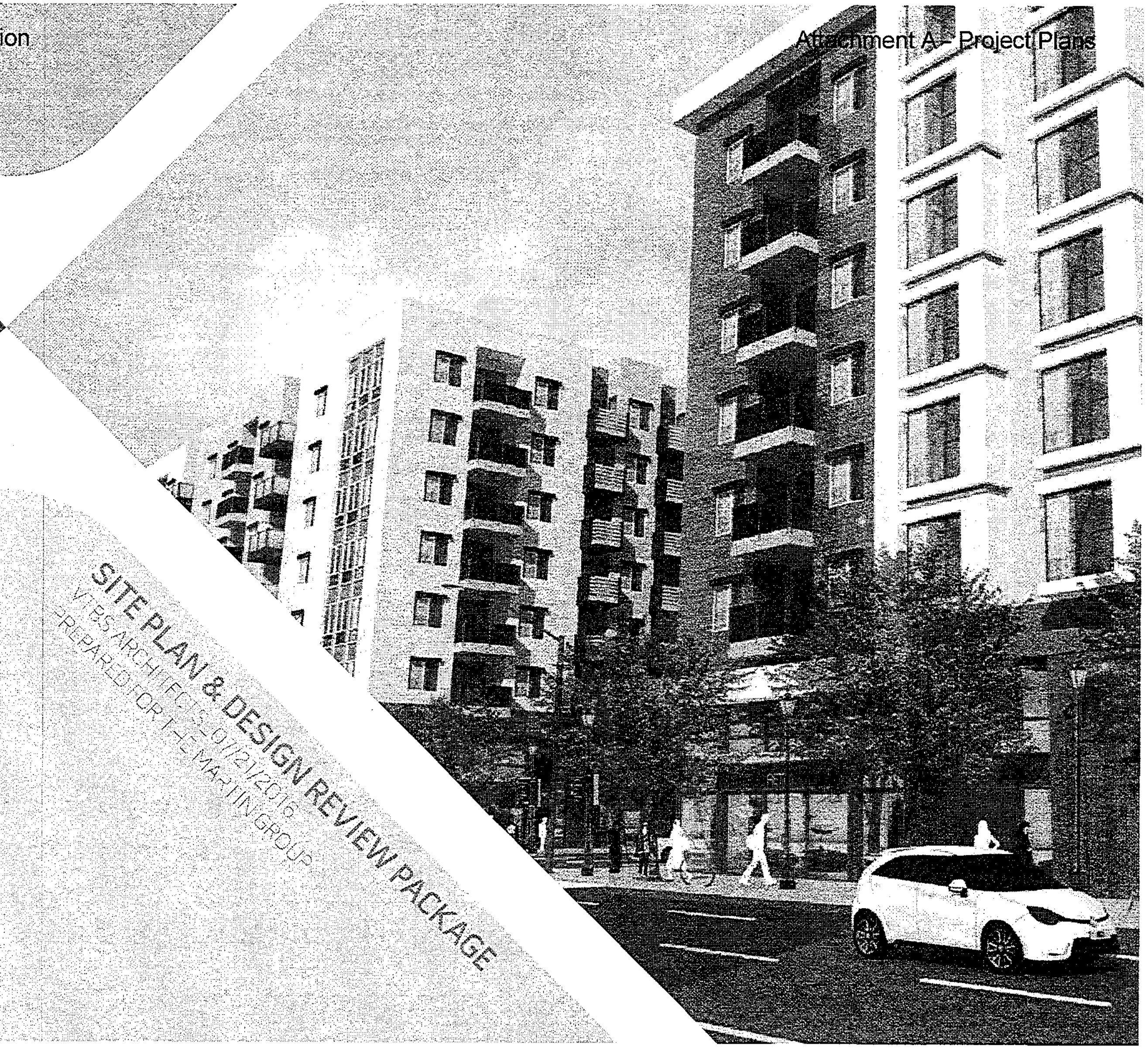
Attachment A - Project Plans

W12
WEBSTER & 12TH
OAKLAND, CA

SITE PLAN & DESIGN REVIEW PACKAGE

BY BSA ARCHITECTS 07/21/2016

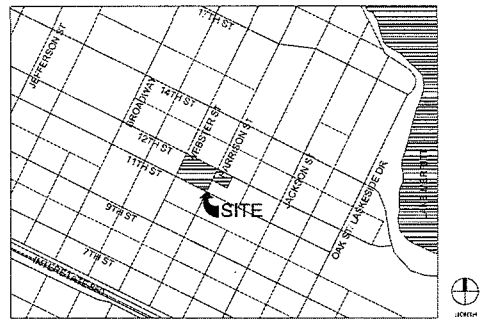
PREPARED FOR THE MARTIN GROUP



W12

WEBSTER & 12TH

OAKLAND, CA



VICINITY MAP

SITE PLAN & DESIGN REVIEW PACKAGE

V.TBS ARCHITECTS 07/21/2016

PREPARED FOR THE MARTIN GROUP

Attachment A - Project Plans

SHEET INDEX

C-SERIES

CIVIL: BFK ENGINEERS

CONTACT: Ryan Bernal / rbernal@bfk.com

C-01 EXISTING CONDITIONS PLAN
C-02 CONCEPTUAL GRADING PLAN
C-03 CONCEPTUAL STORMWATER MANAGEMENT PLAN
C-04 CONCEPTUAL UTILITY PLAN

A-SERIES

ARCHITECTURE: VTBS

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A-03 EXISTING SITE PHOTOS
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L-SERIES

LANDSCAPE: GUZZZARDO PARTNERSHIP

CONTACT: Paul Lettieri / plettieri@TGP-INC.com

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L-2.1 CONCEPTUAL LANDSCAPE PLAN - PODIUM LEVEL
L-2.2 CONCEPTUAL LANDSCAPE ENLARGEMENT PLAN - COURTYARD A
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L-3.3 CONCEPTUAL LANDSCAPE ENLARGEMENT PLAN - ROOF C

SITE AREA

FULL BLOCK:	
SITE AREA: 1.38 ACRES:	60,000 SF
BUILDING FOOTPRINT	60,000 SF
LOT COVERAGE:	100%
¼ BLOCK:	
SITE AREA: .34 ACRES:	15,000 SF
BUILDING FOOTPRINT	15,000 SF
LOT COVERAGE:	100%
TOTAL OPEN SPACE:	
REQUIRED: 75 SF/ UNIT	31,650 SF
BALCONIES: 362 x 50SF	18,100 SF
COURTYARD LVL 3	14,900 SF
ROOF TERRACE LVL 8	11,120 SF
COMMUNITY ROOMS LVL 1-2	≥ 3,000SF
COMMUNITY ROOMS LVL 3	3,440 SF
PROVIDED:	≥ 50,560 SF

PROJECT AREA TABULATION

FULL BLOCK:	
COMMERCIAL SF:	23,400 SF
RESIDENTIAL:	291,390 SF
TOTAL:	**FAR 5.2/ 314,790 SF**
¼ BLOCK:	
COMMERCIAL SF:	1,650 SF
RESIDENTIAL:	67,325 SF
TOTAL:	**FAR 4.6/ 68,975 SF**
TOTAL PROJECT:	
COMMERCIAL SF:	25,050 SF
RESIDENTIAL:	358,715 SF
TOTAL:	**383,765 SF**

UNIT TABULATION

FULL BLOCK:

UNIT	TYPE	SIZE	NO.	AREA	%
A	STUDIO	450 SF	43	19,350 SF	12.4%
A*	STUDIO	480 SF	78	37,440 SF	23.1%
B	1 BD	720 SF	136	97,920 SF	40.1%
C	2 BD	1,050 SF	76	79,800 SF	22.4%
D	3 BD	1,545 SF	6	9,270 SF	1.8%
NET RESIDENTIAL				243,780SF	100%
LEASING/ LOBBY/ AMENITIES				10,100 SF	
MULTIPURPOSE & COMMON AREAS				37,510 SF	
TOTAL RESIDENTIAL			339	291,390 SF	

¼ BLOCK:

UNIT	TYPE	SIZE	NO.	AREA	%
A	STUDIO	450 SF	24	10,800 SF	31.1%
B	1 BD	720 SF	30	21,600 SF	39.0%
C	2 BD	1,050 SF	23	24,150 SF	29.9%
NET RESIDENTIAL				56,550 SF	100%
LEASING/ LOBBY/ AMENITIES				2,400 SF	
MULTIPURPOSE & COMMON AREAS				8,375 SF	
TOTAL RESIDENTIAL			77	67,325 SF	

TOTAL PROJECT RESIDENTIAL	416	358,715 SF

PARKING REQUIRED

RESIDENTIAL:	.75 STALLS PER UNIT	312 STALLS
COMMERCIAL:		0 STALLS
		312 STALLS

PARKING PROVIDED

FULL BLOCK:	273 STALLS
¼ BLOCK:	44 STALLS
	317 STALLS

BICYCLE PARKING REQUIRED

LONG TERM:		
RETAIL:	1 PER 12,000SF/ MIN 2	3 STALLS
RESIDENTIAL:	1 PER 4 UNITS	104 STALLS
		107 STALLS
SHORT TERM:		
RETAIL:	1 PER 5,000SF/ MIN 2	5 STALLS
RESIDENTIAL:	1 PER 20 UNITS	21 STALLS
		26 STALLS

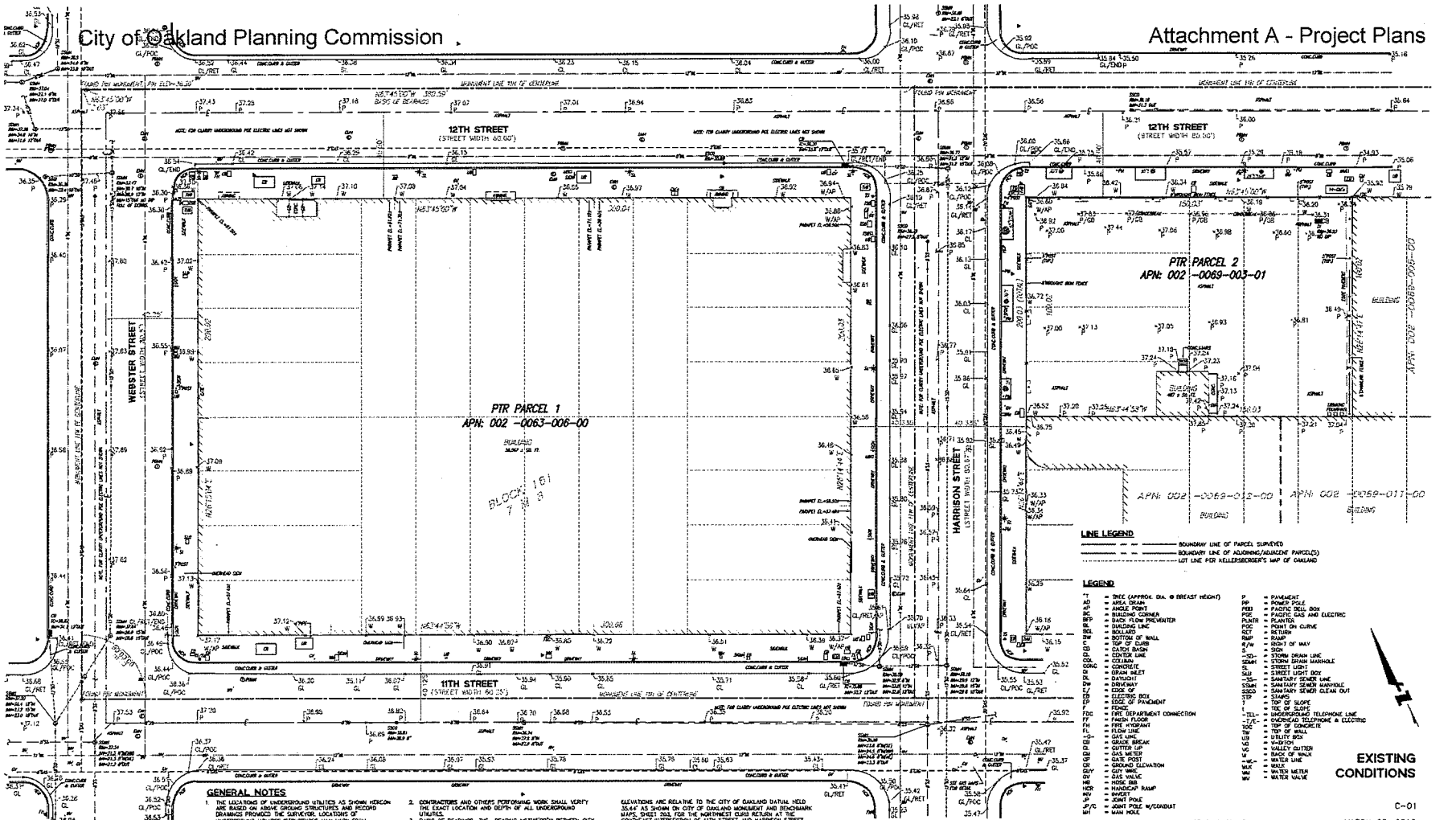
BICYCLE PARKING PROVIDED

LONG TERM:	**288 STALLS**
SHORT TERM:	**26 STALLS**

DATA SHEET

A-00

JULY 21, 2016



WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET &
BETWEEN ALICE STREET & WEBSTER STREET

OAKLAND, CA

PREPARED FOR:
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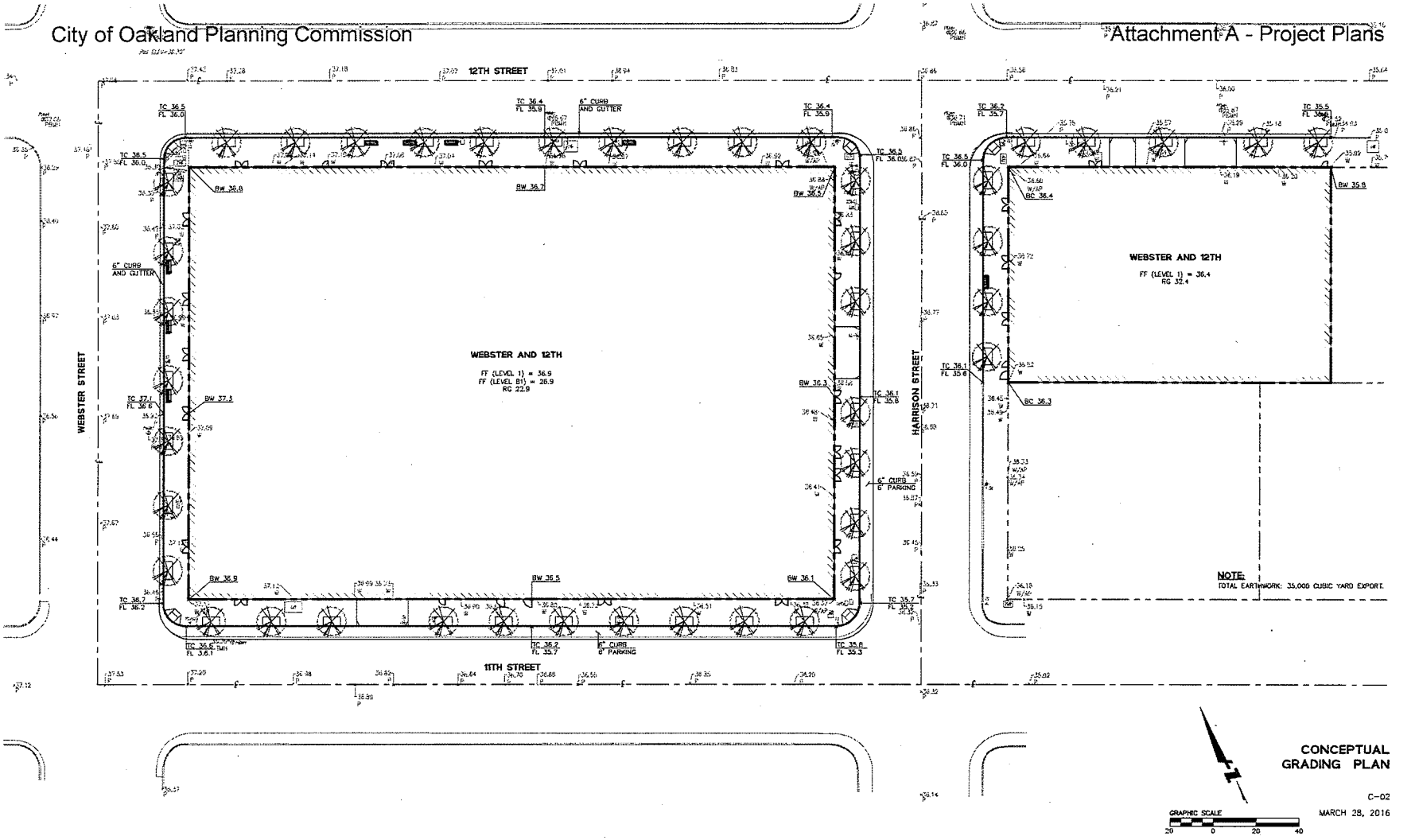
VAN TILBURG, BANVARD & SODERBERGH, AIA



CONCEPTUAL GRADING PLAN

C-02

MARCH 28, 2016

WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET & BETWEEN ALICE STREET & WEBSTER STREET

OAKLAND, CA

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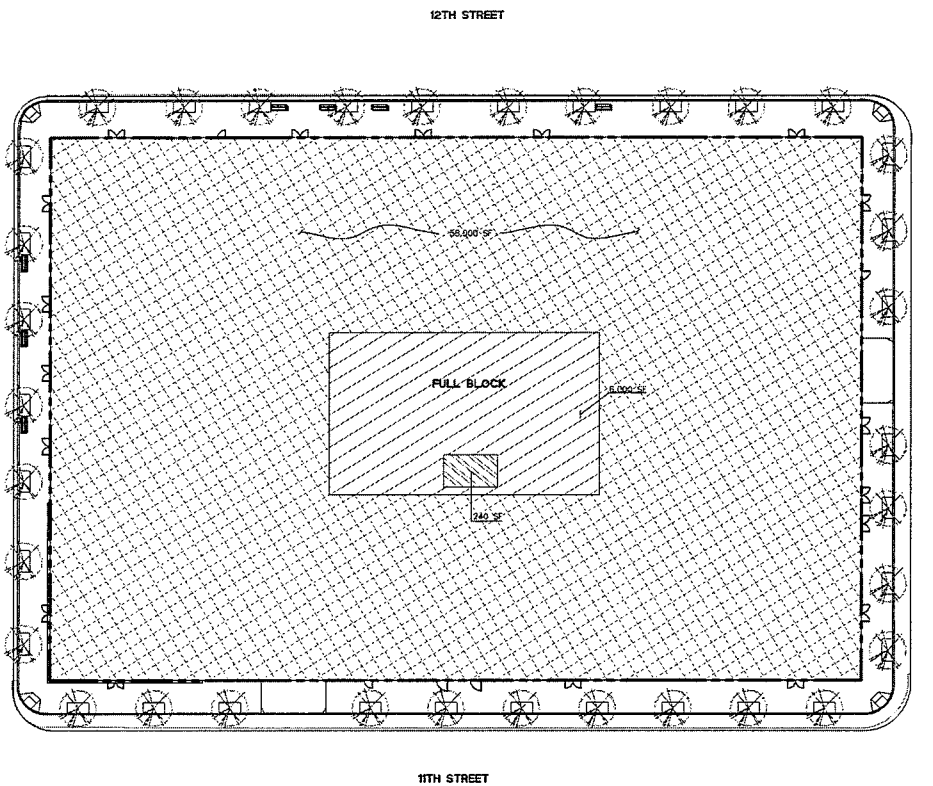

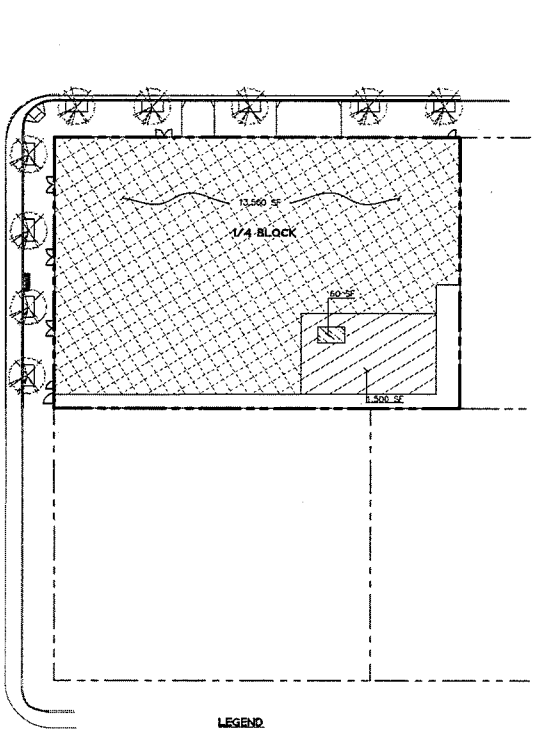

TRANSIT ORIENTED DEVELOPMENTS

SITE QUALIFIES AS SPECIAL PROJECT CATEGORY C: TRANSIT ORIENTED DEVELOPMENTS PER APPENDIX K SECTION K.4 OF THE ALAMEDA COUNTYWIDE CLEAN WATER PROGRAM HANDBOOK DATED JANUARY 1, 2015.

FULL BLOCK

- 50% LOCATION CREDIT (100% OF SITE LOCATED WITHIN QUARTER MILE OF 12TH STREET BART STATION.)
- 20% DENSITY CREDIT (MIXED USE PROJECT WITH FAR OF 5.4)
- 20% MINIMIZED SURFACE PARKING CREDIT (0% SURFACE PARKING)

54,000 SF OF 60,000 SF TOTAL TO BE TREATED WITH APPROVED NON-LID TREATMENT MEASURES.
6,000 SF OF 60,000 SF TOTAL TO BE TREATED WITH BIOTREATMENT PLANTER (240 SF FLOW THROUGH PLANTER BASED ON 4% RULE) LOCATED ON PODIUM.

1/4 BLOCK

- 50% LOCATION CREDIT (100% OF SITE LOCATED WITHIN QUARTER MILE OF 12TH STREET BART STATION.)
- 20% DENSITY CREDIT (MIXED USE PROJECT WITH FAR OF 4.6)
- 20% MINIMIZED SURFACE PARKING CREDIT (0% SURFACE PARKING)

13,500 SF OF 15,000 SF TOTAL TO BE TREATED WITH APPROVED NON-LID TREATMENT MEASURES.
1,500 SF OF 15,000 SF TOTAL TO BE TREATED WITH BIOTREATMENT PLANTER (60 SF FLOW THROUGH PLANTER BASED ON 4% RULE) LOCATED ON PODIUM.

LEGEND

IMPERVIOUS BUILDING AREA TO BE TREATED BY NON-LID TREATMENT MEASURES

IMPERVIOUS BUILDING AREA TO BE TREATED BY LID TREATMENT MEASURES

LID TREATMENT

GRAPHIC SCALE 20 0 20 40

CONCEPTUAL STORMWATER MANAGEMENT PLAN

C-03

MARCH 28, 2016

WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET &
BETWEEN ALICE STREET & WEBSTER STREET
OAKLAND, CA

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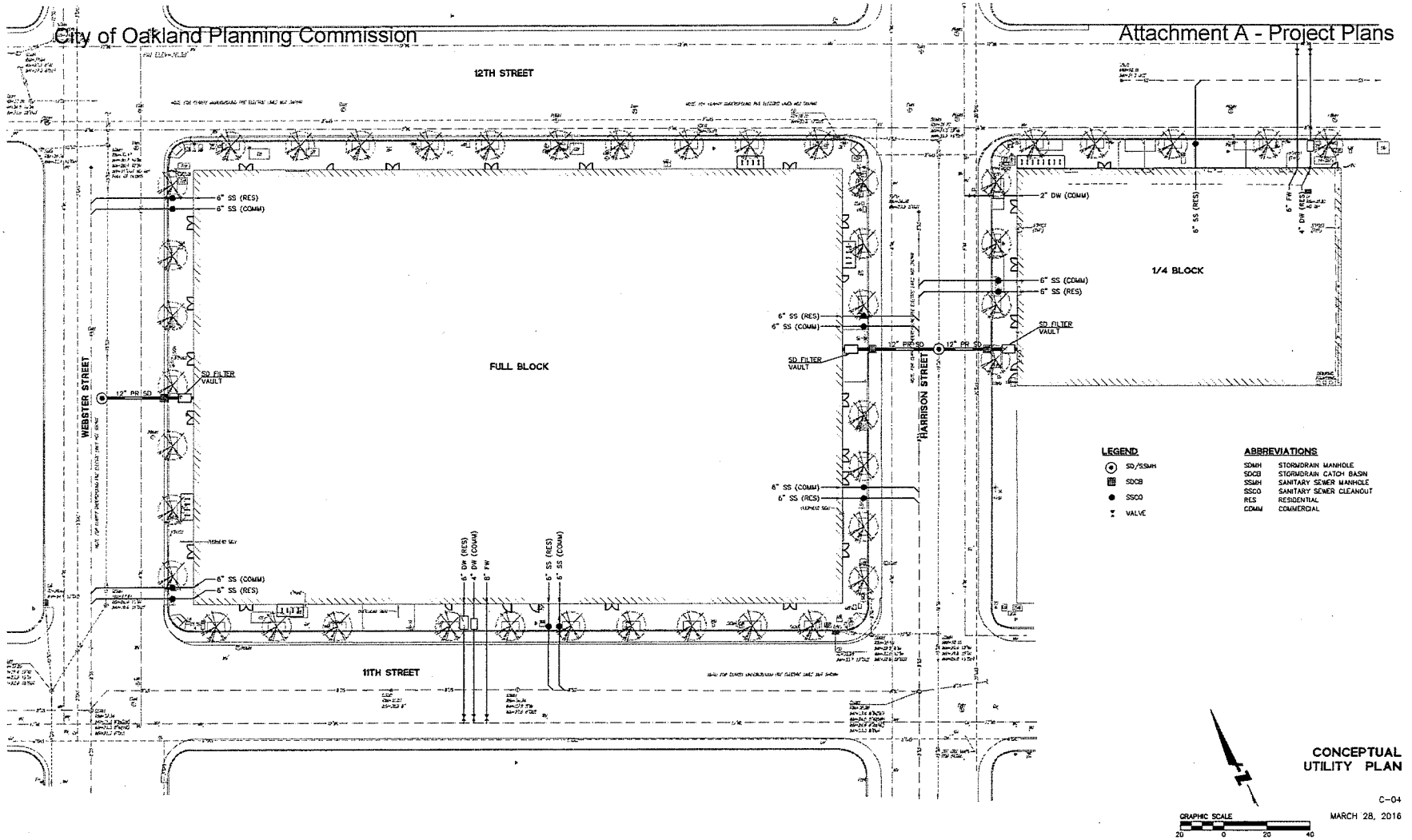
VAN TILBURG, BANVARD & SODERBERGH, AIA



CONCEPTUAL UTILITY PLAN

C-04

MARCH 28, 2016

WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET &
BETWEEN ALICE STREET & WEBSTER STREET

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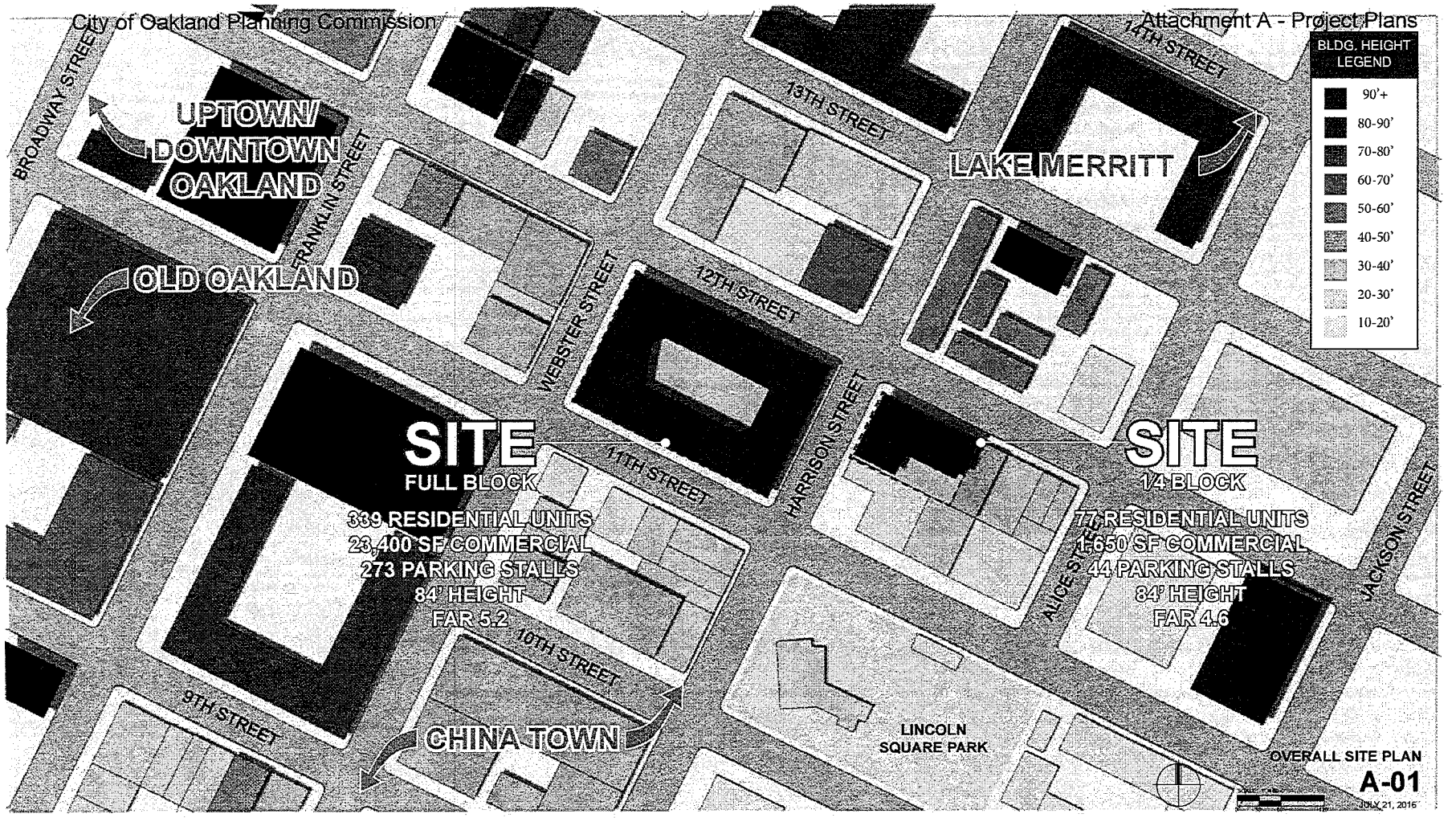
REDWOOD CITY, CA 94065
650/482-6300
650/482-6399 (FAX)

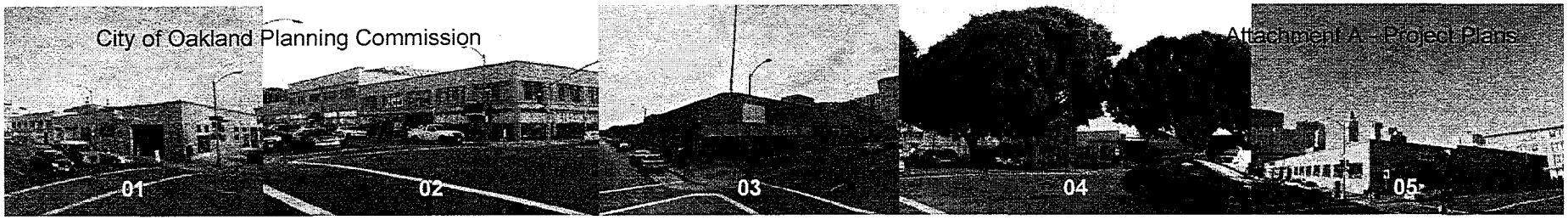
VAN TILBURG, BANVARD & SODERBERGH, AIA

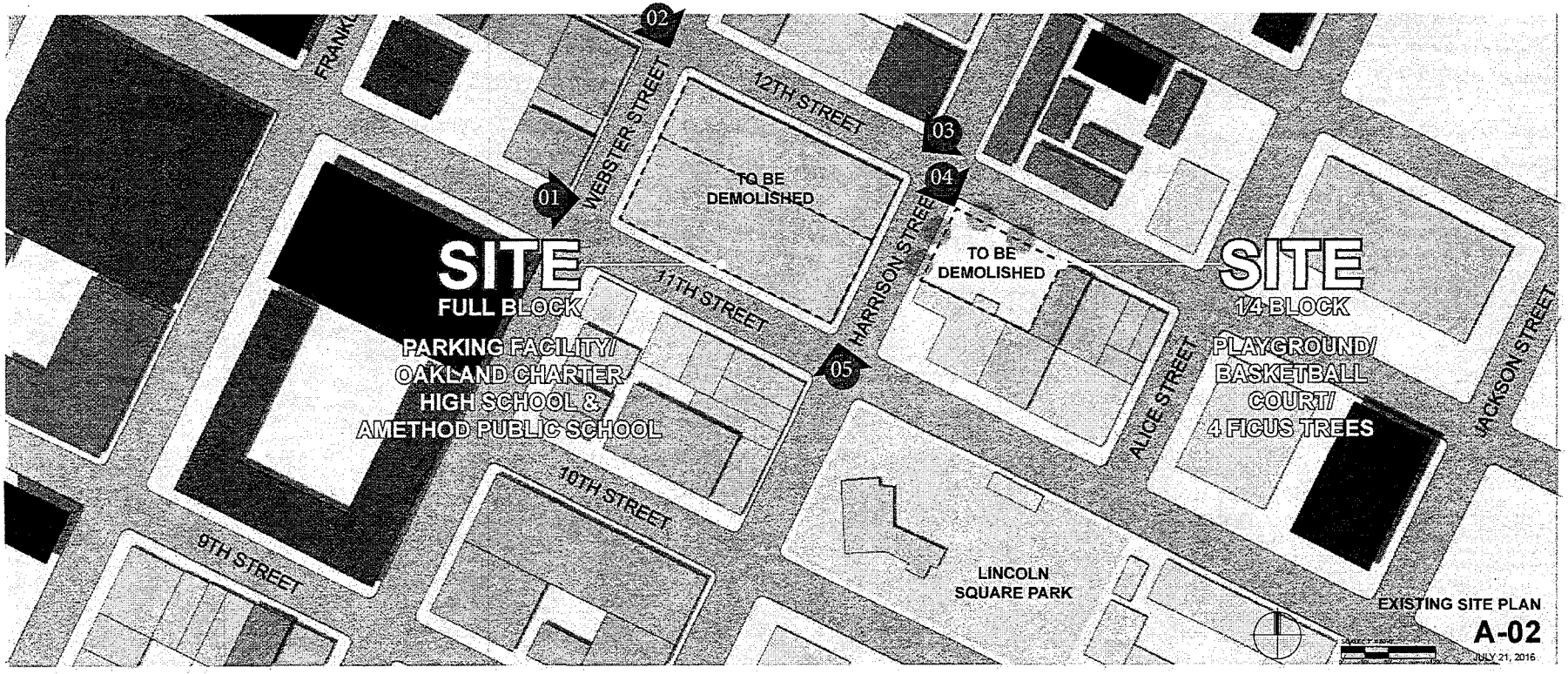


W12 - WEBSTER & 12TH
BETWEEN 11TH & 12TH STREET
HARRISON STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA



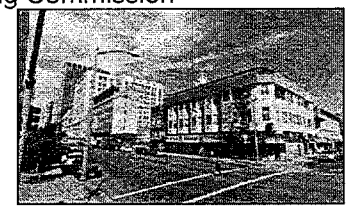


W12 - WEBSTER & 12TH
BETWEEN 11TH & 12TH STREET/
HARRISON STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA


01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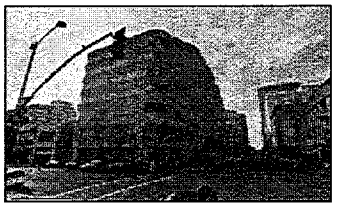
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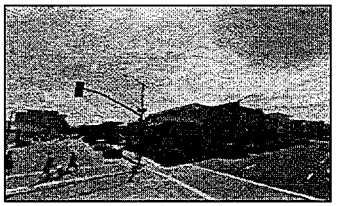
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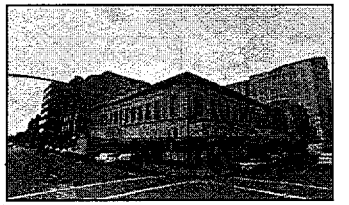
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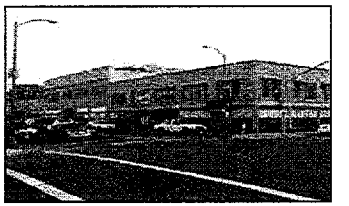
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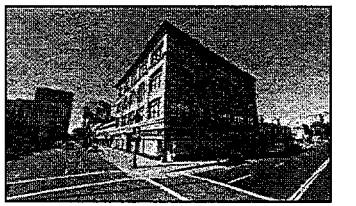
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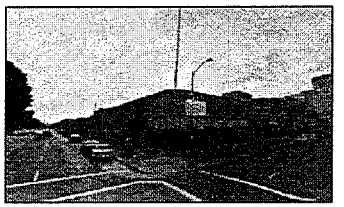
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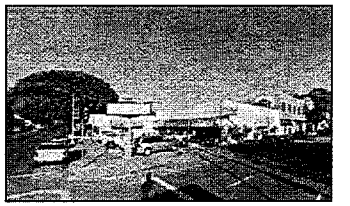
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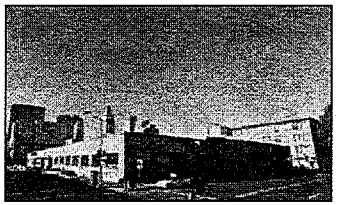
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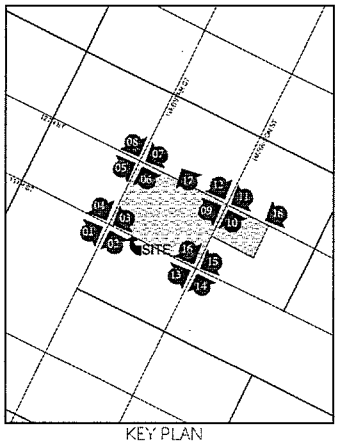
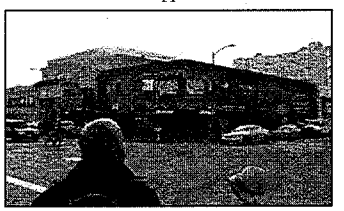


KEY PLAN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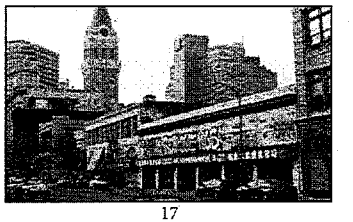
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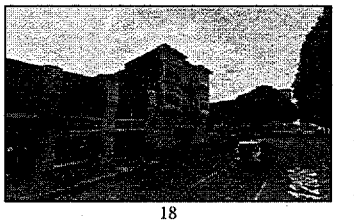
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(1) Address : 301 12th St.
(2) Address : 1101 Webster St.
(3) Address : 375 11th St.
(4) Address : 1088 Webster St.
(5) Address : 344 12th St.
(6) Address : 360 12th St.
(7) Address : 351 12th St.
(8) Address : 345 12th St.
(9) Address : 1238 Harrison St.
(10) Address : 300 12th St.
(11) Address : 301 12th St.
(12) Address : 285 12th St.
(13) Address : 288 11th St.
(14) Address : 301 12th St.
(15) Address : 303 11th St.
(16) Address: 1098 Harrison
(17) Address: 332 12th St.
(18) Address: 261 12th St.

EXISTING SITE PHOTOS

A-03

JULY 21, 2016

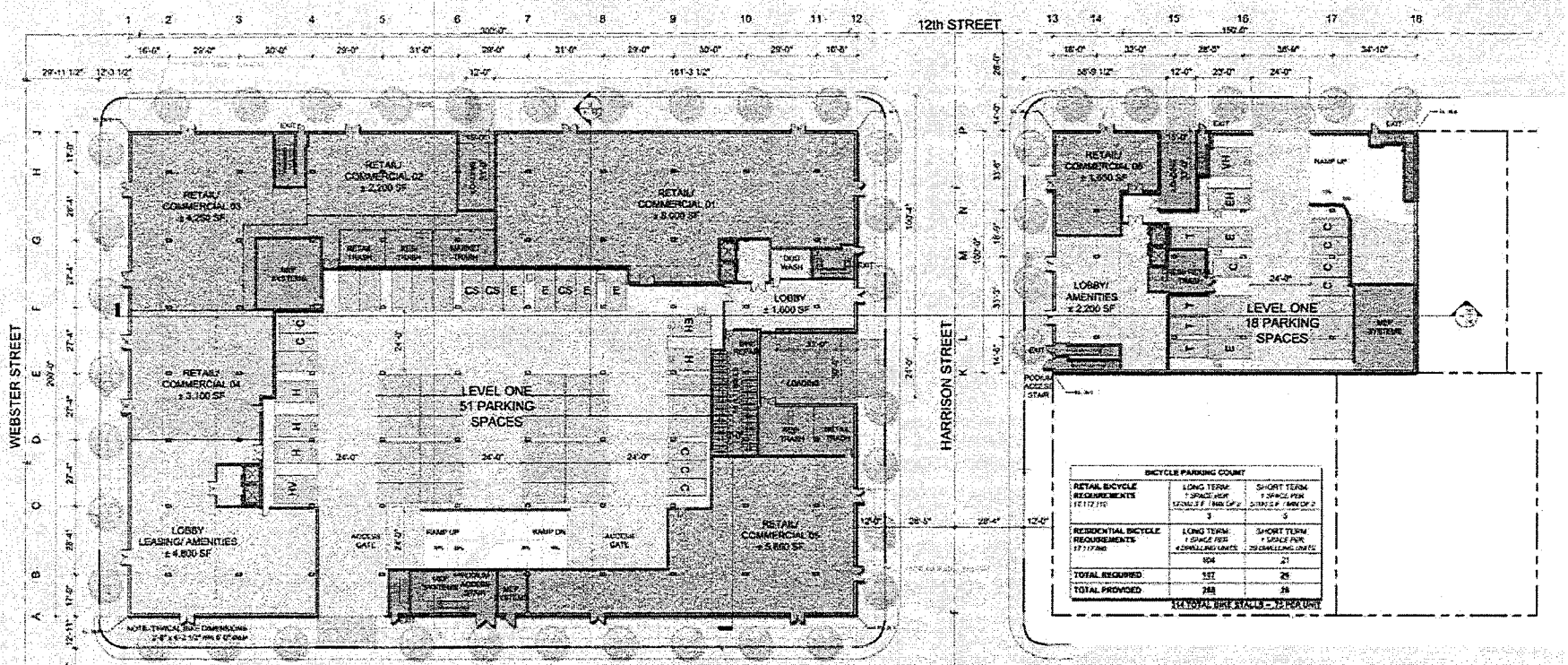
W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET
HARRISON STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA

RENDERING (12TH & HARRISON)
A-04



PODIUM AREA

	FULL BLOCK				QUARTER BLOCK			
	RETAIL	LEASING/ LOBBY/ AMENITY	PARKING/ STORAGE/ SHAFTS, ETC.	TOTAL	RETAIL	LEASING/ LOBBY/ AMENITY	PARKING/ STORAGE/ SHAFTS, ETC.	TOTAL
BASEMENT	-	300	39,500 SF	40,000 SF	-	-	-	-
LEVEL ONE	23,400 SF	9,400 SF	34,200 SF	67,000 SF	1,550 SF	2,200 SF	11,150 SF	15,000 SF
LEVEL TWO	-	3,200 SF	30,350 SF	33,550 SF	-	200	11,800 SF	12,000 SF
TOTAL	23,400 SF	12,100 SF	104,050 SF	140,550 SF	1,550 SF	2,400 SF	22,950 SF	27,000 SF
				167,550 SF				

PARKING COUNT

	FULL BLOCK						QUARTER BLOCK					
	STD.	COMPACT	TANDEM	ELECTRIC VEHICLE	CAR SHARING	TOTAL	STD.	COMPACT	TANDEM	ELECTRIC VEHICLE		TOTAL
BASEMENT	135	29	3	-	-	168	-	-	-	-		-
LEVEL ONE	39*	5	-	4	3	51	7**	5	4	2		18
LEVEL TWO	40	14	-	-	-	54	9	10	-	-		20
TOTAL	373						44					
	317 PROVIDED / 312 REQUIRED											

* HANDICAP PARKING SPACES, 1 WITH EV CHARGING STATION

** HANDICAP PARKING SPACE, 1 WITH EV CHARGING STATION

LEVEL ONE FLOOR PLAN

A-05

JULY 21, 2016

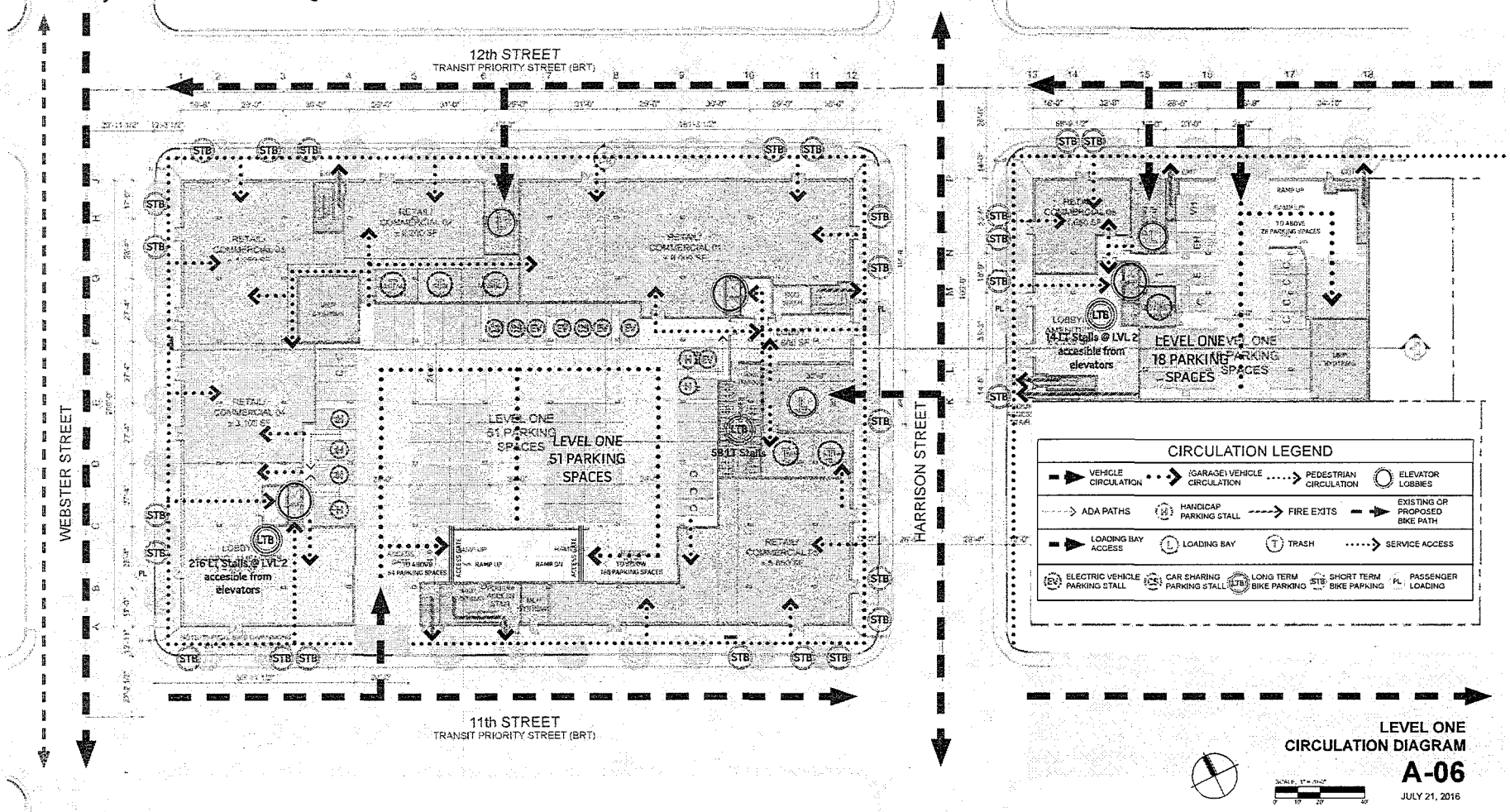
W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET/ HARRISON STREET & WEBSTER STREET

OAKLAND, CA

PREPARED FOR: THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA



LEVEL ONE
CIRCULATION DIAGRAM

A-06

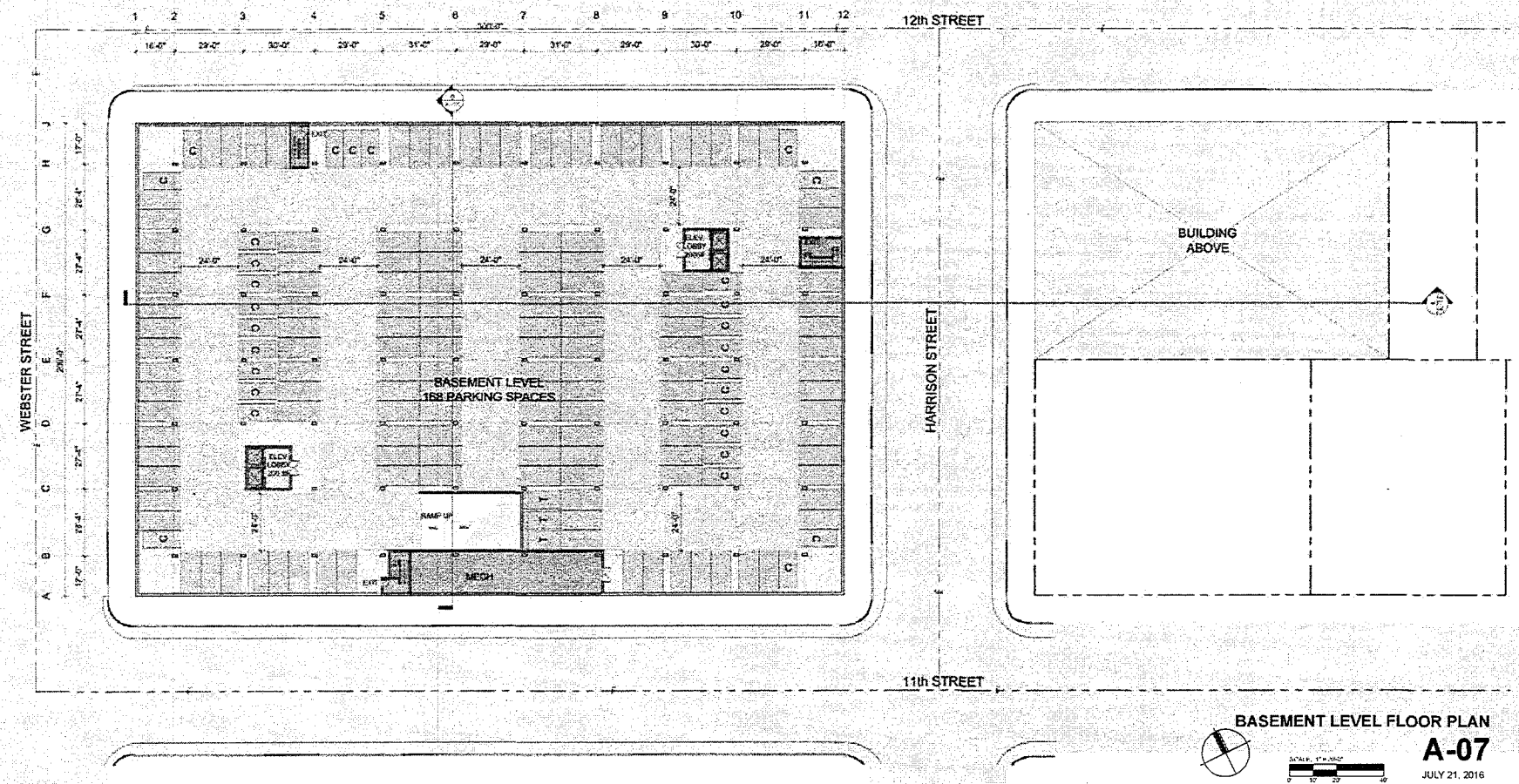
JULY 21, 2016

W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET
HARRISON STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH AIA



BASEMENT LEVEL FLOOR PLAN

A-07

JULY 21, 2016

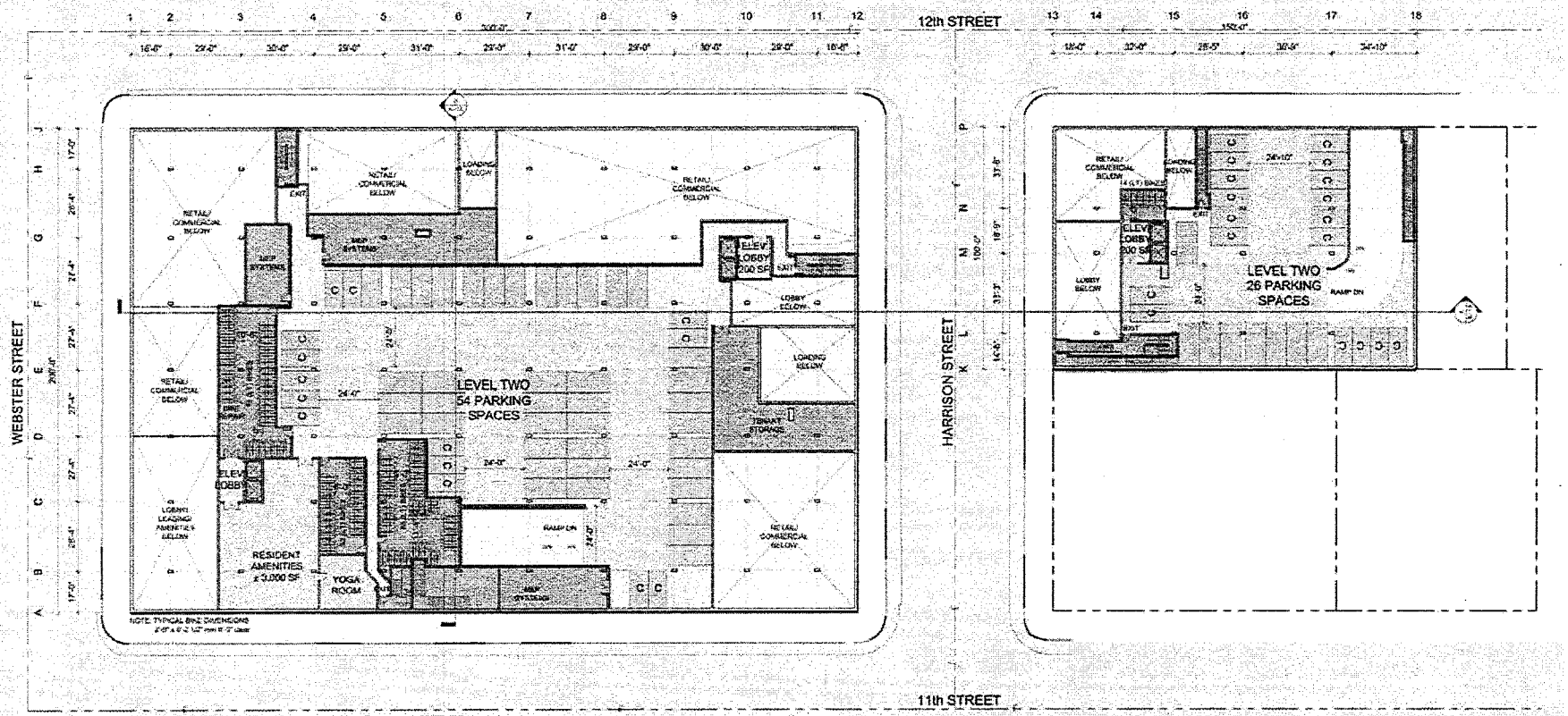
W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET; HARRISON STREET & WEBSTER STREET

OAKLAND, CA

PREPARED FOR: THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA



LEVEL TWO FLOOR PLAN

A-08

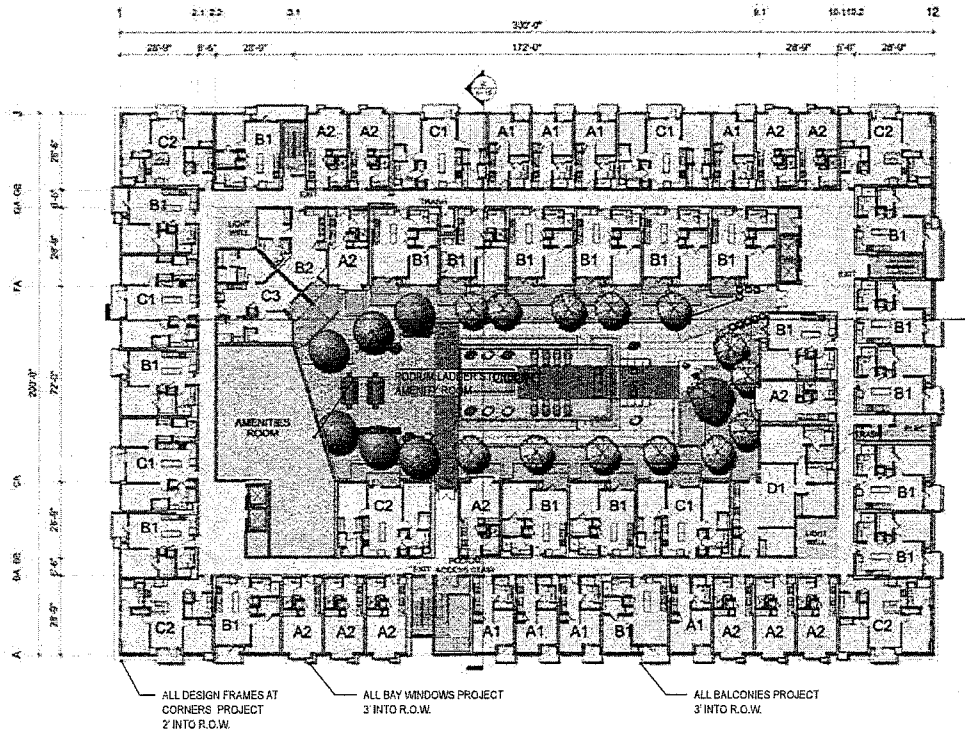
JULY 21, 2016

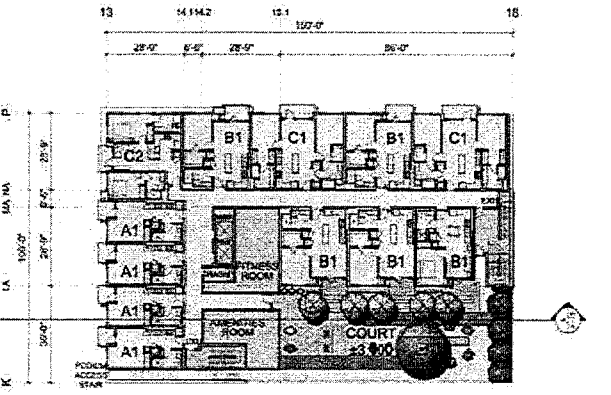
W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET/
HARRISON STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA





UNIT TABULATION

FULL BLOCK:

UNIT	TYPE	SIZE	NO.	AREA	%
A	STUDIO	450 SF	43	19,350 SF	12.4%
A*	STUDIO	480 SF	78	37,440 SF	23.1%
B	1 BD	720 SF	136	97,920 SF	40.1%
C	2 BD	1,050 SF	76	79,800 SF	22.4%
D	3 BD	1,545 SF	6	9,270 SF	1.8%
NET RESIDENTIAL				243,780SF	100%
LEASING/RESIDENT AMENITIES				10,100 SF	
MISC.PURPOSE & COMMON AREAS				37,510 SF	
TOTAL RESIDENTIAL			339	291,390 SF	

½ BLOCK:

UNIT	TYPE	SIZE	NO.	AREA	%
A	STUDIO	450 SF	24	10,800 SF	31.1%
B	1 BD	720 SF	30	21,600 SF	39.0%
C	2 BD	1,050 SF	23	24,150 SF	29.9%
NET RESIDENTIAL				56,550 SF	100%
LEASING/RESIDENT AMENITIES				2,400 SF	
MISC.PURPOSE & COMMON AREAS				8,375 SF	
TOTAL RESIDENTIAL			77	67,325 SF	
TOTAL PROJECT RESIDENTIAL			416	358,715 SF	

PODIUM LEVEL (3) FLOOR PLAN

A-09

JULY 21, 2016

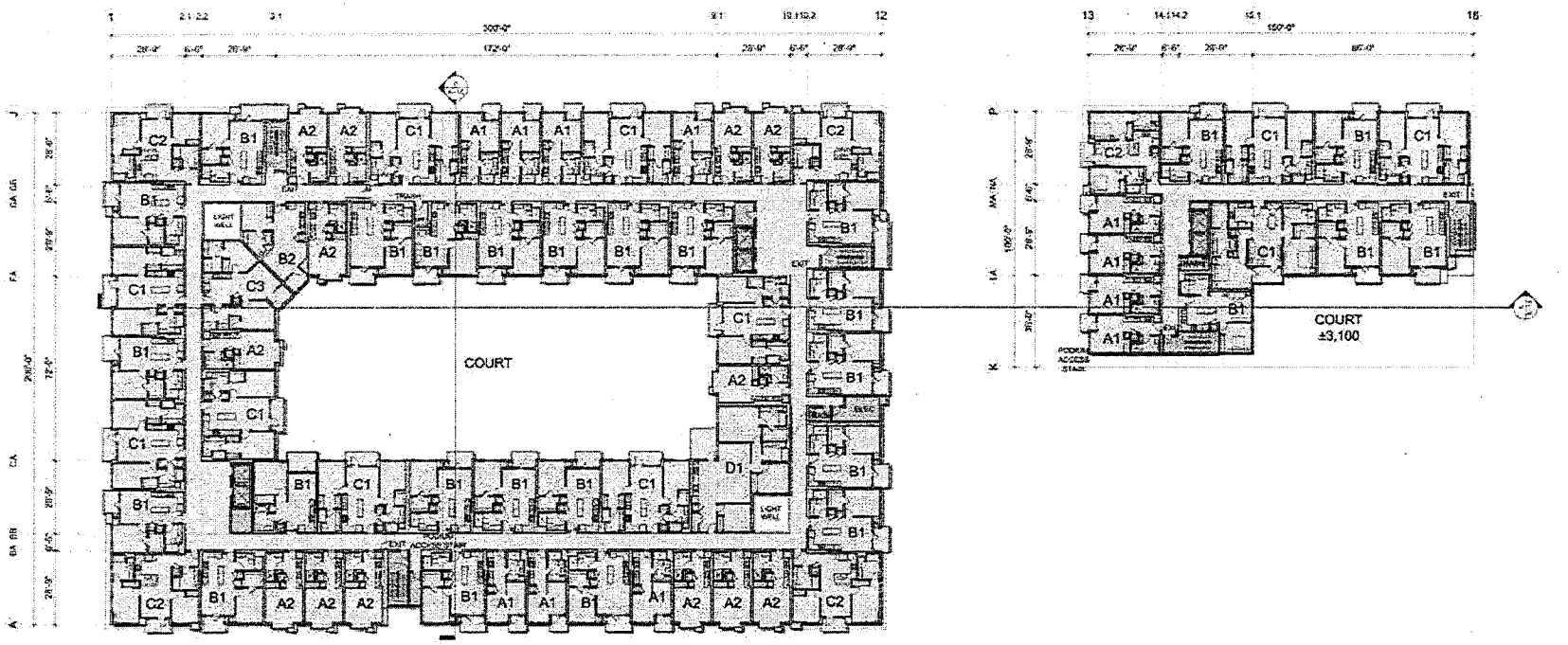
W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET/ HARRISON STREET & WEBSTER STREET

OAKLAND, CA

PREPARED FOR: THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA



TYPICAL LEVEL (4-8) FLOOR PLAN

A-10

JULY 21, 2016

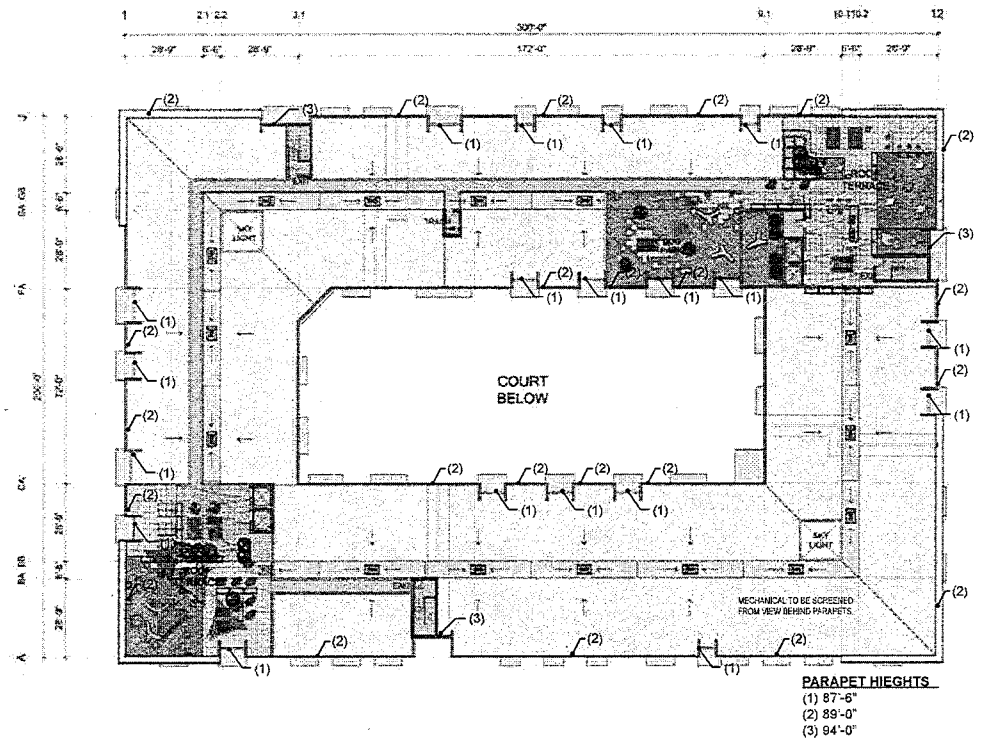
W12 - WEBSTER & 12TH

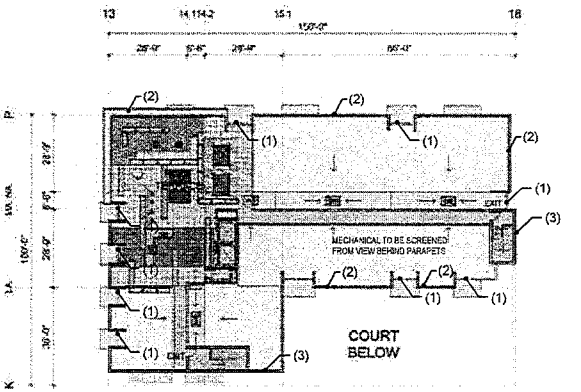
BETWEEN 11TH & 12TH STREET/
HARRISON STREET & WEBSTER STREET

OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA





ROOF LEVEL FLOOR PLAN

A-11

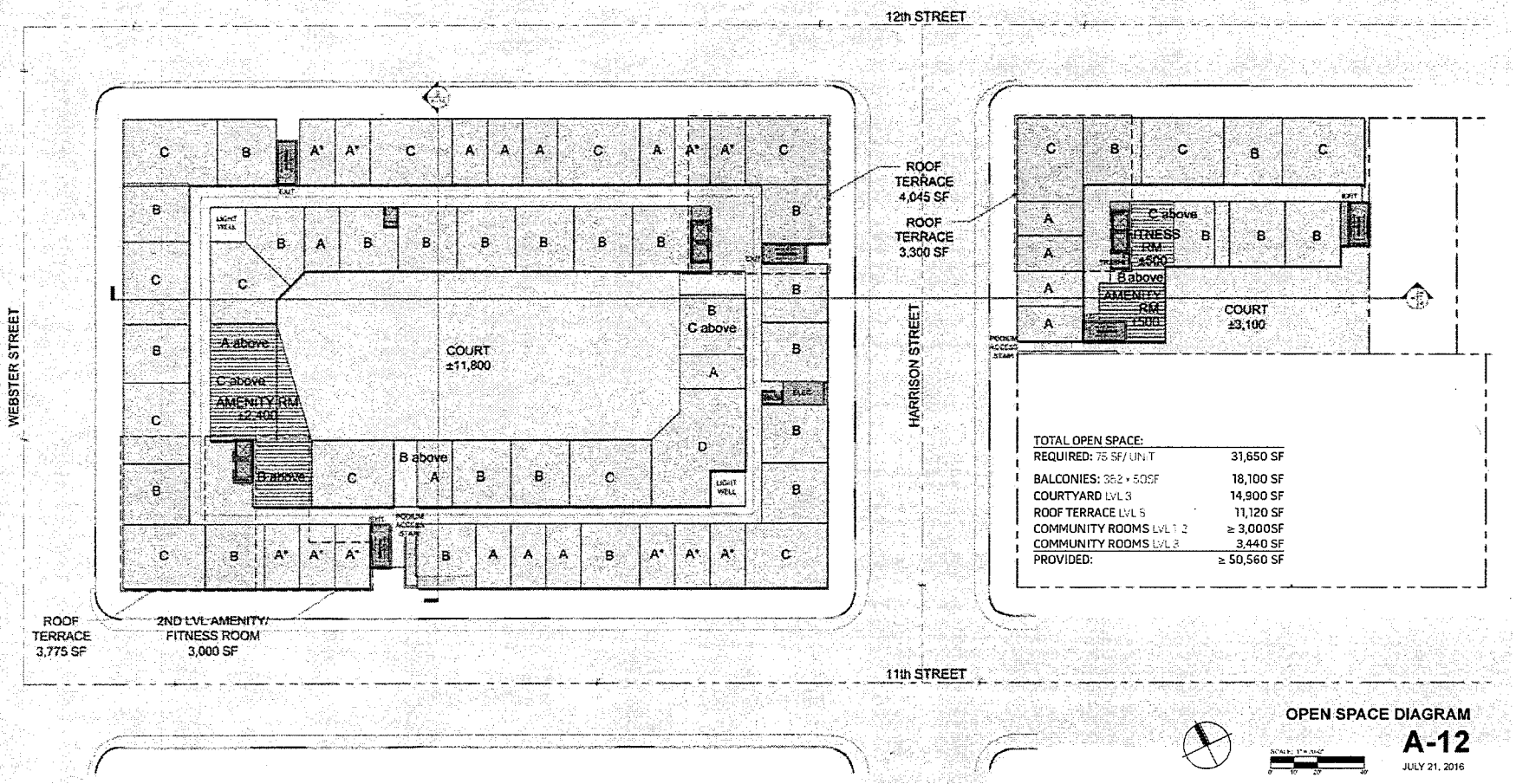
JULY 21, 2016

W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET/
HARRISON STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA



TOTAL OPEN SPACE:	
REQUIRED: 75 SF/ UNIT	31,650 SF
BALCONIES: 362 x 50SF	18,100 SF
COURTYARD LVL 3	14,900 SF
ROOF TERRACE LVL 5	11,120 SF
COMMUNITY ROOMS LVL 1-2	≥ 3,000SF
COMMUNITY ROOMS LVL 3	3,440 SF
PROVIDED:	≥ 50,560 SF

OPEN SPACE DIAGRAM

A-12

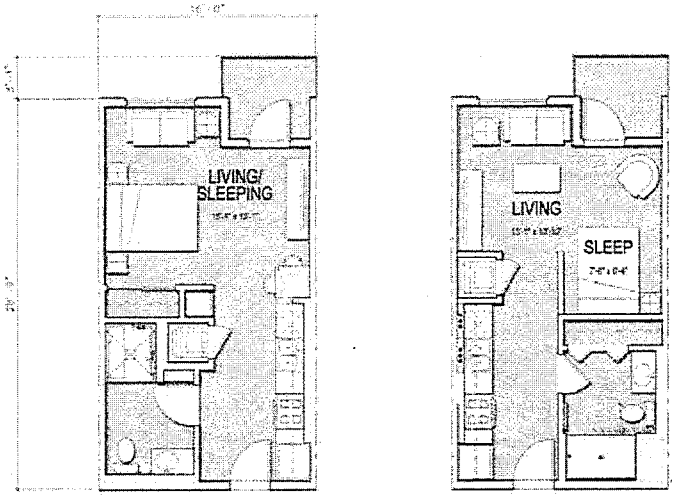
JULY 21, 2016

W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET;
HARRISON STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA

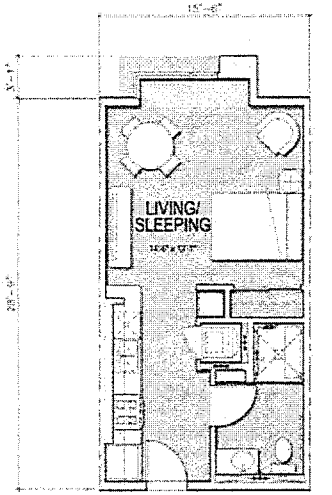


OPTION 1

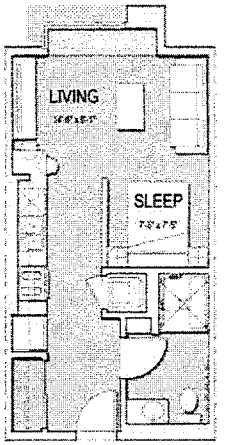
OPTION 2

UNIT A1

Unit: 440 GSF
Balcony: 39 SF



OPTION 1



OPTION 2

UNIT A2

Unit: 460 GSF

UNIT A1 & A2 FLOOR PLANS

A-13

JULY 21, 2016

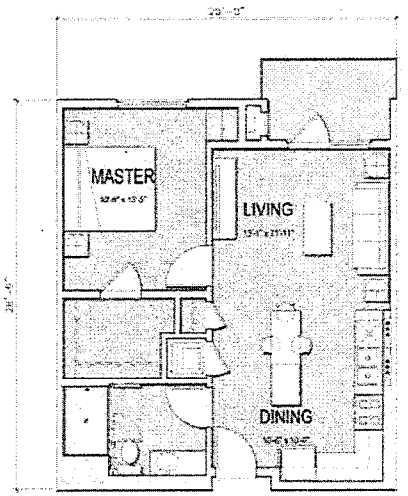
W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET/
HARRISON STREET & WEBSTER STREET

OAKLAND, CA

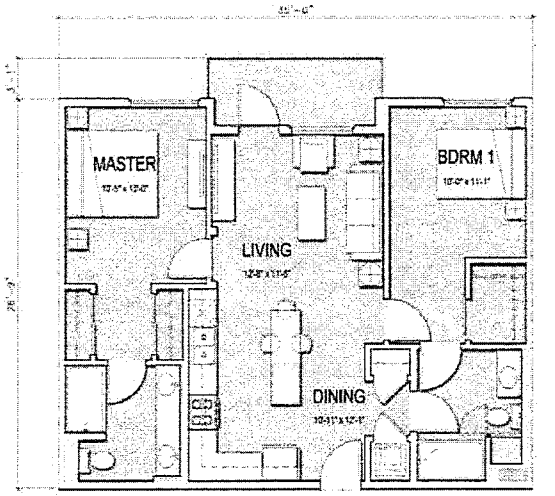
PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA



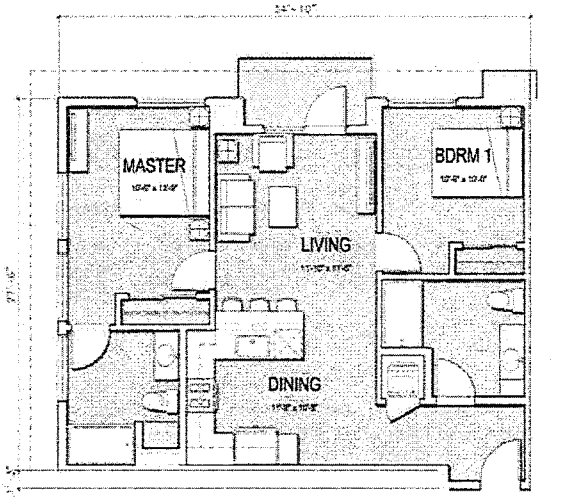
UNIT B1

Unit: 665 GSF
Balcony: 57 SF



UNIT C1

Unit: 982 GSF
Balcony: 57 SF



UNIT C2

Unit: 910 GSF
Balcony: 46 SF

UNIT B1, C1 & C2 FLOOR PLANS

A-14

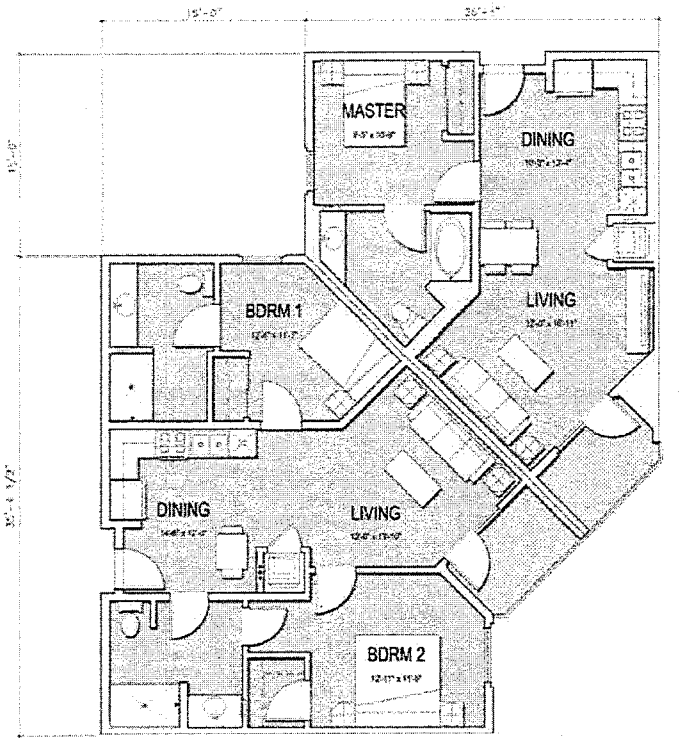
JULY 21, 2016

W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET/
HARRISON STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERGREN, AIA

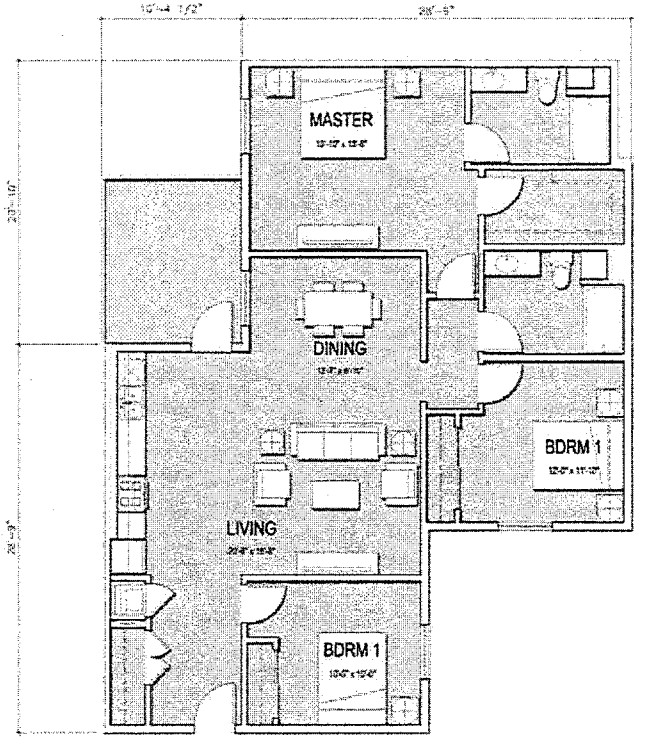


UNIT C3

Unit: 910 GSF
Balcony: 46 SF

UNIT B2

Unit: 635 GSF
Balcony: 46 SF



UNIT D1

Unit: 1,497 GSF
Balcony: 123 SF

UNIT B2,C3 &D1 FLOOR PLANS

A-15

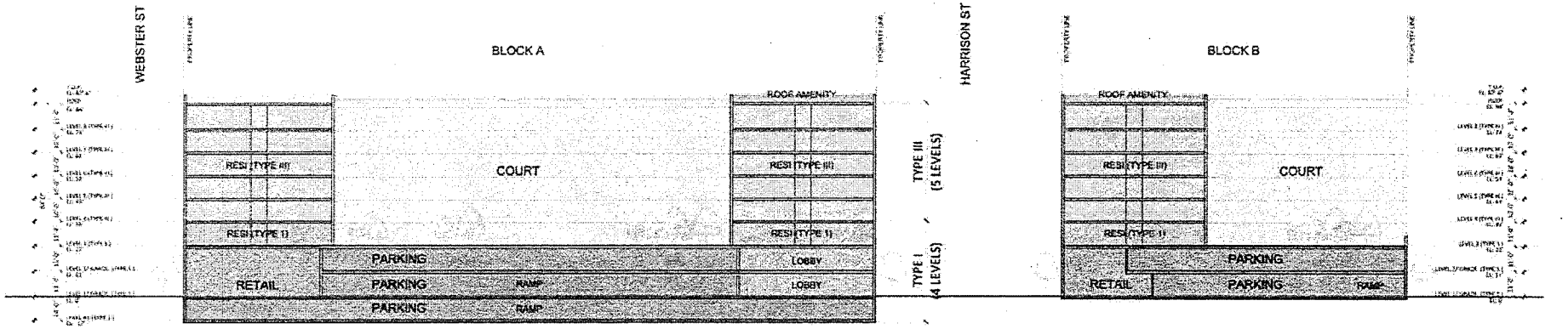
JULY 21, 2016

W12 - WEBSTER & 12TH

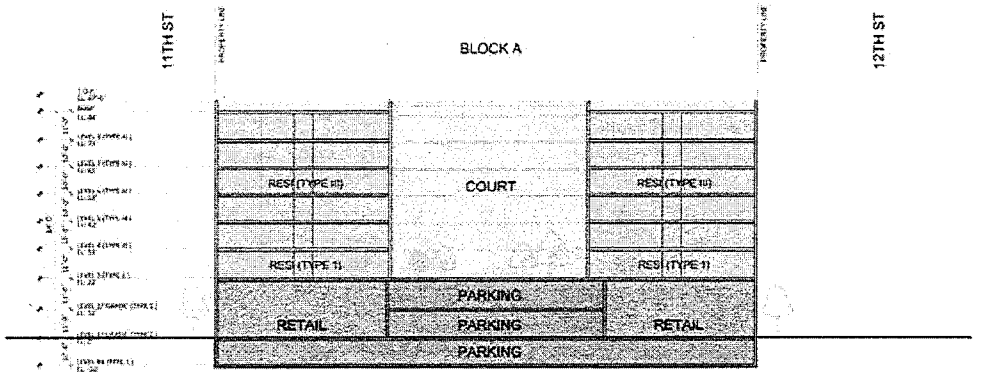
BETWEEN 11TH & 12TH STREET;
HARRISON STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA



SECTION A



SECTION B

BUILDING SECTIONS A&B

A-16

JULY 21, 2016

W12 - WEBSTER & 12TH

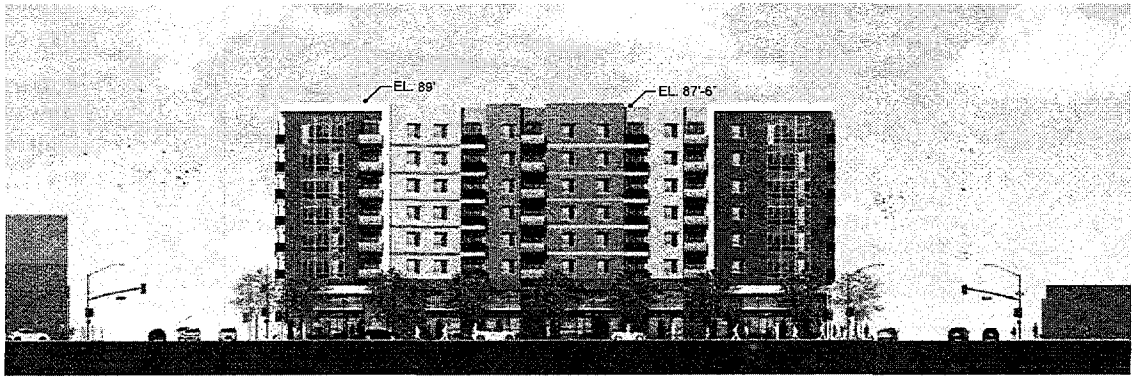
BETWEEN 11TH & 12TH STREET/ HARRISON STREET & WEBSTER STREET

OAKLAND, CA

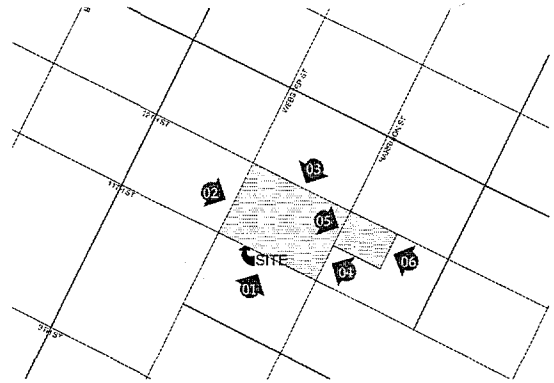
PREPARED FOR: THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA

(01) / 11TH STREET ELEVATION (SOUTH-WEST)



(02) / WEBSTER STREET ELEVATION (NORTH-WEST)



ELEVATION KEY PLAN

BUILDING ELEVATIONS

A-17

JULY 21, 2016

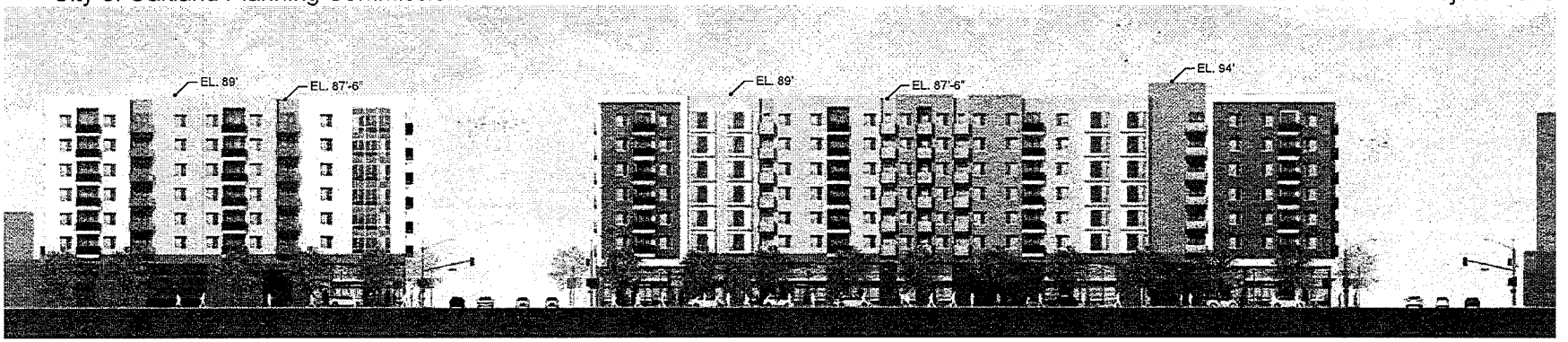
W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET
HARRISON STREET & WEBSTER STREET

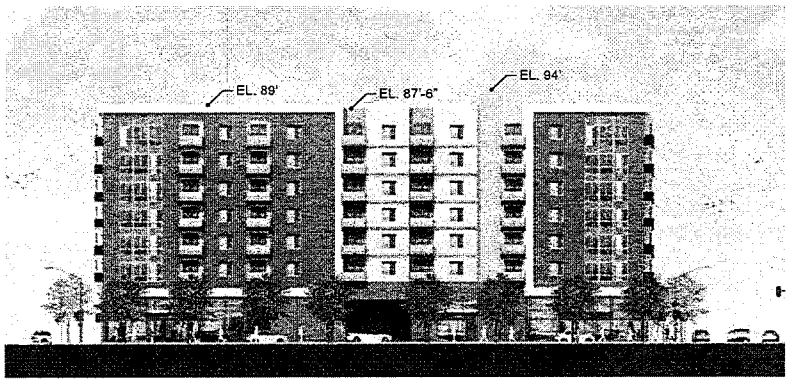
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA

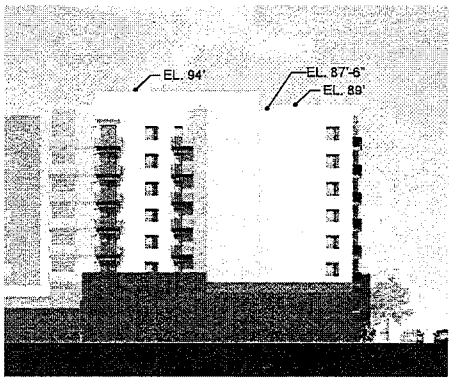


(03) / 12TH STREET ELEVATION (NORTH-EAST)



(04) / HARRISON STREET ELEVATION
(SOUTH-EAST)

(05) / 1/4 BLOCK HARRISON STREET ELEVATION
(NORTH-WEST)



(06) / 1/4 BLOCK
(SOUTH-EAST)

BUILDING ELEVATIONS

A-18

JULY 21, 2016

W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET
HARRISON STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA

RENDERING (11TH & WEBSTER)

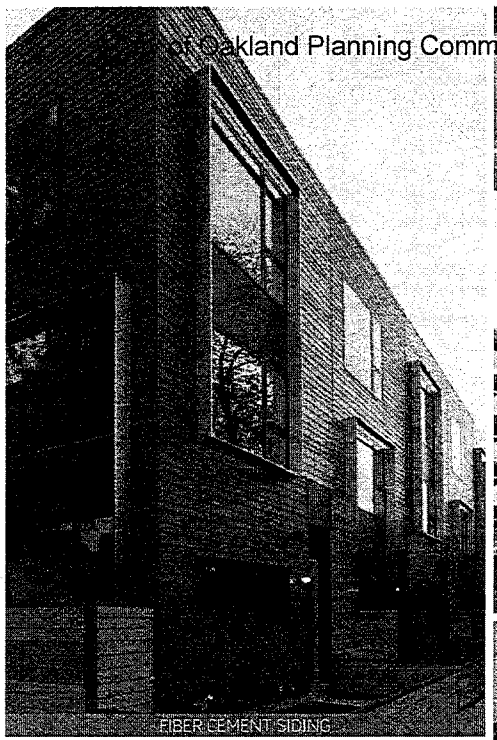
A-19

RENDERING (12TH & WEBSTER)
A-20

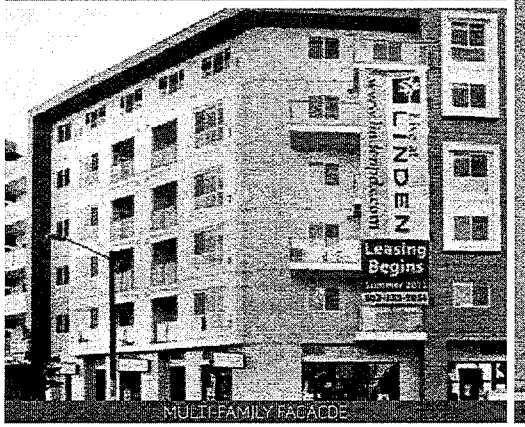
RENDERING (11TH & HARRISON)

A-21

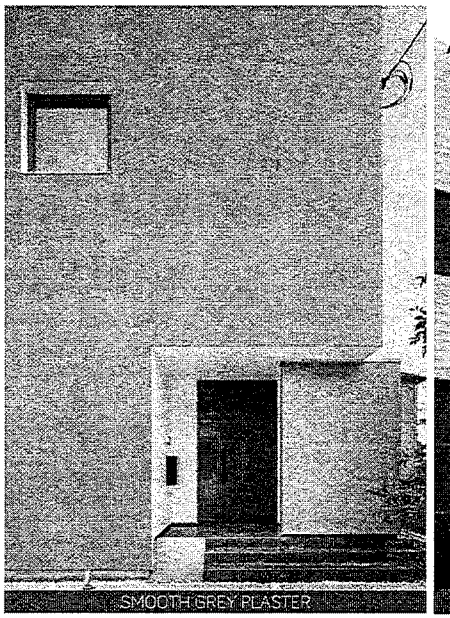
RENDERING (12TH & HARRISON)
1/4 BLOCK DESIGN OPTION 1
A-22

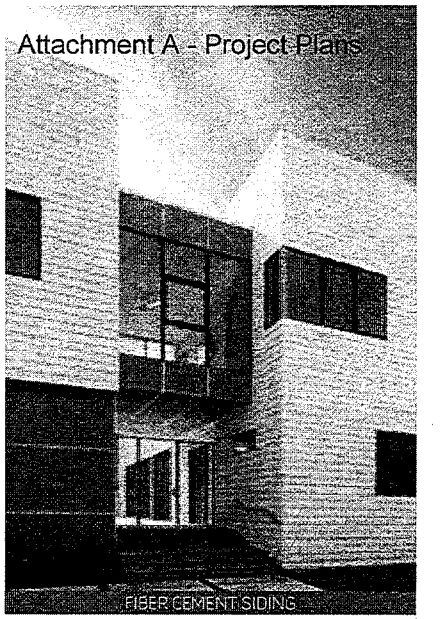

FIBER CEMENT SIDING

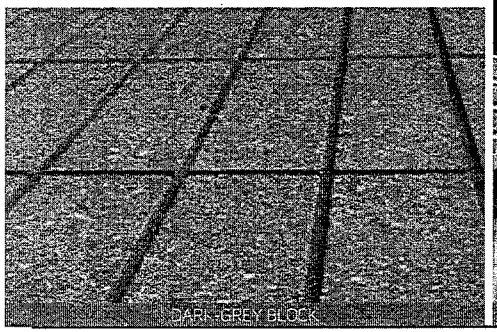

TRANSLUCENT HANDRAIL

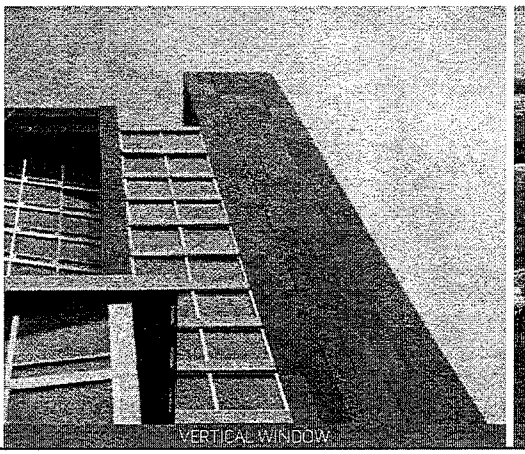


MULTI-FAMILY FACADE

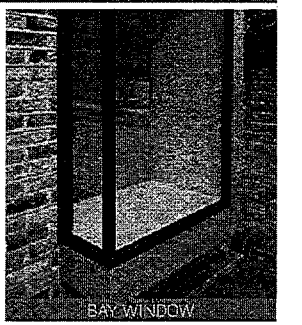

SMOOTH GREY PLASTER


FIBER CEMENT SIDING


DARK GREY BLOCK


VERTICAL WINDOW


MULTI-FAMILY FACADE


BAY WINDOW

REFERENCE IMAGES

A-23

JULY 21, 2016

W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET
HARRISON STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA

PODIUM BASE
MATERIAL CALL OUTS

A-24

JULY 21, 2016

W12 - WEBSTER & 12TH

OAKLAND, CA

PREPARED FOR:
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WHITE PLASTER SMOOTH TROWEL FINISH

MID-GREY PLASTER SMOOTH TROWEL FINISH

DARK-GREY PLASTER SMOOTH TROWEL FINISH

CHARCOAL PLASTER SMOOTH TROWEL FINISH

DARK GREY FIBER CEMENT PLANK SIDING

RED PLASTER SMOOTH TROWEL FINISH

TAN PLASTER SMOOTH TROWEL FINISH

UPPER LEVEL
MATERIAL CALL OUTS

A-25

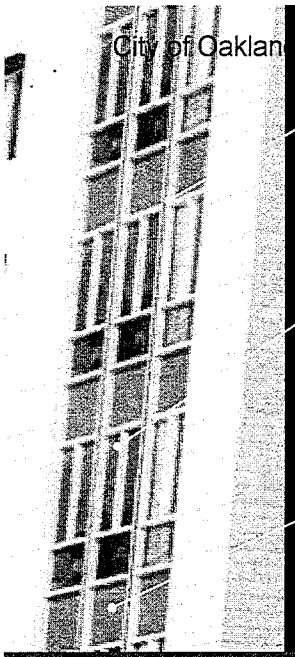
JULY 21, 2016

W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET
WEBSTER STREET & HARRISON STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

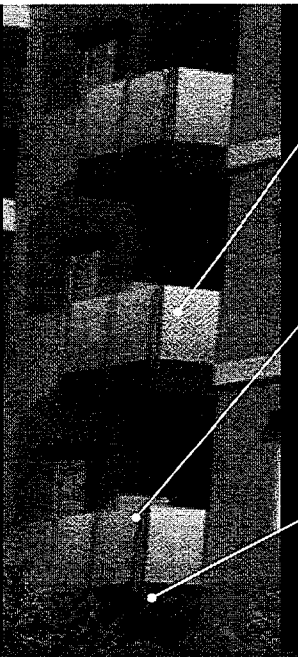
City of Oaklan
ttachm
t A
Plans
VERTICAL
GLAZING SYSTEM
PERFORATED
ALUMINUM BALCONY #1
PERFORATED
ALUMINUM BALCONY #2
STUDIO
BAY WINDOW
STUDIO
BALCONY
WHITE MULLION
WINDOW
W12 - WEBSTER & 12TH
PREPARED FOR
THE MARTIN GROUP
OAKLAND, CA
WINDOW & BALCONY
TYPOLOGY
A-26
JULY 21, 2016



WHITE MULLION

VISION GLASS

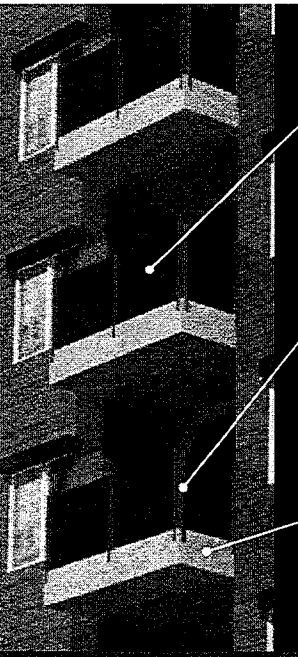
MID-GREY PAINTED ALUMINUM



WHITE PERFORATED ALUMINUM

DARK GREY GALVANIZED STEEL

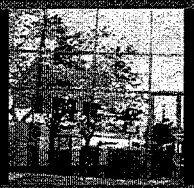
CHARCOAL PLASTER SMOOTH TROWEL FINISH



CHARCOAL PERFORATED ALUMINUM

DARK GREY GALVANIZED STEEL

MID-GREY PLASTER SMOOTH TROWEL FINISH



VERTICAL GLAZING SYSTEM

PERFORATED ALUMINUM BALCONY #1

PERFORATED ALUMINUM BALCONY #2

WINDOW & BALCONY MATERIAL CALL OUTS

A-27

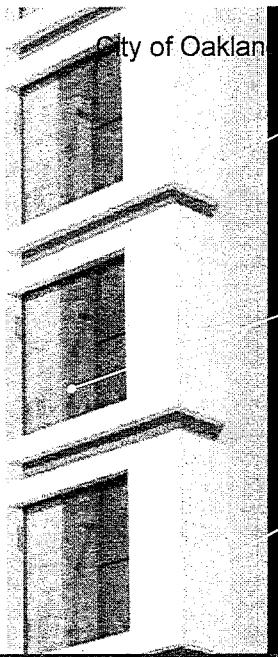
JULY 21, 2016

W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET
PARK STREET & WEBSTER STREET

OAKLAND, CA

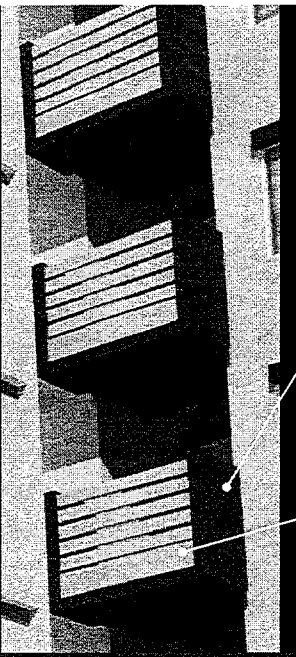
PREPARED FOR:
THE MARTIN GROUP



WHITE PLASTER SMOOTH TROWEL FINISH

VISION GLASS

DARK GREY ALUMINUM MULLION



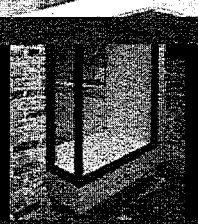
CHARCOAL PLASTER SMOOTH TROWEL FINISH

LIGHT GREY ARCHITECTURAL PANEL

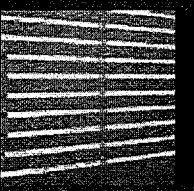
VISION GLASS

CHARCOAL PAINTED ACCENT

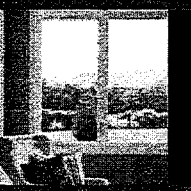
WHITE MULLION



STUDIO BAY WINDOW



STUDIO BALCONY



WHITE MULLION WINDOW

WINDOW & BALCONY MATERIAL CALL OUTS

A-28

JULY 21, 2016

W12 - WEBSTER & 12TH

OAKLAND, CA

PREPARED FOR THE MARTIN GROUP

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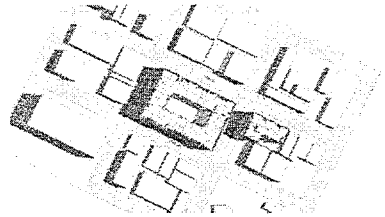
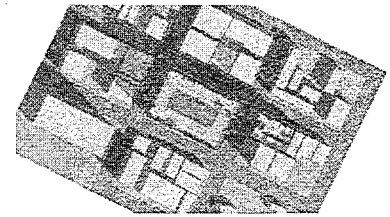
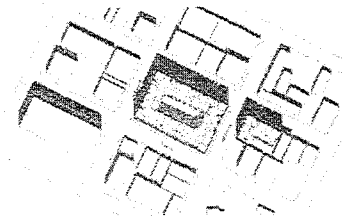
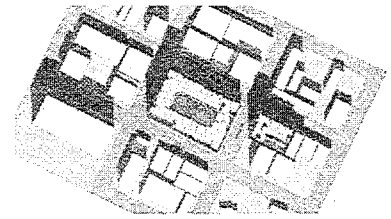
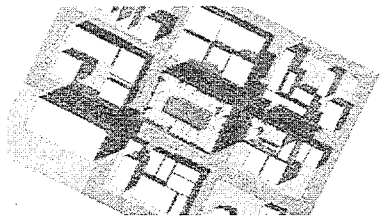
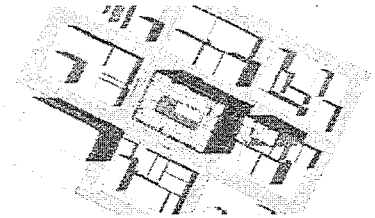
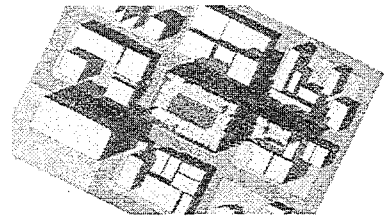
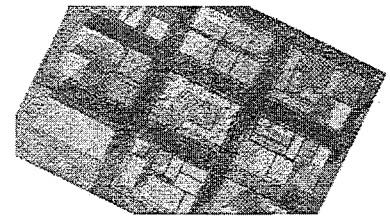
9:00 AM				
12:00 PM				
4:00 PM				

SHADOW STUDY

A-29

JULY 21, 2016

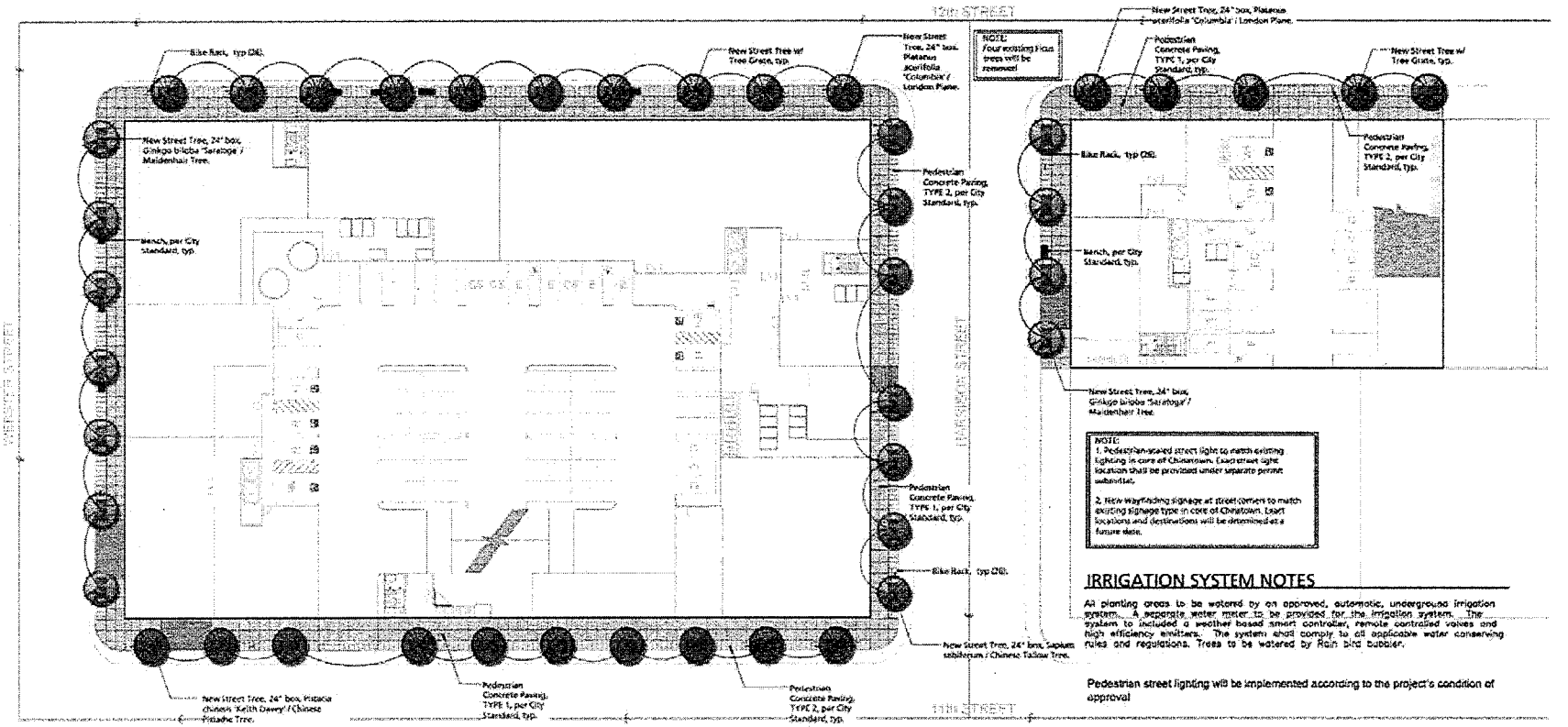
W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET
HARRISON STREET & WEBSTER STREET

OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA



IRRIGATION SYSTEM NOTES

All planting areas to be watered by an approved, automatic, underground irrigation system. A separate water meter to be provided for the irrigation system. The system to included a weather based smart controller, remote controlled valves and high efficiency emitters. The system shall comply to all applicable water conserving rules and regulations. Trees to be watered by Rain bird bubbler.

Pedestrian street lighting will be implemented according to the project's condition of approval

CONCEPTUAL LANDSCAPE PLAN - STREET LEVEL

L-1.1

JULY 13, 2016

WEBSTER & 12TH

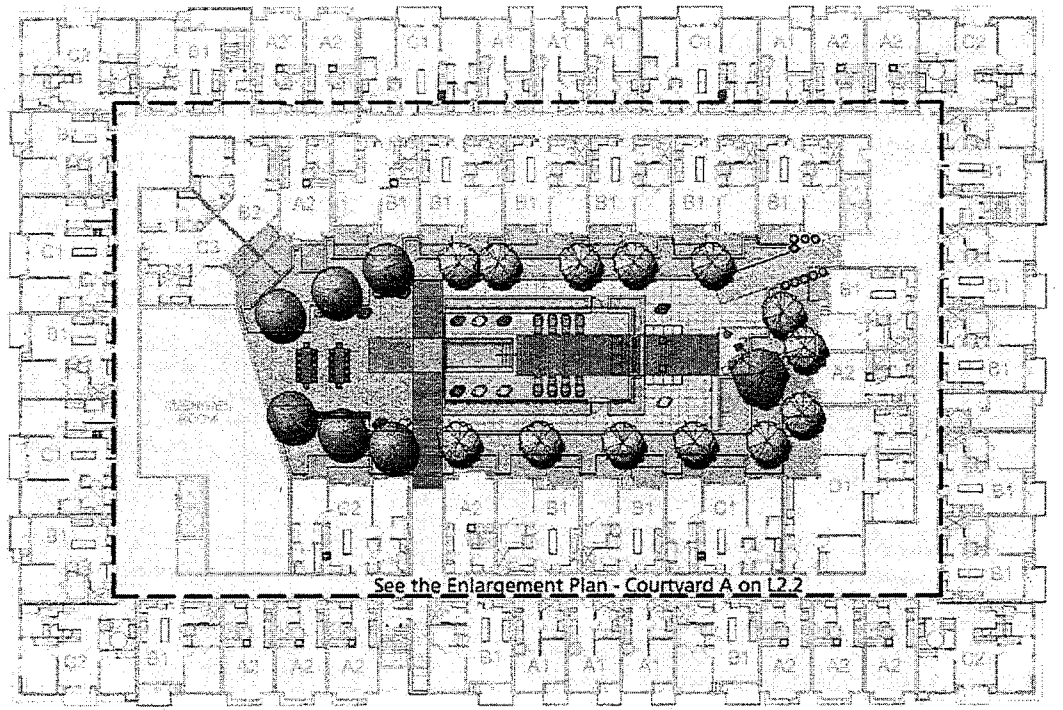
BETWEEN 11TH & 12TH STREET & BETWEEN ALICE STREET & WEBSTER STREET

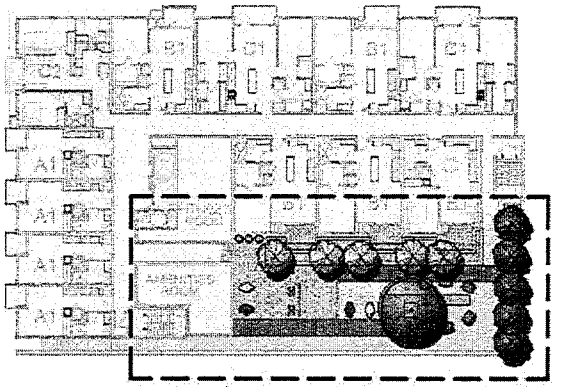
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

THE GUZZARDO PARTNERSHIP INC.
Landscape Architects • Land Planners

VAN TILBURG, BANVARD & SODERBERGH, AIA





CONCEPTUAL LANDSCAPE PLAN - PODIUM LEVEL

L-2.1

JULY 13, 2016

WEBSTER & 12TH

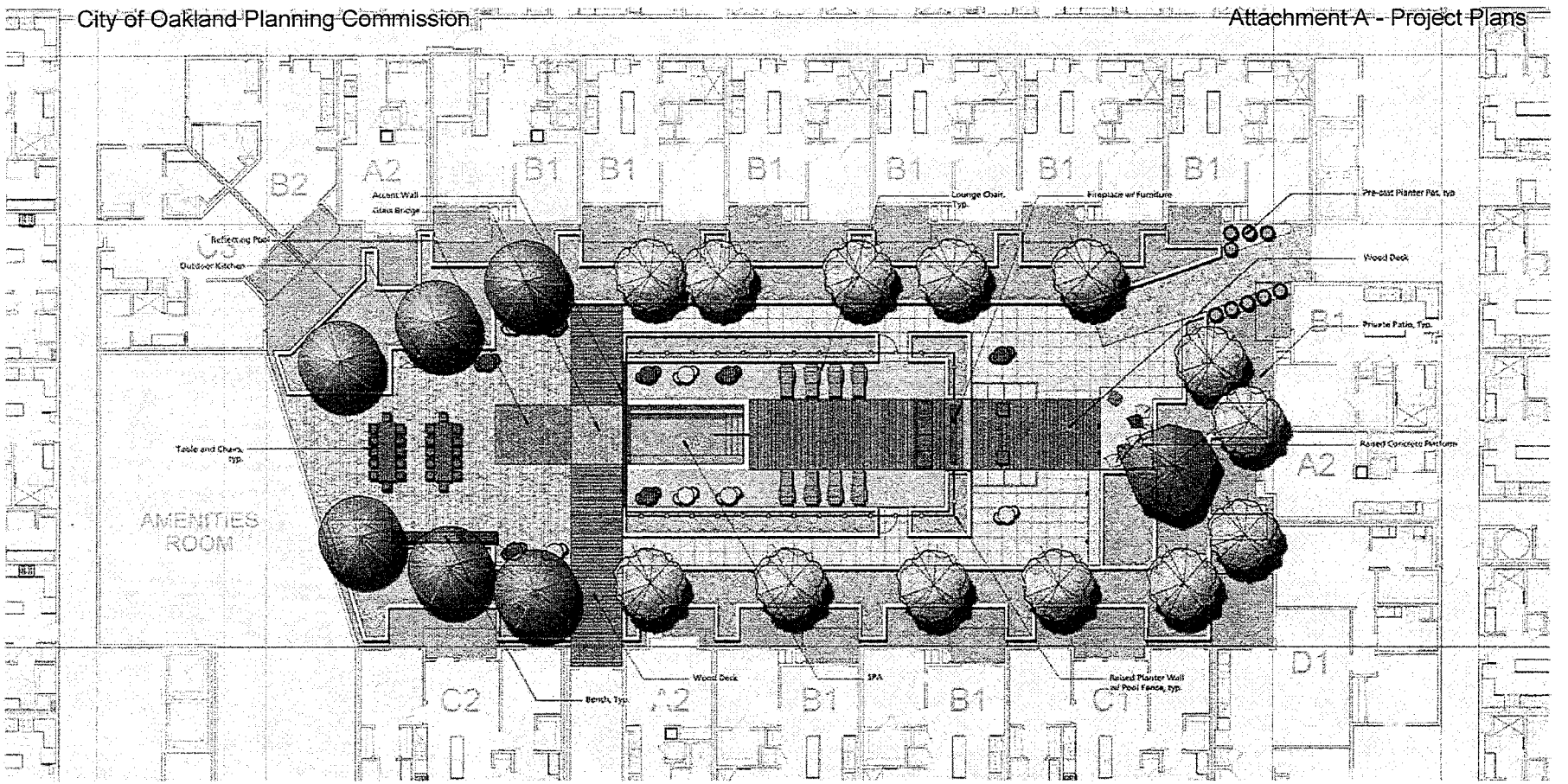
BETWEEN 11TH & 12TH STREET &
BETWEEN HIGH STREET & WEBSTER STREET

OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

THE GUZZARDO PARTNERSHIP INC.
Landscape Architects + Land Planners

VAN TILBURG, BANVARD & SODERBERGH, AIA



CONCEPTUAL LANDSCAPE ENLARGEMENT PLAN - COURTYARD A

L-2.2

JULY 13, 2016

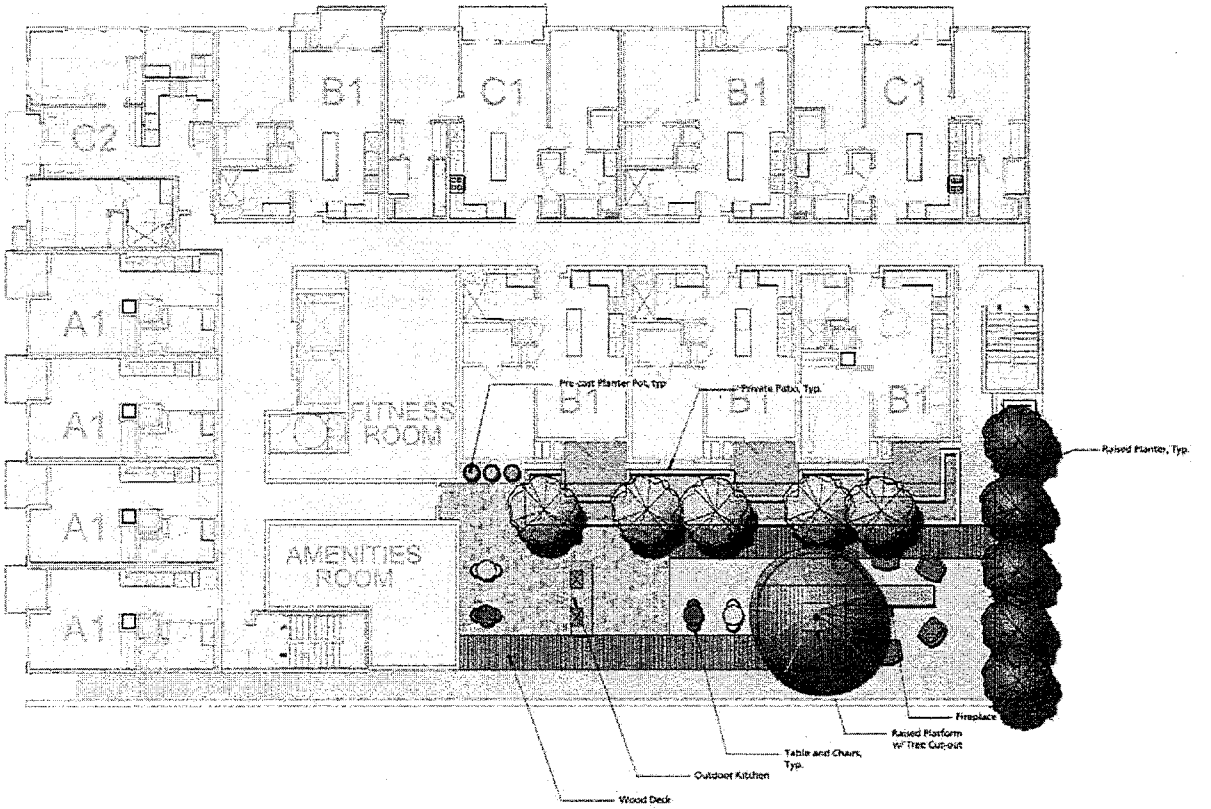
WEBSTER & 12TH

BETWEEN 11TH & 12TH STREETS &
BETWEEN ALICE STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

THE GUZZARDO PARTNERSHIP INC.
Landscape Architects + Land Planners

VAN TILBURG, BANVARD & SODERBERGH, AIA



CONCEPTUAL LANDSCAPE ENLARGEMENT PLAN - COURTYARD B

L-2.3

JULY 15, 2016

WEBSTER & 12TH

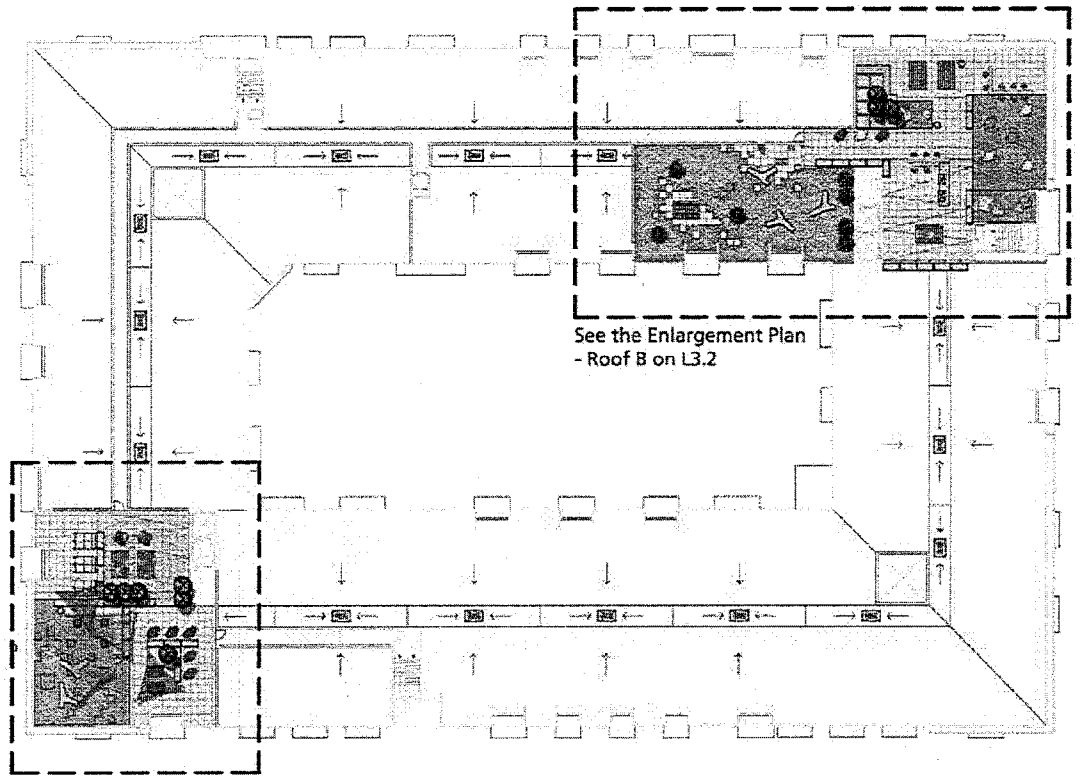
BETWEEN 11TH & 12TH STREET & BETWEEN ALICE STREET & WEBSTER STREET

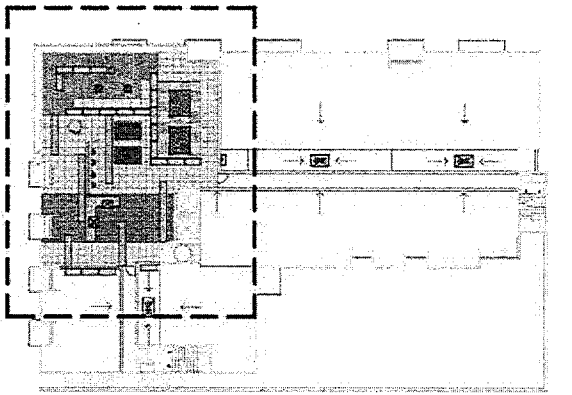
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

THE GUZZARDO PARTNERSHIP INC.

VAN TILBURG, BANVARD & SODERBERGH AIA





CONCEPTUAL LANDSCAPE PLAN - ROOF LEVEL

L-3.1

JULY 13, 2016

WEBSTER & 12TH

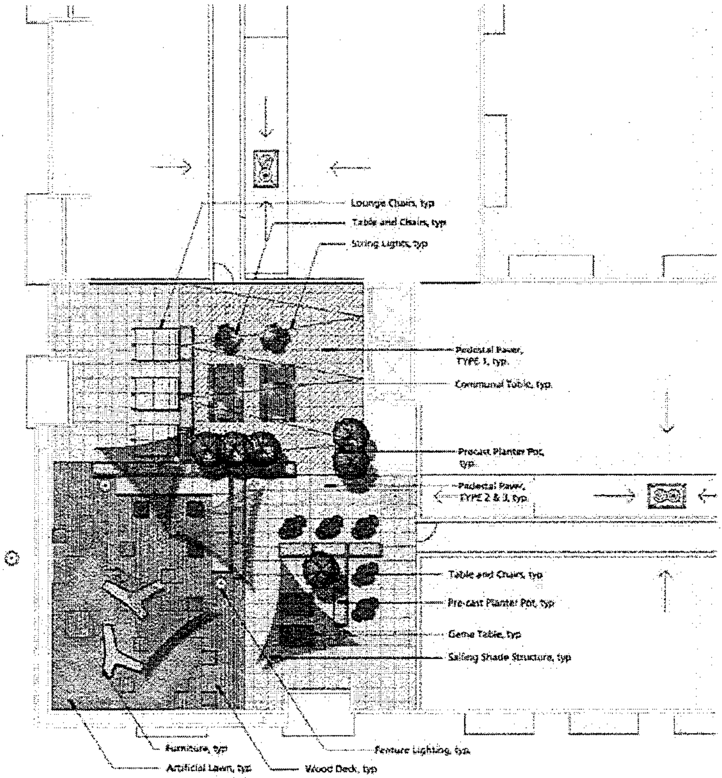
BETWEEN 11TH & 12TH STREET &
BETWEEN ALICE STREET & WEBSTER STREET

OAKLAND, CA

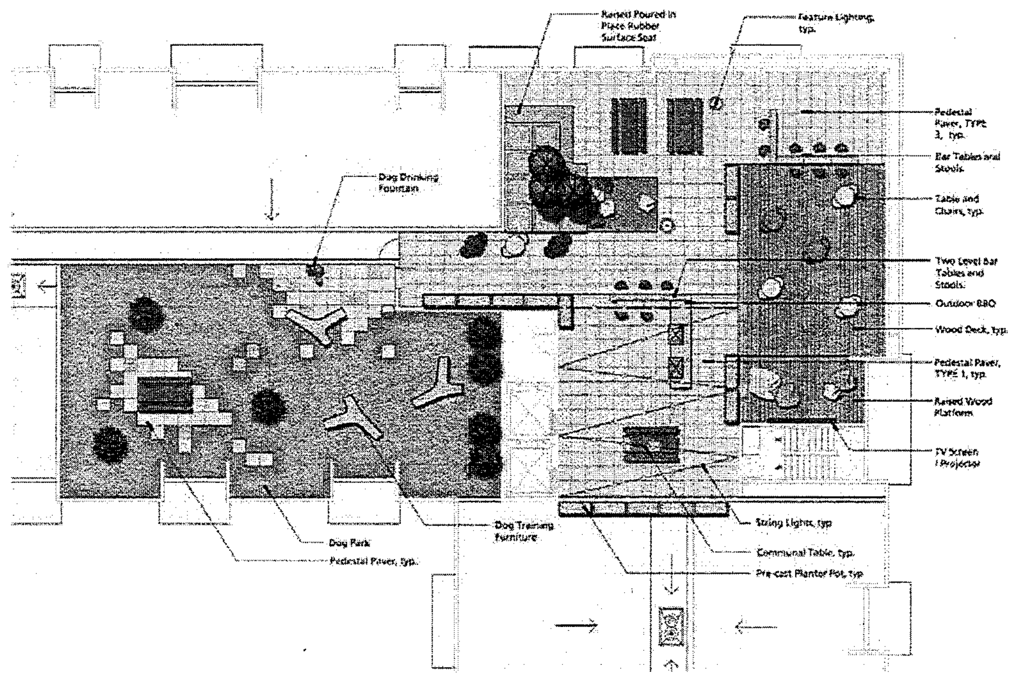
PREPARED FOR:
THE MARTIN GROUP

THE GUZZARDO PARTNERSHIP INC.
Landscape Architects - Land Planners

VAN TILBERG, BANVARD & SODERBERGH, AIA



ENLARGEMENT PLAN - ROOF A



ENLARGEMENT PLAN - ROOF B

CONCEPTUAL LANDSCAPE ENLARGEMENT PLAN - ROOF A & B

L-3.2

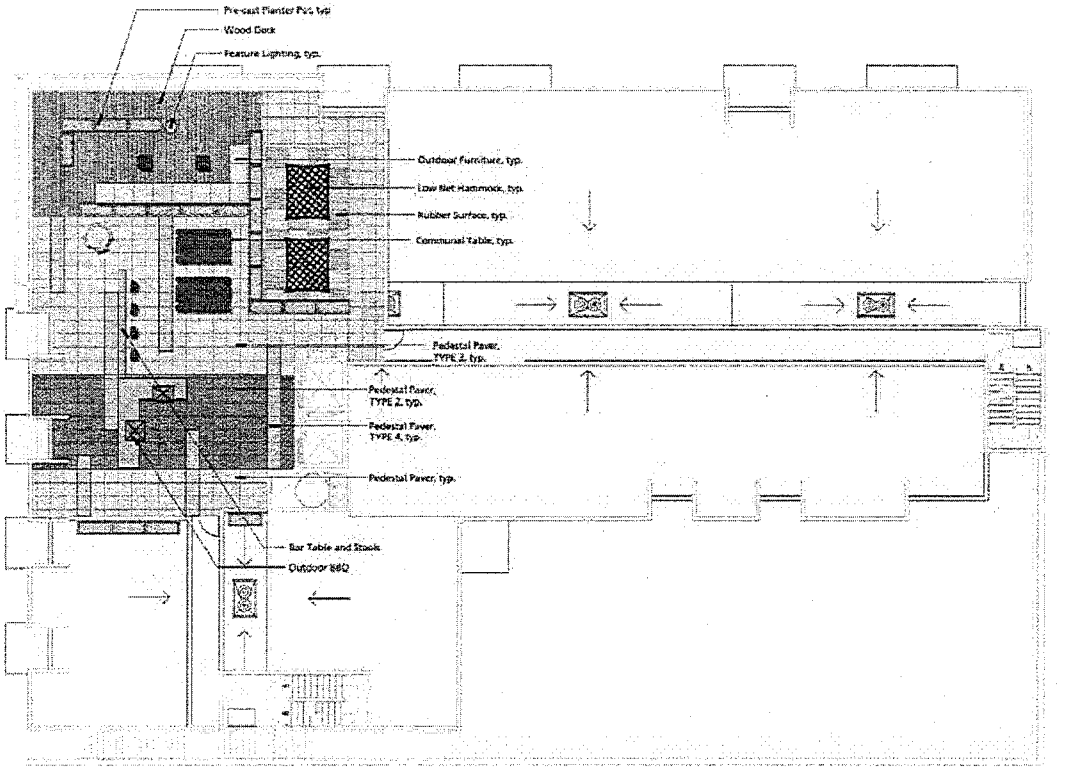
JULY 13, 2016

WEBSTER & 12TH
BETWEEN 11TH & 12TH STREET &
BETWEEN ALICE STREET & WEBSTER STREET
OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

THE GUZZARDO PARTNERSHIP INC
Landscape Architects · Land Planners

VAN TILBURG, BANVARD & SODERBERGH, AIA



ENLARGEMENT PLAN - ROOF C

CONCEPTUAL LANDSCAPE ENLARGEMENT PLAN - ROOF C

L-3.3

JULY 13, 2016

WEBSTER & 12TH

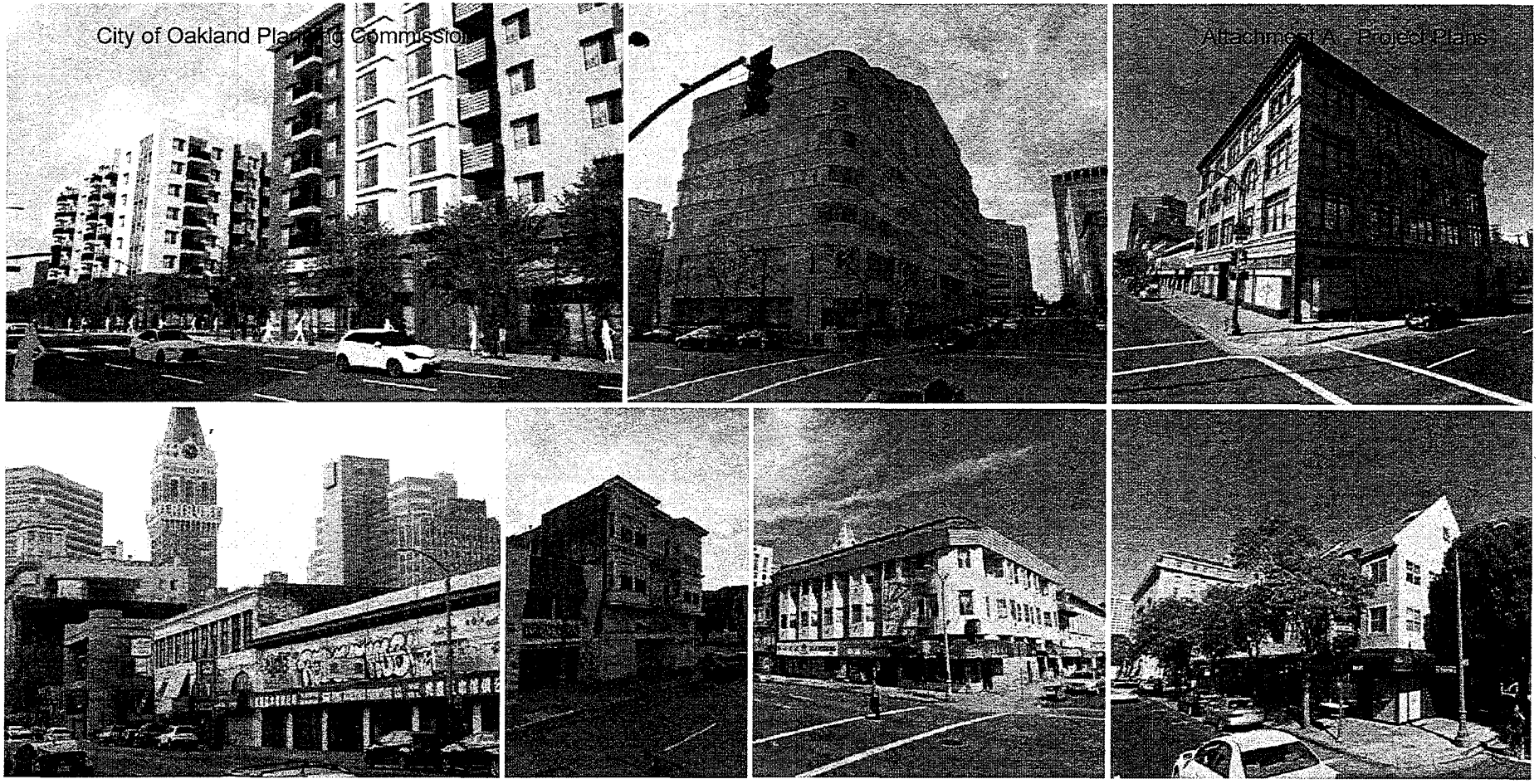
BETWEEN 11TH & 12TH STREET &
BETWEEN ALICE STREET & WEBSTER STREET

OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

THE GUZZARDO PARTNERSHIP INC

VAN TILBURG, BANVARD & SODERBERGH, AIA



ADJACENT CONTEXT COMPARISON

X-01

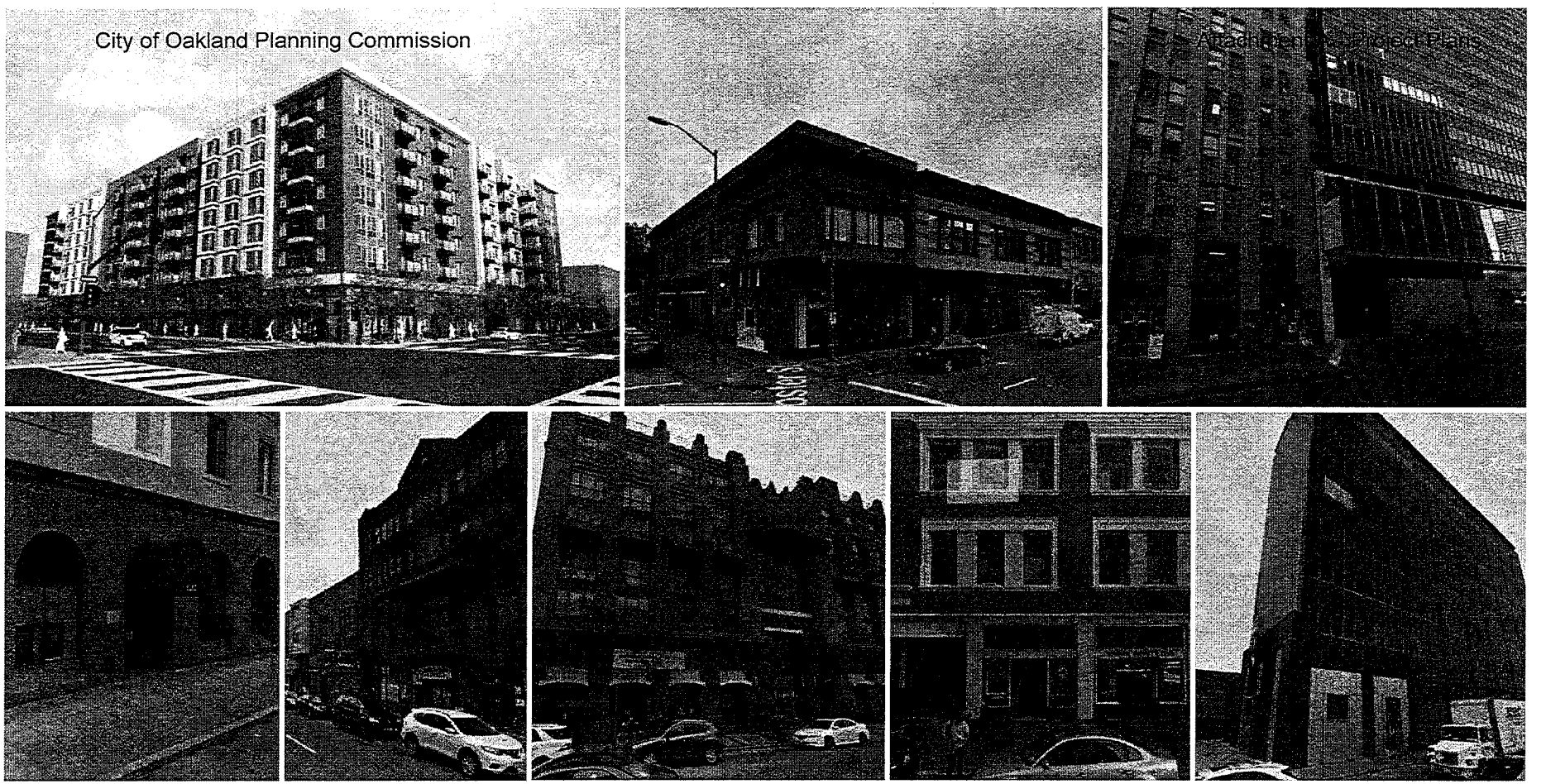
W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET/
HARRISON STREET & WEBSTER STREET

OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA



DARK-TONE CONTEXT COMPARISON

X-02

W12 - WEBSTER & 12TH

BETWEEN 11TH & 12TH STREET/
HARRISON STREET & WEBSTER STREET

OAKLAND, CA

PREPARED FOR:
THE MARTIN GROUP

VAN TILBURG, BANVARD & SODERBERGH, AIA

ATTACHMENT B

FINDINGS FOR APPROVAL

FINDINGS FOR APPROVAL

This proposal meets all the required Conditional Use Permit Criteria (Section 17.134.050 & 17.101 .G.050B.2) and Design Review Criteria (Section 17.136.050) as set forth below and which are required to approve an application. This proposal does not contain characteristics that require denial pursuant to the Tentative Map Findings (Section 16.08.030) and is consistent with the Lot Design Standards (Section 16.24.040) of the Oakland Subdivision Regulations. The proposal also meets all the findings necessary to comply with the California Environmental Quality Act. Required findings are shown in bold capital type; reasons the proposal satisfies them are shown in normal or italic type. (Note: The Project's conformance with the following findings is not limited to the discussion below, but is also included in all discussions in this report and elsewhere in the record).

CONDITIONAL USE PERMIT FINDINGS

Section 17.134.050 General Use Permit Criteria

A. The location, size, design, and operating characteristics of the proposed development will be compatible with, and will not adversely affect, the livability or appropriate development of abutting properties and the surrounding neighborhood, with consideration to be given to harmony in scale, bulk, coverage, and density; to the availability of civic facilities and utilities; to harmful effect, if any upon desirable neighborhood character; to the generation of traffic and the capacity of surrounding streets; and to any other relevant impact of the development:

The W12 project will consist of two 7-story midrise buildings. One full block building & a quarter block building. In total the project will consist of 416 apartment units & approximately 25,000 sf of commercial space that will screen an internal parking structure housing adequate vehicular and bicycle parking. The new addition to Oakland's urban fabric will be located on a 1.38 acre (full block) & a .34 acre (1/4 block) site at the intersection of Webster & 12th in the Lake Merritt Station Area District Mixed Commercial Zone-4 (D-LM-4). The project will provide new housing and service opportunities in Oakland's Chinatown District. It is located within the region's major employment, retail, entertainment, cultural, and transportation center and conforms to the standards set in that zone.Indeed it is less dense thanit could be under the zoning regulations which anticipated such a development. Therefore, this proposal will not be harmful to the neighborhood character, to the generation of traffic and capacity of surrounding streets or any other factor.

B. The location, design, and site planning of the proposed development will provide a convenient and functional living, working, shopping, or civic environment, and will be as attractive as the nature of the use and its location and setting warrant:

The project plans for mid-rise apartments and neighborhood retail and support services. Modern community amenities, landscaped decks, and rooftop open space, are other planned features of the community. W12 is planned to be a cohesive residential community, incorporating sustainable best practices that complement the character of the Downtown urban fabric, existing resources on the site, and the surrounding neighborhood area context. The project is located within Downtown, Oakland's main job center and transit hub.

C. The proposed development will enhance the successful operation of the surrounding area in its basic community functions, or will provide an essential service to the community or region:

The Project will offer new housing that will increase foot traffic in the area as well as provide new retail / commercial amenities to the neighborhood. The Project includes 2 and 3 bedroom units that are suitable for families.

D. The proposal conforms with all applicable Regular Design Review criteria set forth in Section 17.136.050 of the Oakland Planning Code.

See Design Review findings below.

E. The proposal conforms in all significant respects with the Oakland General Plan and with any other applicable plan or development control map which has been adopted by the City Council.

As detailed in the accompanying staff report, the project is located within the Central Business District (CBD) General Plan Land Use Classification and within the boundaries of the Lake Merritt Station Area. The Project is consistent/conforms with the goals and policies in those plans, by creating a new, mixed use development with high density housing and an active commercial ground floor in close proximity to BART Stations. The Project fully conforms to all zoning requirements.

Section 17,101.G.050.B.2 Lake Merritt Station Area Plan Findings

1. The proposal is consistent with the intent and desired land use character identified in the Lake Merritt Station Area Plan and its associated policies.

   The Project is located in the LMSAP's Pedestrian Transition Land Use District, which calls for mixed-use projects with continuous ground floor retail. The Project includes 25,000 SF of ground floor, pedestrian-oriented retail, with nearly 70% of the ground floor designed as continuous commercial with high clear heights and commercially reasonable depths. From the perspective of a pedestrian, the integrated awnings, which provide clear delineation between ground floor commercial and upper story residential uses, will ensure a consistent character with neighboring buildings.

   The Project site is zoned for a total building height of 175' and a density of up to 681 units. The proposal is approx. 84' tall and has 417 units, and is therefore within the zonings standards that implement the vision of the LMSAP. Due to its proximity to Downtown, there are numerous buildings nearby that are 85ft or higher with no setbacks, including the EBMUD, California Regents, Hotel Oakland, Clorox, Oakland Marriott, 1111 Broadway and the Social Security office.

2. The proposal will promote implementation of the Lake Merritt Station Area Plan.

   The Proposal helps promote the implementation of the Lake Merritt Station Plan in the following ways:

   The Project will improve Public Safety by increasing foot traffic, increasing the street lighting and strengthening the linkage between Chinatown and the Downtown area. The Project will also address the needs of non-english speaking visitors & residents with wayfinding signage.

The Project has approximately 25,000 SF of retail space which will promote a variety of new businesses that will both offer employment to residents and serve the local community. The Project itself is anticipated to have 10 fulltime employees and the 25,000 SF of retail will create additional employment opportunities. The Project will deliver 416 new multifamily rental units, supporting the demand for housing within the LMSAP and the Bay Area for individuals and families.

The Project greatly exceeds the minimum number of required bicycle parking spaces, thereby supporting an increase in bike vs. car trips.

The Project will incorporate art, wayfinding signage, symbolic color schemes and other design features that enhance the cultural heritage of Chinatown while providing a gateway on Webster Street into Chinatown to the south.

The Project exceeds the CalGreen requirements, promoting the sustainability goals of the LMSAP.

3. The proposal is consistent with the desired visual character described in the Lake Merritt Station Area Plan and Lake Merritt Station Area Design Guidelines, with consideration given to the existing character of the site and surrounding area.

The project is consistent with the LMSAP Design Guidelines, notably the following:
1) Conformity with neighboring buildings and colors (DG 1)
2) Tall (over the recommended 15 feet) ceiling height for ground floor retail (DG 2)
3) Emphasis of building corners at block corners (DG 7)
5) Three-Dimensional Articulation through windows, balconies and design elements (DG 16)
6) Distinct Ground Floor Design (DG 29)
7) Clear delineation between primary and secondary entrances (DG 30)
8) Consistent Horizontal Lines (DG 33)
9) Integrated Awnings (DG 35)
10) Bike Parking (over the requirement)(DG 119)
11) Flexible Commercial Design (DG 42)
12) Range of Unit Sizes (DG 53)
13) Enhanced shared residential space (DG 57)
14) High Quality, Durable and Attractive Building Materials (DG 69 & 70)
15) Significant Pedestrian Lighting (DG 124)
16) Special Paving via high contrast concrete (DG 129)
17) Wayfinding & Signage (DG 133)
19) Lighting and street trees (DG 136)
20) Lighting for safety (DG-150)

o Wayfinding Signage – The project incorporate wayfinding signage from Chinatown to better cement the Project's role as a gateway to Oakland's Chinatown.

o Awning Color – The project includes maroon red awnings to match colors of the wayfinding signage and nearby buildings. This helps better delineate between the commercial and residential space, better integrates the Project with neighboring buildings and helps support the LMSAP's goal of creating a visual entrance to Chinatown.

o Active Street Frontage – As noted earlier, the project includes a significant amount of ground floor retail, activating the pedestrian realm.

RESIDENTIAL DESIGN REVIEW CRITERIA
(Section 17.136.050(A))

A-1: That the proposed design will create a building or set of buildings that are well related to the surrounding area in their setting, scale, bulk, height, materials, and textures:

The Project ("W12") aims to fit in with the eclectic Chinatown & Downtown Oakland urban neighborhoods. W12's midrise scale, bulk and height will blend in well with the surrounding community, which contains numerous projects that are similar in scale. Throughout the neighborhood there is a large variety of unique buildings with a wide range of materials, that include brick, cement siding, painted plaster and aluminum. W12 aims to mimic the feeling left in the community through the use of these similar materials, but in a way that adds to the neighborhoods eclectic character. Massing of the building is varied through articulation and different colors, mixing recessed balconies and bay windows, both common design attributes in residential projects in the area.

A-2: That the proposed design will protect, preserve, or enhance desirable neighborhood characteristics:

W12 project will protect local neighborhood characteristics through cohesive design. W12 preserves the neighborhood by creating a pedestrian-oriented and transit-oriented development project in the heart of Downtown. Finally, W12 will enhance the neighborhood by meeting demand for new housing near transit and services, and extending the vibrancy of Chinatown's commercial district by including ground floor retail along most of the project's frontages.

W12 will help preserve the transit-oriented nature of the site through an active transit demand management program (Condition of Approval), and by providing more bike parking than required and a very low auto parking ratio.

A-3: That the proposed design will be sensitive to the topography and landscape:

The project site is flat and W12 is designed with this in mind without any changes in elevation throughout the project. W12's exterior landscape design will focus on new trees and foliage planted in a manner consistent with City & Community standards.

A-4: That, if situated on a hill, the design and massing of the proposed building relates to the grade of the hill:

Not applicable.

A-5: That the proposed design conforms in all significant respects with the Oakland General Plan and with any applicable design review guidelines or criteria, district plan, or development control map which has been adopted by the Planning Commission or City Council.

As proposed, W12 complies with the Lake Merritt Station Area Plan Design Guidelines and zoning standards, which are an implementation of the policies in the Oakland General Plan and the Lake Merritt Station Area Plan, as described in the Planning Commission staff report.

TENTATIVE MAP FINDINGS

Section 16.08.030 O.M.C. & California Government Code §66474

The Advisory Agency shall deny approval of a tentative map, or a parcel map for which a tentative map was not required, if it makes any of the following findings:

A. That the proposed map is not consistent with applicable general and specific plans as specified in the State Government Code Section 65451.

The proposal is consistent with the Central Business District General Plan designation and with the Lake Merritt Station Area Plan (LMSAP), by creating a mixed use development with viable street fronting retail. See additional General Plan Conformity findings above.

B. That the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans.

The proposal is consistent with the Central Business District General Plan designation and with the LMSAP, by creating a mixed use development with viable street fronting retail. See additional General Plan Conformity findings above.

C. That the site is not physically suitable for the type of development.

The site is suitable for the proposed development as it is located close to public utilities, transit, and other civic facilities, and fulfills the vision for the area as set forth in the LMSAP.

D. That the site is not physically suitable for the proposed density of development.

The proposed density is consistent with the General Plan and Specific Plan density envisioned for the area.

E. That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

The project is proposing to remove trees that currently contain night heron and egret rookeries. However, as a Condition of Approval, the trees cannot be removed if the birds are present, and the applicant will be implementing a Plan for relocation of the rookeries.

F. That the design of the subdivision or type of improvements is likely to cause serious public health problems.

There should be no adverse health effects. This is in a mixed use development containing residential and retail uses located in the downtown area and it will introduce no new use classifications that are incompatible with the surrounding neighborhood.

G. That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision. In this connection, the governing body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public. (This subsection shall apply only to easements of record or to easements established by judgment of a court of competent jurisdiction and no

authority is hereby granted to a legislative body to determine that the public at large has acquired easements for access through or use of property within the proposed subdivision.)

There are no easements on this property at present therefore this finding is not applicable.

H. That the design of the subdivision does not provide to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision

The project could to be set up for solar panels on the rooftop.

Section 16.24.040 O.M.C. – Lot Design Standards

For condominium purposes, these standards are not applicable.

CEQA COMPLIANCE FINDINGS

An evaluation of the proposed project is provided in the CEQA Checklist in Section VI that follows. This evaluation concludes that the W12 Mixed-Use Project qualifies for an addendum as well as an exemption from additional environmental review. It is consistent with the development density and land use characteristics established by the City of Oakland General Plan, and any potential environmental impacts associated with its development were adequately analyzed and covered by the analysis in the 2014 LMSAP EIR, and in the applicable Prior EIRs: the 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR, and the 2010 General Plan Housing Element Update EIR and its 2014 Addendum.

The proposed project would be required to comply with the applicable mitigation measures and City of Oakland SCAs identified in the 2014 LMSAP EIR and presented in Attachment A to this document.[7] With implementation of the applicable mitigation measures and SCAs, the proposed project would not result in a substantial increase in the severity of previously identified significant impacts in the 2014 LMSAP EIR, the applicable Prior EIRs, or in any new significant impacts that were not previously identified in any of those Previous CEQA Documents.

In accordance with California Public Resources Code Sections 21083.3, 21094.5, and 21166; and CEQA Guidelines Sections 15183, 15183.3, 15162, 15164, 15168, and 15180, and as set forth in the CEQA Checklist below, the proposed project qualifies for an addendum and one or more exemptions because the following findings can be made:

- Addendum. The 2014 LMSAP EIR analyzed the impacts of development within the LMSAP. The proposed project would not result in substantial changes or involve new information not already analyzed in the 2014 LMSAP EIR because the level of development now proposed for the site is within the broader development assumptions analyzed in the EIR. The proposed project would not cause new significant impacts not previously identified in the 2014 LMSAP EIR, or result in a substantial increase in the severity of previously identified significant impacts. No new mitigation measures would be necessary to reduce significant impacts. No changes have occurred with respect to circumstances surrounding the LMSAP that would cause significant environmental impacts to which the proposed project would contribute considerably, and no new information has been put forward that shows that the proposed project would cause significant environmental impacts.

Therefore, no supplemental environmental review is required in accordance with Public Resources Code Section 21166, and CEQA Guidelines Sections 15162 through 15164, as well as 15168 and 15180.

- Community Plan Exemption. The proposed project would not result in significant impacts that (1) are peculiar to the project or project site; (2) were not previously identified as significant project-level, cumulative, or offsite effects in the 2014 LMSAP EIR, or in the applicable Previous CEQA Documents: 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum; or (3) were previously identified as significant effects, but—as a result of substantial new information not known at the time the 2014 LMSAP EIR was prepared, or when the Prior EIRs were certified— would increase in severity beyond that described in those EIRs. Therefore, the proposed project would meet the criteria to be exempt from further environmental review in accordance with Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183.

- Qualified Infill Exemption. The proposed project would not cause any new specific effects on the environment that were not already analyzed in the 2014 LMSAP EIR or in the applicable Prior EIRs: the 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum. Further, the proposed project would not cause any new specific effects on the environment that are more significant than previously analyzed in the 2014 LMSAP EIR, or the aforementioned previously certified applicable Prior EIRs. The effects of the proposed project have been addressed in the 2014 LMSAP EIR and Prior EIRs, and no further environmental documents are required in accordance with Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3.

- Other Applicable Previous CEQA Documents - Prior EIRs and Redevelopment Projects. The analysis in the 2011 Redevelopment Plan Amendments EIR, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum, and in this CEQA Analysis demonstrates that the proposed project would not result in substantial changes or involve new information that would warrant preparation of a subsequent EIR, per CEQA Guidelines Section 15162, because the level of development now proposed for the site is within the broader development assumptions analyzed in the EIR. The effects of the proposed project have been addressed in that EIR and no further environmental documents are required in accordance with CEQA Guidelines Sections CEQA Guidelines Sections 15168 and 15180.

Overall, based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR, as well as those of the 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR (or "Redevelopment Plan Amendments EIR"), and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum—all of which are summarized in the CEQA Checklist in Section VI of this document—the potential environmental impacts associated with the W12 Mixed-Use Project have been adequately analyzed and covered in the LMSAP EIR and other Previous CEQA Documents. Therefore, no further review or analysis under CEQA is required.

Each of the above findings provides a separate and independent basis for CEQA compliance.

FINDINGS

ATTACHMENT C

CONDITIONS OF APPROVAL AND SCAMMRP

STANDARD ADMINISTRATIVE CONDITIONS:

1. **Approved Use**

The project shall be constructed and operated in accordance with the authorized use as described in the approved application materials, **staff report** and the approved plans **dated July 21, 2016**, as amended by the following conditions of approval and mitigation measures, if applicable ("Conditions of Approval" or "Conditions").

2. **Effective Date, Expiration, Extensions and Extinguishment**

This Approval shall become effective immediately, unless the Approval is appealable, in which case the Approval shall become effective in ten calendar days unless an appeal is filed. Unless a different termination date is prescribed, this Approval shall expire **two years** from the Approval date, or from the date of the final decision in the event of an appeal, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this Approval, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit or other construction-related permit for this project may invalidate this Approval if said Approval has also expired. If litigation is filed challenging this Approval, or its implementation, then the time period stated above for obtaining necessary permits for construction or alteration and/or commencement of authorized activities is automatically extended for the duration of the litigation.

3. **Compliance with Other Requirements**

The project applicant shall comply with all other applicable federal, state, regional, and local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Bureau of Building, Fire Marshal, and Public Works Department. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition #4.

4. **Minor and Major Changes**

a. Minor changes to the approved project, plans, Conditions, facilities, or use may be approved administratively by the Director of City Planning.

b. Major changes to the approved project, plans, Conditions, facilities, or use shall be reviewed by the Director of City Planning to determine whether such changes require submittal and approval of a revision to the Approval by the original approving body or a new independent permit/approval. Major revisions shall be reviewed in accordance with the procedures required for the original permit/approval. A new independent permit/approval shall be reviewed in accordance with the procedures required for the new permit/approval.

5. **Compliance with Conditions of Approval**

a. The project applicant and property owner, including successors, (collectively referred to hereafter as the "project applicant" or "applicant") shall be responsible for compliance with all the Conditions of Approval and any recommendations contained in any submitted and

approved technical report at his/her sole cost and expense, subject to review and approval by the City of Oakland.

b. The City of Oakland reserves the right at any time during construction to require certification by a licensed professional at the project applicant's expense that the as-built project conforms to all applicable requirements, including but not limited to, approved maximum heights and minimum setbacks. Failure to construct the project in accordance with the Approval may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension, or other corrective action.

c. Violation of any term, Condition, or project description relating to the Approval is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approval or alter these Conditions if it is found that there is violation of any of the Conditions or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Approval or Conditions.

6. Signed Copy of the Approval/Conditions

A copy of the Approval letter and Conditions shall be signed by the project applicant, attached to each set of permit plans submitted to the appropriate City agency for the project, and made available for review at the project job site at all times.

7. Blight/Nuisances

The project site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60 days of approval, unless an earlier date is specified elsewhere.

8. Indemnification

a. To the maximum extent permitted by law, the project applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the Oakland Redevelopment Successor Agency, the Oakland City Planning Commission, and their respective agents, officers, employees, and volunteers (hereafter collectively called "City") from any liability, damages, claim, judgment, loss (direct or indirect), action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul this Approval or implementation of this Approval. The City may elect, in its sole discretion, to participate in the defense of said Action and the project applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.

b. Within ten (10) calendar days of the filing of any Action as specified in subsection (a) above, the project applicant shall execute a Joint Defense Letter of Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Joint Defense Letter of Agreement shall survive termination, extinguishment, or invalidation of the Approval. Failure to timely execute the Letter of

Agreement does not relieve the project applicant of any of the obligations contained in this Condition or other requirements or Conditions of Approval that may be imposed by the City.

9. Severability

The Approval would not have been granted but for the applicability and validity of each and every one of the specified Conditions, and if one or more of such Conditions is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid Conditions consistent with achieving the same purpose and intent of such Approval.

10. Special Inspector/Inspections, Independent Technical Review, Project Coordination and Monitoring

The project applicant may be required to cover the full costs of independent third-party technical review and City monitoring and inspection, including without limitation, special inspector(s)/inspection(s) during times of extensive or specialized plan-check review or construction, and inspections of potential violations of the Conditions of Approval. The project applicant shall establish a deposit with the Bureau of Building, if directed by the Building Official, Director of City Planning, or designee, prior to the issuance of a construction-related permit and on an ongoing as-needed basis.

11. Public Improvements

The project applicant shall obtain all necessary permits/approvals, such as encroachment permits, obstruction permits, curb/gutter/sidewalk permits, and public improvement ("p-job") permits from the City for work in the public right-of-way, including but not limited to, streets, curbs, gutters, sidewalks, utilities, and fire hydrants. Prior to any work in the public right-of-way, the applicant shall submit plans for review and approval by the Bureau of Planning, the Bureau of Building, and other City departments as required. Public improvements shall be designed and installed to the satisfaction of the City.

12. Compliance Matrix

The project applicant shall submit a Compliance Matrix, in both written and electronic form, for review and approval by the Bureau of Planning and the Bureau of Building that lists each Condition of Approval (including each mitigation measure if applicable) in a sortable spreadsheet. The Compliance Matrix shall contain, at a minimum, each required Condition of Approval, when compliance with the Condition is required, and the status of compliance with each Condition. For multi-phased projects, the Compliance Matrix shall indicate which Condition applies to each phase. The project applicant shall submit the initial Compliance Matrix prior to the issuance of the first construction-related permit and shall submit an updated matrix upon request by the City.

13. Construction Management Plan

Prior to the issuance of the first construction-related permit, the project applicant and his/her general contractor shall submit a Construction Management Plan (CMP) for review and approval by the Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department and the Public Works Department as directed. The CMP shall contain measures to minimize potential construction impacts including measures to comply with all construction-related Conditions of Approval (and mitigation measures if applicable) such as dust control, construction emissions, hazardous materials, construction days/hours, construction traffic control,

waste reduction and recycling, stormwater pollution prevention, noise control, complaint management, and cultural resource management (see applicable Conditions below). The CMP shall provide project-specific information including descriptive procedures, approval documentation, and drawings (such as a site logistics plan, fire safety plan, construction phasing plan, proposed truck routes, traffic control plan, complaint management plan, construction worker parking plan, and litter/debris clean-up plan) that specify how potential construction impacts will be minimized and how each construction-related requirement will be satisfied throughout construction of the project.

14. Standard Conditions of Approval / Mitigation Monitoring and Reporting Program (SCAMMRP)

a. All mitigation measures identified in the **W12 CEQA Analysis** are included in the Standard Condition of Approval / Mitigation Monitoring and Reporting Program (SCAMMRP), which is included in these Conditions of Approval and is incorporated herein by reference, as **Exhibit A**, as Conditions of Approval of the project. The Standard Conditions of Approval identified in the **W12 CEQA Analysis** are also included in the SCAMMRP, and are, therefore, incorporated into these Conditions by reference but are not repeated in these Conditions. To the extent that there is any inconsistency between the SCAMMRP and these Conditions, the more restrictive Conditions shall govern. In the event a Standard Condition of Approval or mitigation measure recommended in the **W12 CEQA Analysis** has been inadvertently omitted from the SCAMMRP, that Standard Condition of Approval or mitigation measure is adopted and incorporated from the **W12 CEQA Analysis** into the SCAMMRP by reference, and adopted as a Condition of Approval. The project applicant and property owner shall be responsible for compliance with the requirements of any submitted and approved technical reports, all applicable mitigation measures adopted, and with all Conditions of Approval set forth herein at his/her sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or Condition of Approval, and subject to the review and approval by the City of Oakland. The SCAMMRP identifies the timeframe and responsible party for implementation and monitoring for each Standard Condition of Approval and mitigation measure. Monitoring of compliance with the Standard Conditions of Approval and mitigation measures will be the responsibility of the Bureau of Planning and the Bureau of Building, with overall authority concerning compliance residing with the Environmental Review Officer. Adoption of the SCAMMRP will constitute fulfillment of the CEQA monitoring and/or reporting requirement set forth in section 21081.6 of CEQA.

b. Prior to the issuance of the first construction-related permit, the project applicant shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

PROJECT-SPECIFIC CONDITIONS:

15. Exterior Finishes

Requirement: The final building permit plan set shall contain detailed information on all proposed exterior finishes. If requested by the Bureau of Planning sample materials shall be submitted and are subject to final approval by the Zoning Manager. This

includes but is not limited to the texture and colors of the proposed vinyl windows, and metal balconies.

When Required: Prior to issuance of a Building Permit

Permit Initial Approval: Bureau of Planning Monitoring/Inspection:

Bureau of Planning

16. Public Art for Private Development Condition of Approval

Requirement: The project is subject to the City's Public Art Requirements for Private Development, adopted by Ordinance No. 13275 C.M.S. ("Ordinance"). The public art contribution requirements are equivalent to one-half percent (0.5%) for the "residential" building development costs, and one percent (1 .0%) for the "non-residential" building development costs. The contribution requirement can be met through the commission or acquisition and installation of publicly accessible art fund, or satisfaction of alternative compliance methods described in the Ordinance. The applicant shall provide proof of full payment of the in-lieu contribution, or provide proof of installation of artwork on the development site prior to the City's issuance of a final certificate of occupancy for each phase unless a separate, legal binding instrument is executed ensuring compliance within a timely manner subject to City approval. On-site art installation shall be designed by independent artists, or artists working in conjunction with arts or community organizations that are verified by the City to either hold a valid Oakland business license and/or be an Oakland-based 501(c)(3) tax designated organization in good standing.

When Required: Prior to issuance of Final Certificate of Occupancy and

Ongoing Initial Approval: Bureau of Planning

17. Covenants, Conditions and Restrictions & Homeowner's Association

Requirement: When the condominium units created are offered for sale, the Covenants, Conditions and Restrictions (CC&Rs) for the approved units shall be submitted to the Planning and Zoning Division for review. The CC&Rs shall provide for the establishment of a non-profit homeowners association to maintenance and operation of all common landscaping, driveways, and other facilities, in accordance with approved plans. Membership in the association shall be made a condition of ownership. The developer shall be a member of such association until all units are sold.

When Required: If the condominium units are offered for immediate sale, within one year after issuance of the first certificate of occupancy. If not, prior to the first sale of a condominium unit.

18. Miscellaneous Transportation Improvement Measures

Requirement #1: Ensure that the project has adequate sight distance between motorists who are exiting the driveway and pedestrians on adjacent sidewalks. This may require removing on-street parking spaces adjacent to the driveway and audio/visual warning devices at the driveway.

Requirement #2: Ensure that the project coordinates any public right of way activities, including trenching, repaving, sidewalk reconstruction, with improvements associated with the Bus Rapid Transit project.
Requirement #3: In order for adjacent intersections to properly handle the new pedestrians generated by the project, the project must implement safety improvements, such as corner bulbouts to shorten crossing distances. However the City is in the midst of a Downtown Circulation Plan which may call for the reconfiguration of streets in Downtown. In order to not preclude the possibility of those changes, the project will work with staff to either implement the bulbouts or an equivalent value of streetscape improvements.
When Required: Prior to issuance of Final Certificate of Occupancy
Approval: Bureau of Planning, Department of Transportation

19. Fire Safety Measures for Rooftop Open Space

Requirement #1:.The rooftop open space can have gas appliances, including grills, as long as these are hard-plumbed through the floor into the building. No charcoal fires, or fires utilizing other fuels besides gas, are permitted.
Requirement #2: As part of the design, add an aluminum fire ladder to be stored on the podium in addition to the enhanced stair access with a wider door. Coordinate with the Fire Prevention Bureau regarding details on the type of ladder.
Requirement #3: No permanent structures are allowed in the rooftop open space, but temporary tents, umbrellas, planting boxes, and other moveable furniture is allowed.
When Required: Prior to issuance of Final Certificate of Occupancy and ongoing monitoring.
Approval: Bureau of Planning, Fire Prevention Bureau, Bureau of Building

20. Building Design – Parking and Loading Frontage in Building 2 (quarter block)

Requirement: A significant amount of the 12th Street frontage on Building 2 (quarter block) is dedicated to parking and loading behind a wall faced with grey block material, which does not provides much visual interest to passersby. In detailed plans provided for Building permits, the applicant must include ways to enliven that frontage, with greater variety of materials, colors, and/or the insertion of public art and/or plantings (as shown in the renderings, but not in the landscape plan).
When Required: Building Permit submittal
Approval: Bureau of Planning, Bureau of Building

21. Streetscape Elements

Requirement: Consistent with the Lake Merritt Station Area Plan, the project will include streetscape elements, including pedestrian scaled lighting, way finding signage to match those found in the heart of Chinatown. The applicant shall submit plans.
Approval: Department of Public Works, Bureau of Planning
When Required: Building Permit submittal
Approval: Bureau of Planning, Bureau of Building

22. Lighting and Signage for Ground Floor

Requirement: Consistent with the zoning requirements, the project will include detailed lighting and signage plans for the ground floor retail.
When Required: Building Permit submittal
Approval: Bureau of Planning, Bureau of Building

ATTACHMENT A

Standard Conditions of Approval and Mitigation Monitoring and Reporting Program

This Standard Conditions of Approval ("SCAs") and Mitigation Monitoring and Reporting Program ("SCAMMRP") is based on the CEQA Analysis prepared for the W12 Mixed-Use Project.

This SCAMMRP is in compliance with Section 15097 of the CEQA Guidelines, which requires that the Lead Agency "adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." The SCAMMRP lists mitigation measures recommended in the 2014 LMSAP EIR that apply to the proposed project. The SCAMMRP also lists other SCAs that apply to the proposed project, most of which were identified in the LMSAP EIR and some of which have been subsequently updated or otherwise modified by the City. Specifically, on July 22, 2015, the City of Oakland released a revised set of all City of Oakland SCAs, which largely still include SCAs adopted by the City in 2008, along with supplemental, modified, and new SCAs. SCAs are measures that would minimize potential adverse effects that could result from implementation of the proposed project, to ensure the conditions are implemented and monitored. The revised set of the City of Oakland SCAs includes new, modified, and reorganized SCAs; however, none of the revisions diminish or negate the ability of the SCAs considered "environmental protection measures" to minimize potential adverse environmental effects. As such, the SCAs identified in the SCAMMRP reflect the current SCAs only. Although the SCA numbers listed below may not correspond to the SCA numbers in the 2014 LMSAP EIR, all of the environmental topics and potential effects addressed by the SCAs in the LMSAP EIR are included in this SCAMMRP (as applicable to the W12 Project). This SCAMMRP also identifies the mitigation monitoring requirements for each mitigation measure and SCA.

This CEQA Analysis is also based on the analysis in the following Prior EIRs that apply to the W12 Mixed-Use Project: Oakland's 1998 General Plan Land Use and Transportation Element ("LUTE") EIR ("1998 LUTE EIR"), the 2010 General Plan Housing Element Update EIR and its 2014 Addendum, and the 2011 Central District Urban Renewal Plan Amendments EIR (or "Redevelopment Plan Amendments EIR"). None of the mitigation measures or SCAs from these EIRs are included in this SCAMMRP because they, or an updated or equally effective mitigation measure or SCA, is identified in the 2014 LMSAP EIR, its addenda, or in this CEQA Analysis for the W12 Mixed-Use Project.

To the extent that there is any inconsistency between any mitigation measures and/or SCAs, the more restrictive conditions shall govern; to the extent any mitigation measure and/or SCA identified in the CEQA Analysis were inadvertently omitted, they are automatically incorporated herein by reference.

- The first column of the SCAMMRP table identifies the mitigation measure or SCA applicable to that topic in the CEQA Analysis. While a mitigation measure or SCA can apply to more than one topic, it is listed in its entirety only under its primary topic (as indicated in the mitigation or SCA designator). The SCAs are numbered to specifically apply to the W12 Mixed-Use Project and this CEQA Analysis; however, the SCAs as presented in the City's *Standard Conditions of Approval and Uniformly Applied Development Standards* document[24] are included in parenthesis for cross-reference purposes.
- The second column identifies the monitoring schedule or timing applicable to the Project.
- The third column names the party responsible for monitoring the required action for the Project.

The Project Sponsor is responsible for compliance with any recommendations identified in City-approved technical reports, all applicable mitigation measures adopted, and with all SCAs set forth herein at its sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or condition of approval, and subject to the review and approval of the City of Oakland. Overall monitoring and compliance with the mitigation measures will be the responsibility of the Bureau or Planning, Zoning Inspections Division. Prior to the issuance of a demolition, grading, and/or construction permit, the Project Sponsor shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

[24] Dated July 22, 2015, as amended.

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
General		
SCA GEN-1 (Standard Condition Approval 15) *Regulatory Permits and Authorizations from Other Agencies* Requirement: The project applicant shall obtain all necessary regulatory permits and authorizations from applicable resource/regulatory agencies including, but not limited to, the Regional Water Quality Control Board, Bay Area Air Quality Management District, Bay Conservation and Development Commission, California Department of Fish and Wildlife, U. S. Fish and Wildlife Service, and Army Corps of Engineers and shall comply with all requirements and conditions of the permits/authorizations. The project applicant shall submit evidence of the approved permits/authorizations to the City, along with evidence demonstrating compliance with any regulatory permit/authorization conditions of approval.	Prior to activity requiring permit/authorization from regulatory agency.	City of Oakland Bureau of Planning and Building
Aesthetics, Shadow, and Wind		
SCA AES-1 (Standard Condition of Approval 16) *Graffiti Control* a. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation: i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces. ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces. iii. Use of paint with anti-graffiti coating. iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED). b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following: i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system. ii. Covering with new paint to match the color of the surrounding surface. iii. Replacing with new surfacing (with City permits if required).	Ongoing.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA AES-2 (Standard Condition of Approval 17) *Landscape Plan* a. Landscape Plan Required The project applicant shall submit a final Landscape Plan for City review and approval that is consistent with the approved Landscape Plan. The Landscape Plan shall be included with the set of drawings submitted for the construction-related permit and shall comply with the landscape requirements of chapter 17.124 of the Planning Code. b. Landscape Installation The project applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or other equivalent instrument acceptable to the Director of City Planning, is provided. The financial instrument shall equal the greater of $2,500 or the estimated cost of implementing the Landscape Plan based on a licensed contractor's bid.	a. Prior to approval of construction-related permit. b. Prior to building permit final. c. Ongoing	a. City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Aesthetics, Shadow, and Wind (cont.)		
c. Landscape Maintenance All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. The property owner shall be responsible for maintaining planting in adjacent public rights-of-way. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.		
SCA AES-3 (Standard Condition of Approval 18): *Lighting* Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties.	Prior to building permit final.	City of Oakland Bureau of Building Services Division, Zoning Inspections
Also **SCA UTIL-2, Underground Utilities.** See *Utilities and Service Systems*, below.		
Air Quality		
SCA AIR-1 (Standard Condition of Approval 19) *Construction-Related Air Pollution Controls (Dust and Equipment Emissions)* The project applicant shall implement all of the following applicable air pollution control measures during construction of the project: a. Water all exposed surfaces of active construction areas at least twice daily (using reclaimed water if possible). Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible. b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. d. Pave all roadways, driveways, sidewalks, etc., as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. e. Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.). f. Limit vehicle speeds on unpaved roads to 15 miles per hour. g. Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points. h. Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations").	During construction.	City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Air Quality (cont.)		
i. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.		
j. Portable equipment shall be powered by electricity if available. If electricity is not available, propane or natural gas shall be used if feasible. Diesel engines shall only be used if electricity is not available and it is not feasible to use propane or natural gas.		
k. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.		
l. All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.		
m. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.		
n. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).		
o. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.		
p. Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind blown dust. Wind breaks must have a maximum 50 percent air porosity.		
q. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.		
r. Activities such as excavation, grading, and other ground-disturbing construction activities shall be phased to minimize the amount of disturbed surface area at any one time.		
s. All trucks and equipment, including tires, shall be washed off prior to leaving the site.		
t. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.		
u. All equipment to be used on the construction site and subject to the requirements of Title 13, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations") must meet emissions and performance requirements one year in advance of any fleet deadlines. Upon request by the City, the project applicant shall provide written documentation that fleet requirements have been met.		
v. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings).		
w. All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM.		
x. Off-road heavy diesel engines shall meet the California Air Resources Board's most recent certification standard.		
y. Post a publicly-visible large on-site sign that includes the contact name and phone number for the project complaint manager responsible for responding to dust complaints and the telephone numbers of the City's Code Enforcement unit and the Bay Area Air Quality Management District. When contacted, the project complaint manager shall respond and take corrective action within 48 hours.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Air Quality (cont.)		
SCA AIR-2 (Standard Condition of Approval 20) *Exposure to Air Pollution (Toxic Air Contaminants)* ***a. Health Risk Reduction Measures*** Requirement: The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. The project applicant shall choose one of the following methods: i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. - or - ii. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City: • Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required. • Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph). • Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible. • The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall be located as far away as feasible from a loading dock or where trucks concentrate to deliver goods. • Sensitive receptors shall be located on the upper floors of buildings, if feasible. • Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (*Pinus nigra* var. *maritima*), Cypress (*X Cupressocyparis leylandii*), Hybrid popular (*Populus deltoids X trichocarpa*), and Redwood (*Sequoia sempervirens*). • Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible. • Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible.	a. Prior to approval of construction-related permit. b. ongoing	a. City of Oakland Bureau of Planning and Building; City of Oakland Bureau of Building Services Division, Zoning Inspections b. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Air Quality (cont.)		
• Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible: – Installing electrical hook-ups for diesel trucks at loading docks. – Requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards. – Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels. – Prohibiting trucks from idling for more than two minutes. – Establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented. b. ***Maintenance of Health Risk Reduction Measures*** Requirement: The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.		
SCA AIR-3 (Standard Condition of Approval 21) *Stationary Sources of Air Pollution (Toxic Air Contaminants)* The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to on-site stationary sources of toxic air contaminants. The project applicant shall choose one of the following methods: a. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk associated with proposed stationary sources of pollution in the project. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. - or – b. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City: i. Installation of non-diesel fueled generators, if feasible, or; ii. Installation of diesel generators with an EPA-certified Tier 4 engine or engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy, if feasible.	Prior to approval of construction-related permit.	City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Biological Resources		
SCA BIO-1 (Standard Condition of Approval 26): *Tree Removal During Bird Nesting Season* To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.	Prior to removal of trees.	City of Oakland Public Works Department, Tree Division; Bureau of Buildings
SCA BIO-2 (Standard Condition of Approval 27): *Tree Permit* *a. Tree Permit Required* Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit. *b. Tree Protection During Construction* Requirement: Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist: i. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree. ii. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree. iii. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.	a. Prior to approval of construction-related permit b. During construction.	a. City of Oakland Public Works Department, Tree Division; Bureau of Buildings b. City of Oakland Public Works Department, Tree Division; Bureau of Buildings

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Biological Resources (cont.)		
iv. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration. v. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed. vi. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.		
Recommendation BIO-1: While not required to address a CEQA impact, the following will be included as additional implementation details for **SCA BIO-1.** For all projects that propose removal of a tree[25] that is associated with a heron rookery, the project applicant shall take the following additional actions, which will require City review and approval, to implement **SCA BIO-1**: **1) Prior to tree removal:** a. *Field Survey*: The applicant shall submit the results of a field survey conducted by a qualified biologist to determine if the heron rookery shall be deemed active. An historical heron rookery must be assumed to be active unless a qualified biologist visits the rookery three times between March and July, with at least one month between visits, and does not observe any herons engaging in nesting behavior (e.g., territorial displays, courtship, nest building, food deliveries to the nest) at any time. If the rookery is deemed inactive, no further steps are necessary. If the rookery is deemed active, the applicant shall proceed with steps 1(b) through 1 (f). b. *Technical Memorandum*: The project applicant shall submit a Technical Memorandum drafted by a qualified biologist that characterizes the rookery by documenting individual tree size (i.e., diameter at breast height, vertical height); canopy width, height and depth (sq ft); distance between tree trunks or canopies, as appropriate; number of nests per tree canopy (sq ft), and overall characteristics of the existing rookery site (such as size, number of trees in rookery, noise level, substrate below trees, adjacent habitat/ building types, observations of predators or prey, etc.). Ideally, the survey is conducted during the breeding season, but it can be conducted during the non-breeding season. c. *Identification of Replacement Site*: The project applicant, in coordination with the City of Oakland and a qualified biologist, shall identify a replacement rookery site located as near as possible to the existing rookery (e.g., Lake Merritt, Oakland shoreline, estuary, parks). The applicant must demonstrate how the replacement rookery site meets the following requirements:	Prior to removal of trees.	City of Oakland Public Works Department, Tree Division; Bureau of Buildings

[25] "Tree removal" means the destruction of any tree by cutting, regrading, girdling, interfering with the water supply, or applying chemicals, or distortion of the tree's visual proportions by topping; or "Topping", which means elimination of the upper twenty-five percent or more of a tree's trunk(s) or main leader(s).

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Biological Resources (cont.)		
i. Support an equal or greater number of nests as the existing rookery ii. Be composed of trees/ shrubs that are the same or similar (in foliage cover, canopy density, and branching structure) to those which are documented to have supported a successful rookery for BCNH and SNEG; or be a site in which such trees/ shrubs (immature or mature) can be planted in order to develop a rookery within the time frame required by the SCA (see item 1(f) below). iii. Be within 3 miles of foraging habitat iv. Be in an area of equal or less human disturbance than the existing rookery v. Not conflict with other uses in that area (e.g., presence of dogs or other domestic animals, human activity that could either cause heron nest abandonment, scheduled redevelopment projects, or nuisance problems associated with heron activity affecting humans). d. *Implementation Plan*: The applicant, in coordination with the City of Oakland and a qualified biologist, shall submit an Implementation Plan describing any enhancements to the replacement rookery site, including construction plans, landscaping plans or plant lists; detailed methods for using social attractants to attract herons to the site (e.g., number of decoy birds and nests, duration of playback recordings, etc.); and a timeline for implementation. e. *Monitoring Program*: The project applicant, in coordination with a qualified Biologist, shall submit a Monitoring Program for monitoring birds and vegetation in the replacement rookery. The Program shall include a monitoring protocol; performance criteria; and strategies for adaptive management should performance criteria not be met. Colonial nesting birds are known to take several years to reach the point of self-recruitment to a new rookery site (i.e. when social attractants are no longer needed to attract additional birds to the site), so a monitoring period of at least three heron breeding seasons is recommended. The Monitoring Program can include a provision that monitoring may be suspended if performance criteria are met within the first or second breeding season. f. *Implementation*: The project applicant, in coordination with the City of Oakland, and/or other entities, shall complete installation of any enhancements, including vegetation, and social attractants at the replacement rookery site. If new vegetation is required for rookery enhancement, it must be fully performing by the third year of monitoring. 2) **Tree removal:** a. If the rookery is deemed active, tree removal can only occur during the non-nesting season, defined as October 1 through January 31. 3) **Following tree removal:** a. Following tree removal and prior to the beginning of nesting season (February 1), social attractants will be activated to lure herons to the replacement rookery site. b. The Monitoring Plan will be implemented during the first nesting season following tree removal and will be implemented for at least three breeding seasons, unless otherwise stated in the approved Monitoring Plan.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Cultural Resources		
SCA CUL-1 (Standard Condition of Approval 29): *Archaeological and Paleontological Resources – Discovery During Construction* Requirement: Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented. In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense. In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA CUL-2 (Standard Condition of Approval 30): *Archaeologically Sensitive Areas – Pre-Construction Measures* Requirement: The project applicant shall implement either Provision A (Intensive Pre-Construction Study) or Provision B (Construction ALERT Sheet) concerning archaeological resources. ***Provision A: Intensive Pre-Construction Study.*** The project applicant shall retain a qualified archaeologist to conduct a site-specific, intensive archaeological resources study for review and approval by the City prior to soil-disturbing activities occurring on the project site. The purpose of the site-specific, intensive archaeological resources study is to identify early the potential presence of history-period archaeological resources on the project site. At a minimum, the study shall include: a. Subsurface presence/absence studies of the project site. Field studies may include, but are not limited to, auguring and other common methods used to identify the presence of archaeological resources. b. A report disseminating the results of this research. c. Recommendations for any additional measures that could be necessary to mitigate any adverse impacts to recorded and/or inadvertently discovered cultural resources.	Prior to approval of construction-related permit; during construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Cultural Resources (cont.)		
If the results of the study indicate a high potential presence of historic-period archaeological resources on the project site, or a potential resource is discovered, the project applicant shall hire a qualified archaeologist to monitor any ground disturbing activities on the project site during construction and prepare an ALERT sheet pursuant to Provision B below that details what could potentially be found at the project site. Archaeological monitoring would include briefing construction personnel about the type of artifacts that may be present (as referenced in the ALERT sheet, required per Provision B below) and the procedures to follow if any artifacts are encountered, field recording and sampling in accordance with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation, notifying the appropriate officials if human remains or cultural resources are discovered, and preparing a report to document negative findings after construction is completed if no archaeological resources are discovered during construction. ***Provision B: Construction ALERT Sheet.*** The project applicant shall prepare a construction "ALERT" sheet developed by a qualified archaeologist for review and approval by the City prior to soil-disturbing activities occurring on the project site. The ALERT sheet shall contain, at a minimum, visuals that depict each type of artifact that could be encountered on the project site. Training by the qualified archaeologist shall be provided to the project's prime contractor, any project subcontractor firms (including demolition, excavation, grading, foundation, and pile driving), and utility firms involved in soil- disturbing activities within the project site. The ALERT sheet shall state, in addition to the basic archaeological resource protection measures contained in other standard conditions of approval, all work must stop and the City's Environmental Review Officer contacted in the event of discovery of the following cultural materials: concentrations of shellfish remains; evidence of fire (ashes, charcoal, burnt earth, fire-cracked rocks); concentrations of bones; recognizable Native American artifacts (arrowheads, shell beads, stone mortars [bowls], humanly shaped rock); building foundation remains; trash pits, privies (outhouse holes); floor remains; wells; concentrations of bottles, broken dishes, shoes, buttons, cut animal bones, hardware, household items, barrels, etc.; thick layers of burned building debris (charcoal, nails, fused glass, burned plaster, burned dishes); wood structural remains (building, ship, wharf); clay roof/floor tiles; stone walls or footings; or gravestones. Prior to any soil-disturbing activities, each contractor shall be responsible for ensuring that the ALERT sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, and supervisory personnel. The ALERT sheet shall also be posted in a visible location at the project site.		
SCA CUL-3 (Standard Condition of Approval SCA 31): *Human Remains – Discovery During Construction* Requirement: Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Geology, Soils, and Geohazards		
SCA GEO-1 (Standard Condition of Approval 33): *Construction-Related Permit(s)* Requirement: The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA GEO-2 (Standard Condition of Approval 34): *Soils Report* Requirement: The project applicant shall submit a soils report prepared by a registered geotechnical engineer for City review and approval. The soils report shall contain, at a minimum, field test results and observations regarding the nature, distribution and strength of existing soils, and recommendations for appropriate grading practices and project design. The project applicant shall implement the recommendations contained in the approved report during project design and construction.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
See **SCA HYD-1, Erosion and Sedimentation Control Plan for Construction**, See *Hydrology and Water Quality*, below.		
Greenhouse Gases and Climate Change		
See **SCA AES-2, Landscape Plan**. See *Aesthetics, Wind, and Shadow*, above.		
See **SCA AIR-1, Construction-Related Air Pollution Controls (Dust and Equipment Emissions)**. See *Air Quality*, above.		
See **SCA UTIL-1, Construction and Demolition Waste Reduction and Recycling.** See *Utilities and Service Systems*, below.		
See **SCA UTIL-4, Green Building Requirements**. See *Utilities and Service Systems*, below.		
Hazards and Hazardous Materials		
SCA HAZ-1 (Standard Condition of Approval 39): *Hazards Materials Related to Construction* Requirement: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following: a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction; b. Avoid overtopping construction equipment fuel gas tanks; c. During routine maintenance of construction equipment, properly contain and remove grease and oils; d. Properly dispose of discarded containers of fuels and other chemicals; e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and f. If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Hazards and Hazardous Materials (cont.)		
SCA HAZ-2 (Standard Condition of Approval 40): *Site Contamination* *a. Environmental Site Assessment Required* Requirement: The project applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency. *b. Health and Safety Plan Required* Requirement: The project applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan. *c. Best Management Practices (BMPs) Required for Contaminated Sites* Requirement: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following: i. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements. ii. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building.	a. Prior to approval of construction-related permit b. Prior to approval of construction-related permit c. During Construction	a. Oakland Fire Department b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Building Services Division, Zoning Inspections
See **SCA TRA-1, Construction Activity in the Public Right-of-Way.** See *Transportation and Traffic*, below.		
Hydrology and Water Quality		
SCA HYD-1 (Standard Condition of Approval 45): *Erosion and Sedimentation Control Plan for Construction* *a. Erosion and Sedimentation Control Plan Required* Requirement: The project applicant shall submit an Erosion and Sedimentation Control Plan to the City for review and approval. The Erosion and Sedimentation Control Plan shall include all necessary measures to be taken to prevent excessive stormwater runoff or carrying by stormwater runoff of solid materials on to lands of adjacent property owners, public streets, or to creeks as a result of conditions created by grading and/or construction operations. The Plan shall include, but not be limited to, such measures as short-term erosion control planting, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and stormwater retention basins. Off-site work by the project applicant may be necessary. The project applicant shall obtain permission or easements necessary for off-site work. There shall be a clear notation that the plan is subject to	a. Prior to approval of construction-related permit. b. During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Hydrology and Water Quality (cont.)		
changes as changing conditions occur. Calculations of anticipated stormwater runoff and sediment volumes shall be included, if required by the City. The Plan shall specify that, after construction is complete, the project applicant shall ensure that the storm drain system shall be inspected and that the project applicant shall clear the system of any debris or sediment. *b. Erosion and Sedimentation Control During Construction* Requirement: The project applicant shall implement the approved Erosion and Sedimentation Control Plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Bureau of Building.		
SCA HYD-2 (Standard Condition of Approval 48): *Site Design Measures to Reduce Stormwater Runoff* Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate site design measures into the project to reduce the amount of stormwater runoff. These measures may include, but are not limited to, the following: a. Minimize impervious surfaces, especially directly connected impervious surfaces and surface parking areas; b. Utilize permeable paving in place of impervious paving where appropriate; c. Cluster structures; d. Direct roof runoff to vegetated areas; e. Preserve quality open space; and f. Establish vegetated buffer areas.	Ongoing.	N/A
SCA HYD-3 (Standard Condition of Approval 50): *NPDES C.3 Stormwater Requirements for Regulated Projects* *a. Post-Construction Stormwater Management Plan Required* Requirement: The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following: i. Location and size of new and replaced impervious surface; ii. Directional surface flow of stormwater runoff; iii. Location of proposed on-site storm drain lines; iv. Site design measures to reduce the amount of impervious surface area; v. Source control measures to limit stormwater pollution; vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff.	a. Prior to approval of construction-related permit. b. Prior to building permit final.	a. City of Oakland Bureau of Building Services Division, Zoning Inspections; City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Hydrology and Water Quality (cont.)		
b. Maintenance Agreement Required Requirement: The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following: i. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense.		
Also **SCA GEO-1, Construction-Related Permit(s).** See *Geology, Soils, and Geohazards*, above.		
Also **SCA GEO-2, Soils Report.** See *Geology, Soils, and Geohazards*, above.		
Also **SCA UTIL-6, Storm Drain System.** See *Utilities and Service Systems*, below.		
Noise		
SCA NOI-1 (Standard Condition of Approval 58) *Construction Days/Hours* Requirement: The project applicant shall comply with the following restrictions concerning construction days and hours: a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday. c. No construction is allowed on Sunday or federal holidays. Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non- enclosed area. Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Noise (cont.)		
SCA NOI-2: (Standard Condition of Approval 59) *Construction Noise* Requirement: The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following: a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. c. Applicant shall use temporary power poles instead of generators where feasible. d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction. e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-3 (Standard Condition of Approval 60) *Extreme Construction Noise* ***a. Construction Noise Management Plan Required*** Requirement: Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following: i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; ii. Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions; iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site; iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.	a. Prior to approval of construction-related permit. b. During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Noise (cont.)		
b. Public Notification Required Requirement: The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented.		
SCA NOI-4 (Standard Condition of Approval 61) *Project-Specific Construction Noise Reduction Measures* Requirement: The project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site- specific noise attenuation measures to further reduce construction noise impacts. The project applicant shall implement the approved Plan during construction	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-5 (Standard Condition of Approval 62) *Construction Noise Complaints* Requirement: The project applicant shall submit to the City for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include: a. Designation of an on-site construction complaint and enforcement manager for the project; b. A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit; c. Protocols for receiving, responding to, and tracking received complaints; and d. Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-6 (Standard Condition of Approval 63) *Exposure to Community Noise* Requirement: The project applicant shall submit a Noise Reduction Plan prepared by a qualified acoustical engineer for City review and approval that contains noise reduction measures (e.g., sound-rated window, wall, and door assemblies) to achieve an acceptable interior noise level in accordance with the land use compatibility guidelines of the Noise Element of the Oakland General Plan. The applicant shall implement the approved Plan during construction. To the maximum extent practicable, interior noise levels shall not exceed the following: a. 45 dBA: Residential activities, civic activities, hotels b. 50 dBA: Administrative offices; group assembly activities c. 55 dBA: Commercial activities d. 65 dBA: Industrial activities	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-7 (Standard Condition of Approval 64) *Operational Noise* Requirement: Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City.	Ongoing.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Noise (cont.)		
SCA NOI-8 (Standard Condition of Approval 66) *Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities* *Requirement*: The project applicant shall submit a Vibration Analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structure and/or substantially interfere with activities located at 260 13th Street and 274 14th Street. The Vibration Analysis shall identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The applicant shall implement the recommendations during construction.	Prior to construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections
Transportation and Circulation		
SCA TRA-1 (Standard Condition of Approval 68) *Construction Activity in the Public Right-of-Way* *a. Obstruction Permit Required* Requirement: The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets and sidewalks. *b. Traffic Control Plan Required* Requirement: In the event of obstructions to vehicle or bicycle travel lanes, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle, and pedestrian detours, including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The project applicant shall implement the approved Plan during construction. *c. Repair of City Streets* Requirement: The project applicant shall repair any damage to the public right-of way, including streets and sidewalks caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately.	a. Prior to approval of construction-related permit. b. Prior to approval of construction-related permit. c. Prior to building permit final.	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. Public Works Department, Transportation Services Division c. City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA TRA-2 (Standard Condition of Approval 69) *Bicycle Parking* Requirement: The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA TRA-3 (Standard Condition of Approval 71) *Transportation and Parking Demand Management* *a. Transportation and Parking Demand Management (TDM) Plan Required* Requirement: The project applicant shall submit a Transportation and Parking Demand Management (TDM) Plan for review and approval by the City. i. The goals of the TDM Plan shall be the following: • Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable, consistent with the potential traffic and parking impacts of the project.	a. Prior to building permit final. b. Prior to building permit final c. Ongoing	a. City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
• Achieve the following project vehicle trip reductions (VTR): – Projects generating 50-99 net new a.m. or p.m. peak hour vehicle trips: 10 percent VTR – Projects generating 100 or more net new a.m. or p.m. peak hour vehicle trips: 20 percent VTR • Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate. • Enhance the City's transportation system, consistent with City policies and programs. ii. TDM strategies to consider include, but are not limited to, the following: • Inclusion of additional long-term and short-term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan and the Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement. • Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority bikeways, on-site signage and bike lane striping. • Installation of safety elements per the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project. • Installation of amenities such as lighting, street trees, and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan. • Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements. • Direct on-site sales of transit passes purchased and sold at a bulk group rate (through programs such as AC Transit Easy Pass or a similar program through another transit agency). • Provision of a transit subsidy to employees or residents, determined by the project applicant and subject to review by the City, if employees or residents use transit or commute by other alternative modes. • Provision of an ongoing contribution to transit service to the area between the project and nearest mass transit station prioritized as follows: 1) Contribution to AC Transit bus service; 2) Contribution to an existing area shuttle service; and 3) Establishment of new shuttle service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario 3). • Guaranteed ride home program for employees, either through 511.org or through separate program. • Pre-tax commuter benefits (commuter checks) for employees. • Free designated parking spaces for on-site car-sharing program (such as City Car Share, Zip Car, etc.) and/or car-share membership for employees or tenants. • On-site carpooling and/or vanpool program that includes preferential (discounted or free) parking for carpools and vanpools. • Distribution of information concerning alternative transportation options. • Parking spaces sold/leased separately for residential units. Charge employees for parking, or provide a cash incentive or transit pass alternative to a free parking space in commercial properties.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
• Parking management strategies including attendant/valet parking and shared parking spaces. • Requiring tenants to provide opportunities and the ability to work off-site. • Allow employees or residents to adjust their work schedule in order to complete the basic work requirement of five eight-hour workdays by adjusting their schedule to reduce vehicle trips to the worksite (e.g., working four, ten-hour days; allowing employees to work from home two days per week). • Provide or require tenants to provide employees with staggered work hours involving a shift in the set work hours of all employees at the workplace or flexible work hours involving individually determined work hours. The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report. *b. TDM Implementation – Physical Improvements* Requirement: For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project. *c. TDM Implementation – Operational Strategies* Requirement: For projects that generate 100 or more net new a.m. or p.m. peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR achieved by the project during operation. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports are not submitted and/or the annual reports indicate that the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM Plan is implemented but the VTR goal is not achieved.		
TRA-1 (LMSAP Mitigation Measure TRAN-1) Requirement: Implement the following measures: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the PM peak hour. • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. To implement this measure, the individual project applicant shall submit the following to City of Oakland's Transportation Services Division for review and approval: • Signal timing plans for the signals in the coordination group. • Plans, Specifications, and Estimates (PS&E) to modify intersection. All elements shall be designed to City and Caltrans standards in effect at the time of construction and all new or upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both City standards	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, at the time when about 50 percent of the Project is operational and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached.	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
and Americans with Disabilities Act (ADA) standards (according to Federal and State Access Board guidelines) at the time of construction. Current City Standards call for the elements listed below: — 2070L Type Controller with cabinet assembly — GPS communications (clock) — Accessible pedestrian crosswalks according to Federal and State Access Board guidelines with signals (audible and tactile) — Countdown pedestrian head module switch out — City standard ADA wheelchair ramps — Video detection on existing (or new, if required) — Mast arm poles, full actuation (where applicable) — Polara push buttons (full actuation) — Bicycle detection (full actuation) — Pull boxes — Signal interconnect and communication with trenching (where applicable), or through (E) conduit (where applicable)- 600 feet maximum — Conduit replacement contingency — Fiber Switch — PTZ Camera (where applicable) — Transit Signal Priority (TSP) equipment consistent with other signals along corridor The individual project applicant shall fund the cost of preparing and implementing the mitigation measures. However, if the City adopts a transportation impact fee program prior to implementation of this mitigation measure, the individual project applicant shall have the option to pay the applicable fee in lieu of implementing this mitigation measure and payment of the fee shall mitigate the impact to less than significant. A straight line interpolation of intersection delay between Existing and Existing Plus Project conditions indicates that mitigation at this intersection may be required when about 50 percent of the Project is developed. Investigation of the need for this mitigation shall be studied at the time when this threshold is reached and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	
TRA-2 (LMSAP Mitigation Measure TRAN-3) Requirement: Implement the following measures: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the AM peak hour. • Coordinate this signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. To implement this measure, the individual project applicant shall submit the following to City of Oakland's Transportation Services Division for review and approval:	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, at the time when about 75 percent of the Project is operational and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
• Signal timing plans for the signals in the coordination group. • Plans, Specifications, and Estimates (PS&E) as detailed in Mitigation Measure TRAN- 1. The individual project applicant shall fund the cost of preparing and implementing the mitigation measures. However, if the City adopts a transportation impact fee program prior to implementation of this mitigation measure, the individual project applicant shall have the option to pay the applicable fee in lieu of implementing this mitigation measure and payment of the fee shall mitigate the impact to less than significant. A straight line interpolation of intersection delay between Existing and Existing Plus Project conditions indicates that mitigation at this intersection may be required when about 75 percent of the Project is developed. Investigation of the need for this mitigation shall be studied at the time when this threshold is reached and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	
TRA-3 (LMSAP Mitigation Measure TRAN-5) Requirement: Implement the following measures: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. To implement this measure, the individual project applicant shall submit the following to City of Oakland's Transportation Services Division for review and approval: • Signal timing plans for the signals in the coordination group. • Plans, Specifications, and Estimates (PS&E) as detailed in Mitigation Measure TRAN- 1. The individual project applicant shall fund the cost of preparing and implementing the mitigation measures. However, if the City adopts a transportation impact fee program prior to implementation of this mitigation measure, the individual project applicant shall have the option to pay the applicable fee in lieu of implementing this mitigation measure and payment of the fee shall mitigate the impact to less than significant. A straight line interpolation of intersection delay between Existing and Existing Plus Project conditions indicates that mitigation at this intersection may be required when about 54 percent of the Project is developed. Investigation of the need for this mitigation shall be studied at the time when this threshold is reached and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, at the time when about 54 percent of the Project is operational and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
TRA-4 (LMSAP Mitigation Measure TRAN-10) Requirement: Implement the following measures: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the PM peak hour. • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2017 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division
TRA-5 (LMSAP Mitigation Measure TRAN-11) Requirement: Implement the following measures: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Create an interconnected corridor along Oak Street from 5th to 14th Streets, and coordinate the signal timing changes at this intersection with the coordination group.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2014 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications,	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
	and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	
TRA-6 (LMSAP Mitigation Measure TRAN-12) Requirement: Implement Mitigation Measure TRAN-11: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Create an interconnected corridor along Oak Street from 5th to 14th Streets, and coordinate the signal timing changes at this intersection with the coordination group.		
TRA-7 (LMSAP Mitigation Measure TRAN-13) Requirement: Implement the following measures: • Provide permitted-protected left-turn phasing for the northbound and southbound approaches. • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2015 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
TRA-8 (LMSAP Mitigation Measure TRAN-14) Requirement: Implement the following measures: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Create an interconnected corridor along Madison Street from 5th to 14th Streets, and coordinate the signal timing changes at this intersection with the coordination group.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2016 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division
TRA-9 (LMSAP Mitigation Measure TRAN-15) Requirement: Implement Mitigation Measure TRAN-14: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Create an interconnected corridor along Madison Street from 5th to 14th Streets, and coordinate the signal timing changes at this intersection with the coordination group.		
TRA-10 (LMSAP Mitigation Measure TRAN-16) Requirement: Implement Mitigation Measure TRAN-14: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Create an interconnected corridor along Madison Street from 5th to 14th Streets, and coordinate the signal timing changes at this intersection with the coordination group.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
TRA-11 (LMSAP Mitigation Measure TRAN-17) Requirement: Implement the following measures: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group within the Oak Street interconnect corridor (5th to 14th Streets).	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2015 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division
TRA-12 (LMSAP Mitigation Measure TRAN-19) Requirement: Implement the following measures: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the AM peak hour. • Coordinate the signal timing changes at this intersection with the adjacent intersections.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2018 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
	will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	
TRA-13 (LMSAP Mitigation Measure TRAN-20) Requirement: Implement Mitigation Measure TRAN-17: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group within the Oak Street interconnect corridor (5th to 14th Streets).		
TRA-14 (LMSAP Mitigation Measure TRAN-22) Requirement: Implement Mitigation Measure TRAN-17: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group within the Oak Street interconnect corridor (5th to 14th Streets).		
TRA-15 (LMSAP Mitigation Measure TRAN-25) Requirement: Implement Mitigation Measure TRAN-17: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group within the Oak Street interconnect corridor (5th to 14th Streets).		
TRA-16 (LMSAP Mitigation Measure TRAN-26) Requirement: Implement Mitigation Measure TRAN-17: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group within the Oak Street interconnect corridor (5th to 14th Streets).		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Utilities and Service Systems		
SCA UTIL-1 (Standard Condition of Approval 74) *Construction and Demolition Waste Reduction and Recycling* Requirement: The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of $50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center.	Prior to approval of construction-related permit	City of Oakland Public Works Department, Environmental Services Division
SCA UTIL-2 (Standard Condition of Approval 75) *Underground Utilities* Requirement: The project applicant shall place underground all new utilities serving the project and under the control of the project applicant and the City, including all new gas, electric, cable, and telephone facilities, fire alarm conduits, street light wiring, and other wiring, conduits, and similar facilities. The new facilities shall be placed underground along the project's street frontage and from the project structures to the point of service. Utilities under the control of other agencies, such as PG&E, shall be placed underground if feasible. All utilities shall be installed in accordance with standard specifications of the serving utilities.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA UTIL-3 (Standard Condition of Approval 76) *Recycling Collection and Storage Spnce* Requirement: The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten cubic feet.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA UTIL-4 (Standard Condition of Approval 77) *Green Building Requirements* *a. Compliance with Green Building Requirements During Plan-Check* Requirement: The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code). i. The following information shall be submitted to the City for review and approval with the application for a building permit: • Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards. • Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit. • Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit. • Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below.	a. Prior to approval of construction-related permit. b. During construction. c. After project completion as specified.	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Utilities and Service Systems (cont.)		
• Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance. • Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit. • Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. ii. The set of plans in subsection (i) shall demonstrate compliance with the following: • CALGreen mandatory measures. • All pre-requisites per the green building checklist approved during the review of the Planning and Zoning permit, or, if applicable, all the green building measures approved as part of the Unreasonable Hardship Exemption granted during the review of the Planning and Zoning permit. • [INSERT: Green building point level/certification requirement: (See Green Building Summary Table; for New Construction of Residential or Non- residential projects that remove a Historic Resource (as defined by the Green Building Ordinance) the point level certification requirement is 53 points for residential and LEED Gold for non-residential)] per the appropriate checklist approved during the Planning entitlement process. • All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted. • The required green building point minimums in the appropriate credit categories. *b. Compliance with Green Building Requirements During Construction* Requirement: The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project. The following information shall be submitted to the City for review and approval: i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit. ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance. iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. *c. Compliance with Green Building Requirements After Construction* Requirement: Within sixty (60) days of the final inspection of the building permit for the project, the Green Building Certifier shall submit the appropriate documentation to Build It Green or Green Building Certification Institute and attain the minimum required certification/point level. Within one year of the final inspection of the building permit for the project, the applicant shall submit to the Bureau of Planning the Certificate from the organization listed above demonstrating certification and compliance with the minimum point/certification level noted above.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Utilities and Service Systems (cont.)		
SCA UTIL-5 (Standard Condition of Approval 79) *Sanitary Sewer System* Requirement: The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system.	Prior to approval of construction-related permit.	City of Oakland Public Works Department, Department of Engineering and Construction
SCA UTIL-6 (Standard Condition of Approval 80) *Storm Drain System* Requirement: The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA UTIL-7 (Standard Condition of Approval 81) *Recycled Water* Requirement: Pursuant to section 16.08.030 of the Oakland Municipal Code, the project applicant shall provide for the use of recycled water in the project for landscape irrigation purposes unless the City determines that there is a higher and better use for the recycled water, the use of recycled water is not economically justified for the project, or the use of recycled water is not financially or technically feasible for the project. The project applicant shall contact the New Business Office of the East Bay Municipal Utility District (EBMUD) for a recycled water feasibility assessment by the Office of Water Recycling. If recycled water is to be provided in the project, the project drawings submitted for construction-related permits shall include the proposed recycled water system and the project applicant shall install the recycled water system during construction.	Prior to approval of construction-related permit.	City of Oakland Bureau of Planning and Building ; City of Oakland Bureau of Building Services Division, Zoning Inspections
Also **SCA HYD-1, Erosion and Sedimentation Control Plan for Construction**. See *Hydrology and Water Quality*, above.		
Also **SCA HYD-2, Site Design Measures to Reduce Stormwater Runoff.** See *Hydrology and Water Quality*, above.		

ATTACHMENT D

WRITTEN PUBLIC COMMENTS

(Received since Design Review Commission meeting on June 22, 2016)

Attachment A - August 3, 2016 Planning Commission Staff report

Received by the Bureau of Planning - July 18, 2016

301 & 285 12th Street Project

On August 2, 2016, the Planning Commission will consider a proposal to develop a 416-unit mixed use residential development with ground floor retail at 301 & 285 12th Street (12th and Webster). The project will replace a former car dealership with much needed housing and high quality, well designed new building with active ground floor commercial uses that will support local businesses, and encourage vibrant and safer streets. Oakland needs more housing and more businesses on 12th Street that will strengthen 12th Street as an important commercial corridor, consistent with the Lake Merritt Area District Plan.

By signing below, I hereby support the development at 285 & 301 12th Street and believe it is a good fit for the neighborhood and will bring much needed housing to the City of Oakland.

#	Name & Company	Address	Contact Number	Email Address	Signature
1	Espreso Gourmet	—			[signature]
2	Khaled	417 14th St			[signature]
3	Doug cho	408 12th St		iCam4226@Hotmail	[signature]
4	BJ's shoes	414 12th St			[signature]
5	Pacific Hoo[illegible]	389 12th St			[signature]
6	Spices 3	369 12th St.		sindydeng@yahoo.com	[signature]
7	Bo Gao	357 12th ST			[signature]
8	[illegible]	421 Webster			[signature]
9	Henry [illegible]	1001 Webster			[signature]
10	Metro PCS	988 Broadway			[signature]
11	Tiffany .	388 #162.			[signature]
12	[illegible]	388 #160			[signature]

Lucky Holiday

Received by the Bureau of Planning - July 18, 2016

	name	address			Signature
13	Jennie Ong	388 9th Street Suite 298		Jennie Yong Ong	Jennie Ong
14	Kyle Ng	388 9th St Suite 123			[illegible]
15	Kenny Li	388 9th st #127			[illegible]
16	Maggie Tong	1 Commerce Ct, Alameda CA 94501			Maggie [illegible]
17	Qi Ruan	1006 Webster st			[illegible]
18	[illegible] ~~[illegible]~~	321 10th St #119 Oakland CA 94607			[illegible]
19	T SGA				[illegible]
20	Ming [illegible]	918 9th Oakland 94607			[illegible]
21	[illegible]	321 9th St			[illegible]
22	[illegible]	362 8th St, Oakland			[illegible]
23	Frances Chen	360 8th Oakland			[illegible]
24					
25					
26					
27					
28					
29					

Thursday, July 23, 2016

Dear Planning Commission & Staff,

We write to you as a coalition of community-based organizations and individuals in Oakland Chinatown with sincere concerns about the proposed W12 project in the heart of our neighborhood.

Our neighborhood has been here since the 1870s, and we face a current crisis in the face of development pressures that threaten the history, culture and residents that have defined this area for over 130 years. While San Francisco Chinatown has zoning protections, Oakland Chinatown does not currently have protections to keep current properties from flipping to corporate development that could diminish and eventually erase our community.

Since we have seen other Chinatowns such as in DC disappear from the process of gentrification manifested through luxury housing and corporate retail development, we are concerned that this development could be part of the beginning of the disappearance of Oakland Chinatown. Taking a full block or more of Chinatown will have a huge impact on Chinatown's boundaries, and impact the culture, identity and composition of the neighborhood. As it stands, this project will increase other high-end development that could displace our small businesses, community organizations, and low-income residents, and contribute to our neighborhood's demise if it does not sufficiently meet the following concerns:

- The current plan to have 416 market-rate units with no guaranteed affordable units could bring upwards of over 1,000 high-income residents into our low-income community that has an average median income of $25,000 per year. Other new development will add thousands more high-income residents, increasing economic tension and displacement pressures.
- The over 25,000 square feet of retail space, if too expensive for Chinatown businesses and organizations, could bring non-Chinatown businesses into the heart of our neighborhood, which could create a disruption in the coherence of the Chinatown landscape, and begin the process of shrinking our boundaries. High-income tenants able to pay current market-rates in Oakland are disproportionately white due to economic inequalities in this country, and these tenants will demand services and businesses that will demand higher prices unaffordable to our families and be able to pay higher commercial rents, which will create more displacement pressures on our mom and pop family-run stores, many of which are just barely getting by on small profit margins.

- The current ground floor design shared with us does not show a lighting plan to provide sufficient brilliant lighting. Public safety and graffiti are current problems for Chinatown, partly due to the lack of lighting in the area.
- The current plan to hire a general contractor from San Carlos does not bode well for local hire and inclusion of Asian and minority contractors in Oakland. Not ensuring local diverse hire, living wages, high safety standards, or apprenticeship opportunities does not contribute to the city's goals for economic equity and opportunity. Too many developers cut costs at the expense of workers and the profits of corporations, which can lead to unsafe conditions and low wages for workers that perpetuate economic inequality. CIWI internships are not a sustainable model of economic development as they only provide a short-term experience of only 12 weeks, 20 hours per week, totaling 240 hours of experience at $19/hour with no benefits. CIWI interns have to be in college, while apprenticeships only require a GED, so there is a class difference in who gets to access those internships, and this usually does not include re-entry residents who desperately need work in fields like construction for a stronger and safer community.
- The building designs completely disregard guidelines in the Lake Merritt Station Area Plan to include publicly accessible space in any development over half a block. In fact, this particular site was identified as an opportunity site for including open public space in the area plan, and yet no one discussed this in the process of development. Chinatown's current open spaces are extremely over-capacity, and our seniors and families desperately need more green space in a neighborhood with high levels of traffic and pollution.
- The current design is quite colorless and does not signal Chinatown at such a critical site and gateway to our neighborhood, and the ground floor does not currently provide a lot of visual interest.
- The plans to displace the schools on site may disrupt the learning of 720 Chinatown youth, which is an unacceptable outcome of the construction timeline.

Based on the above concerns, our organizations representing thousands of Chinatown families have made the following requests of The Martin Group:

- To sign a legally-binding Community Benefits Agreement and Memorandum of Understanding codifying commitments addressing the stated concerns and including the following requests before Planning Commission approval, to ensure anti-displacement mitigation and integration into the neighborhood, to avoid an unnecessary appeal process:
    - We appreciate The Martin Group's quick willingness to begin talks with EBALDC and other nonprofit affordable housing developers to purchase the 285 12th Street site for affordable senior and family housing and community space on the

ground floor. We request that a reasonable price be offered, and that the intention to sell the parcel to a nonprofit affordable housing developer be written into the proposal to the Planning Commission as a condition of approval to ensure that this project includes and mitigates displacement of Chinatown families that is happening right now in Oakland, in nearby SRO and apartment buildings where landlords are pushing out long-time families. We simply cannot support a project in the middle of our neighborhood that does not include equitable access for our Chinatown families who make the neighborhood what it is, to mitigate the impact of thousands of high-income residents flooding the area. So the guaranteed inclusion of the 285 12th Street site for affordable housing is critical to prevent major and prolonged opposition to this project.

- We request a target of about 40% of the over 25,000 square feet of retail space as affordable retail space for Chinatown community and small business needs, including the 285 12th Street site space. That would equal about 8,000 square feet remaining to be designated in the 301 12th Street site. To provide coherence and flow with Lincoln Recreation Center and the EBALDC buildings, we request that one of the Harrison Street spaces in the 301 12th Street site be designated for affordable retail space for the creation of a collaborative cooperative small business incubation space that can be a launching pad and resource space for the future of Chinatown's small business economic life, and also provide high-traffic with the inclusion of a teahouse or similar gathering space for the community with included meeting space and gallery space for the Oakland Asian Cultural Center. In addition, this space can be used for a monthly or weekly night market for pop-up food purveyors, a long-time wish of the Chinatown community. We define affordable at around $1 per square foot per month or below for micro-businesses, all costs included with WIFI service, and request long-term leases and build-out. Extra parking spaces should be first offered to these small businesses.
- We request that the lighting fixtures be designed to signal Chinatown through a lantern-like Chinese-inspired design by a local or Asian Pacific American artist or manufacturer, and that they be provided at least every 20 feet along the sides of the ground floor facade to light up the sidewalks for pedestrians.
- To ensure local hire, living wages, and apprenticeships for our young people, we request a community workforce agreement that codifies goals and targets for including our local residents and contractors in the building of a project in their city and neighborhood. These workers and contractors should include Asian and other minority local contractors and workers with living wages, advancement opportunities, and safety measures that are guaranteed by a written agreement made with local trade unions who facilitate apprenticeships that support young

workers to establish themselves in a successful and economically sustainable career.

- In lieu of providing public open space because the design did not include it as recommended by the Lake Merritt Area Plan, we request financial support for Chinatown's crumbling public infrastructure, including Lincoln and Madison Parks per the neighborhood's open space goals, and the Chinatown Art, Preservation & Environment Committee's projects to preserve and beautify Chinatown for the long-term sustainability of the neighborhood and success of our small business and cultural district. The impact fees will not necessarily be re-directed back to Chinatown, unfortunately. Since the Lake Merritt Station Area Plan, the City has not been able to identify funds to implement most of the community goals, and the neighborhood should benefit from new development as a national best practice to strengthen low-income neighborhoods to be resilient to prevent displacement. The current immediate upgrade needs for Lincoln Recreation Center are estimated at $200,000, and the current immediate upgrade needs for Madison Park are estimated at $300,000 to provide much-needed quality of life improvements for Chinatown residents. The Oakland Chinatown Art, Preservation & Environment Committee is also currently working to beautify and preserve the neighborhood through murals, public art, and place-making initiatives.
- To sufficiently mitigate displacement of small businesses, we request financial support for the Chinatown Chamber's Small Business Support program, which requires $80,000 to run for one year, and APEN's Sustainable Jobs Worker Cooperative Center to build job capacity for local residents to create economic equity.
- We appreciate The Martin Group's intentions to include Chinatown artists in the use of the Public Art Fee, and we would like to put that commitment in writing to include extensive public art on the external facades and sidewalk spaces that affirms and reflects our neighborhood and cultural history and identity, including benches for public seating, murals, mosaics, light art, and sidewalk insignias and markings for place-making. We also request that, if legal outcomes allow, some portion of the estimated $500,000 for public art be designated for the Oakland Asian Cultural Center to be able to continue their programs for the community. We also request a commitment to spend these funds for these purposes, even if pending litigation overturns the Public Art Ordinance, as other developers have done. We also request that sidewalk trees include ones that are familiar to Asian communities, and also visually signal Chinatown's identity, such as cherry blossom and gingko trees, or similar trees as permitted for sidewalk tree inclusion. We request that The Martin Group work with a committee of Chinatown stakeholders, architects, and artists on these overall design plans.

- As many of our children attend the schools on this site, we request a commitment in writing to allow the schools to stay in their building until June 9, 2017 as part of the community agreement, and to work closely with the school administrators to ensure that the students' learning is not disrupted by the project.
- We request a clause that codifies the commitments in the event that the project is sold so that any new owner would have to honor the community agreement.

While The Martin Group is amenable to some of our requests, they have not sufficiently satisfied all of our concerns regarding displacement at this time, therefore we cannot currently support the project as is until a meaningful Community Benefits Agreement is signed by all parties that mitigates harm to our neighborhood and families. We sincerely hope that that The Martin Group will lead by example in implementing responsible development without displacement in Oakland by respecting and mitigating our concerns. And we ask that you as a Planning Commission respect our historic and culturally important neighborhood by not approving the project until that Community Benefits Agreement is in place. Please follow the lead of the Berkeley Planning Commission and other progressive Planning Commissions that require developers to include meaningful community benefits before giving them the green light. Oakland and Chinatown are at a critical junction right now, and we will not stand by quietly and let irresponsible decisions and a lack of leadership destroy our neighborhood.

We believe it is a dangerous precedent for our city in this moment for the Planning Commission to continue approving projects without CBAs, a national best practice, in place to mitigate displacement in our neighborhoods, particularly in our historic and cultural districts. We urge you as our Planning Commission to immediately act to propose and implement meaningful protections for our historic and cultural districts, as other cities across the country have done to ensure protection for low-income communities during periods of rapid development. Lastly, we continue to urge you to require that developers actually read and use the Area Plans to incorporate the guidelines, recommendations and wishes of local neighborhoods to develop housing while meeting the community's needs with their projects.

Thank You,

AYPAL: Building API Community Power
Asian Pacific Environmental Network (APEN)
Asian Pacific Islander Legal Outreach
The Wa Sung Community Service Club
Karen Dea, Wa Sung Community Service Club
Chinese American Citizens Alliance
Buddhist Church of Oakland

Robert Noguchi, Buddhist Church of Oakland Board President
Steve Terusaki, Buddhist Church of Oakland Board President Emeritus
Filipino Advocates for Justice
Alan Yee, Siegel & Yee Law Firm
Corinne Jan, Family Bridges
Chinese Community United Methodist Church
Reverend Emily Lin, Lead Pastor, Chinese Community United Methodist Church
Richard Fong, Board Chair, Chinese Community United Methodist Church
Rebecca Wong, Lay Leader, Chinese Community United Methodist Church
Reverend Deborah Lee, Interfaith Movement for Human Integrity
Bruce Quan, Member of the Oakland Lodge of the Four Family Association
Eduardo Collaço 高華德, Long-Time Chinatown Safety Volunteer
Lailan Sandra Huen, Block by Block Organizing Network
Oakland Residents for Responsible Development
Friends of Lincoln Square

CITY OF OAKLAND
APPEAL FORM
FOR DECISION TO PLANNING COMMISSION, CITY COUNCIL OR HEARING OFFICER

PROJECT INFORMATION

Case No. of Appealed Project: PLN16-133

Project Address of Appealed Project: W12, 285 and 301 12th Street

Assigned Case Planner/City Staff: Christina Ferracane

APPELLANT INFORMATION:

Printed Name: Laura Horton Phone Number: _____

Mailing Address: 601 Gateway Blvd., Suite 1000 Alternate Contact Number: _____

City/Zip Code S. San Francisco, 94080 Representing: Oakland Residents for Responsible Development

Email: _____

An appeal is hereby submitted on:

☐ **AN ADMINISTRATIVE DECISION (APPEALABLE TO THE CITY PLANNING COMMISSION OR HEARING OFFICER)**

YOU MUST INDICATE ALL THAT APPLY:

- ☐ Approving an application on an Administrative Decision
- ☐ Denying an application for an Administrative Decision
- ☐ Administrative Determination or Interpretation by the Zoning Administrator
- ☐ Other (please specify) _____

Please identify the specific Administrative Decision/Determination Upon Which Your Appeal is Based Pursuant to the Oakland Municipal and Planning Codes listed below:

- ☐ Administrative Determination or Interpretation (OPC Sec. 17.132.020)
- ☐ Determination of General Plan Conformity (OPC Sec. 17.01.080)
- ☐ Design Review (OPC Sec. 17.136.080)
- ☐ Small Project Design Review (OPC Sec. 17.136.130)
- ☐ Minor Conditional Use Permit (OPC Sec. 17.134.060)
- ☐ Minor Variance (OPC Sec. 17.148.060)
- ☐ Tentative Parcel Map (OMC Section 16.304.100)
- ☐ Certain Environmental Determinations (OPC Sec. 17.158.220)
- ☐ Creek Protection Permit (OMC Sec. 13.16.450)
- ☐ Creek Determination (OMC Sec. 13.16.460)
- ☐ City Planner's determination regarding a revocation hearing (OPC Sec. 17.152.080)
- ☐ Hearing Officer's revocation/impose or amend conditions (OPC Sec. 17.152.150 &/or 17.156.160)
- ☐ Other (please specify) _____

(Continued on reverse)

(Continued)

☑ **A DECISION OF THE CITY PLANNING COMMISSION (APPEALABLE TO THE CITY COUNCIL)** ☐ Granting an application to: **OR** ☐ Denying an application to:

YOU MUST INDICATE ALL THAT APPLY:

Pursuant to the Oakland Municipal and Planning Codes listed below:

- ☑ Major Conditional Use Permit (OPC Sec. 17.134.070)
- ☐ Major Variance (OPC Sec. 17.148.070)
- ☑ Design Review (OPC Sec. 17.136.090)
- ☑ Tentative Map (OMC Sec. 16.32.090)
- ☐ Planned Unit Development (OPC Sec. 17.140.070)
- ☐ Environmental Impact Report Certification (OPC Sec. 17.158.220F)
- ☐ Rezoning, Landmark Designation, Development Control Map, Law Change (OPC Sec. 17.144.070)
- ☐ Revocation/impose or amend conditions (OPC Sec. 17.152.160)
- ☐ Revocation of Deemed Approved Status (OPC Sec. 17.156.170)
- ☑ Other (please specify) CEQA Findings

FOR ANY APPEAL: An appeal in accordance with the sections of the Oakland Municipal and Planning Codes listed above shall state specifically wherein it is claimed there was an error or abuse of discretion by the Zoning Administrator, other administrative decisionmaker or Commission (Advisory Agency) or wherein their/its decision is not supported by substantial evidence in the record, or in the case of Rezoning, Landmark Designation, Development Control Map, or Law Change by the Commission, shall state specifically wherein it is claimed the Commission erred in its decision. The appeal must be accompanied by the required fee pursuant to the City's Master Fee Schedule.

You must raise each and every issue you wish to appeal on this Appeal Form (or attached additional sheets). Failure to raise each and every issue you wish to challenge/appeal on this Appeal Form (or attached additional sheets), and provide supporting documentation along with this Appeal Form, may preclude you from raising such issues during your appeal and/or in court. However, the appeal will be limited to issues and/or evidence presented to the decision-maker prior to the close of the public hearing/comment period on the matter.

The appeal is based on the following: *(Attach additional sheets as needed.)*

Please see attached.

Supporting Evidence or Documents Attached. *(The appellant must submit all supporting evidence along with this Appeal Form;* however, the appeal will be limited evidence presented to the decision-maker prior to the close of the public hearing/comment period on the matter.

(Continued on reverse)

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August 26, 2016

VIA EMAIL AND OVERNIGHT MAIL

Oakland Community and Economic Development Agency
Planning and Zoning Division
Attn: Christina Ferracane, Planner III
City of Oakland
250 Frank H. Ogawa Plaza, Suite 2114
Oakland, CA 94612
Email: CFerracane@oaklandnet.com

City Clerk
City of Oakland
One Frank H. Ogawa Plaza
Oakland, CA 94612
Email: cityclerk@oaklandnet.com

Re: W12 Mixed-Use Project (PLN16-133) Appeal to Oakland City Council

Dear Ms. Ferracane and City Clerk:

We write on behalf of Oakland Residents for Responsible Development to appeal the Oakland Planning Commission's August 17, 2016 decision to approve the following entitlements for the W12 Mixed-Use Project ("Project"):

1. Affirm staff's environmental determination and adopt the CEQA findings and Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCAMMRP).
2. Approve the Major Conditional Use, Design Review and Vesting Tentative Parcel Map subject to findings and conditions (including the SCAMMRP).

The Project includes the demolition of existing structures, including the Downtown Oakland Charter School, and the construction of two seven-story buildings with up to 416 residential units, approximately 25,050 square feet of commercial space, and up to 317 on-site parking spaces. The Project is located on two parcels at 301 12th Street and 285 12th Street in Oakland.

This appeal letter demonstrates that the Commission's decision was not supported by substantial evidence in the record. Specifically, we identified several flaws in the City's analysis, as well as information regarding new or more severe impacts than previously analyzed in the LMSAP EIR, which were not adequately considered by the Commission. The City's CEQA Analysis fails to analyze and mitigate the Project's site contamination impacts and the construction health risks to workers, residents, and the surrounding community, which are new or more severe than previously analyzed. Therefore, the City lacks substantial evidence to support the conclusions in its CEQA Analysis and an EIR is required.

This appeal letter and attachments raises each and every issue that is contested, and includes all arguments and evidence in the record previously presented to the Planning Commission as required by Section 17.134.070 of the Oakland Planning Code. We previously filed comments on the Project on August 2, 2016 and supplemental comments on August 3, 2016 with the assistance of experts Matt Hagemann and Jessie Jaeger from SWAPE, which we incorporate herein by reference.[1] Furthermore, we reviewed, with the assistance of SWAPE, the August 12, 2016 memorandum from the City's consultant, ESA Community Development ("Memorandum"),[2] as well as the July 5, 2016 letter from the Developer's consultant Sierra Research.[3] SWAPE's attached technical comments are submitted as support

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[1] *See* Letter and Attachments from Laura Horton to the Oakland Planning Commission and Christina Ferracane re: Comments on the CEQA Analysis for the W12 Mixed-Use Project (PLN16-133), August 2, 2016, **Attachment A**; *see also* Letter and Attachments from Laura Horton to the Oakland Planning Commission and Christina Ferracane re: Supplemental Comments on the CEQA Analysis for the W12 Mixed-Use Project (PLN16-133), August 3, 2016, **Attachment B.**

[2] *See* Letter from ESA Community Development to Christina Ferracane re: W12 Response to Comment Letters from Adams Broadwell Joseph & Cardozo, August 12, 2016, (hereinafter, "Memorandum"), **Attachment C.**

[3] *See* Letter from Sierra Research to Justin Osler, The Martin Group re: Evaluation of Construction Phase Emissions for the Webster & 12th (W12) Project, Oakland, California, July 5, 2016 (hereinafter "Sierra Research Letter"), **Attachment D.**

for this appeal letter, and SWAPE's previous letters are incorporated herein by reference.[4]

I. STATEMENT OF INTEREST

Oakland Residents for Responsible Development ("Oakland Residents") is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential impacts associated with Project development. The association includes Alan Guan, Risi Agbabiaka, Peter Lew, Bridgette Hall, Tanya Pitts, the International Brotherhood of Electrical Workers Local 595, Plumbers and Steamfitters Local 342, Sheet Metal Workers Local 104, Sprinkler Fitters Local 483, and their members and their families who live and/or work in the City of Oakland and Alameda County.

The individual members of Oakland Residents live, work, and raise their families in the City of Oakland. They would be directly affected by the Project's impacts. Individual members may also work on the Project itself. They will therefore be first in line to be exposed to any health and safety hazards that may exist on the Project site.

The organizational members of Oakland Residents also have an interest in enforcing the City's planning and zoning laws and the State's environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making it less desirable for businesses to locate and people to live there. Indeed, continued degradation can, and has, caused restrictions on growth that reduce future employment opportunities. Finally, Oakland Residents' members are concerned about projects that present environmental and land use impacts without providing countervailing economic and community benefits.

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[4] See Letter from Matt Hagemann and Jessie Jaeger, SWAPE, to Laura Horton re: Comments on the W12 Mixed-Use Project (hereinafter, "SWAPE Comments I"), August 3, 2016 [found in Attachment A]; *see also* Letter from Matt Hagemann and Jessie Jaeger, SWAPE, to Laura Horton re: Supplemental Comments on the W12 Mixed-Use Project (hereinafter, "SWAPE Comments II"), August 3, 2016, [found in Attachment B]; *see also* Letter from Matt Hagemann and Jessie Jaeger, SWAPE, to Laura Horton re: Response to Comments on the W12 Mixed-Use Project, August 25, 2016 (hereinafter, "SWAPE Comments III"), **Attachment E.**

II. THE CITY MAY NOT RELY ON PREVIOUS ENVIRONMENTAL ANALYSIS FOR PROJECT APPROVAL

CEQA has two basic purposes, neither of which is satisfied by the CEQA Analysis. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental impacts of a project before harm is done to the environment.[5] The EIR is the "heart" of this requirement.[6] The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."[7]

To fulfill this function, the discussion of impacts in an EIR must be detailed, complete, and "reflect a good faith effort at full disclosure."[8] An adequate EIR must contain facts and analysis, not just an agency's conclusions.[9] CEQA requires an EIR to disclose all potential direct and indirect, significant environmental impacts of a project.[10]

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring imposition of mitigation measures and by requiring the consideration of environmentally superior alternatives.[11] If an EIR identifies potentially significant impacts, it must then propose and evaluate mitigation measures to minimize these impacts.[12] CEQA imposes an affirmative obligation on agencies to avoid or reduce environmental harm by adopting feasible project alternatives or mitigation measures.[13] Without an adequate analysis and description of feasible mitigation measures, it would be impossible for agencies relying upon the EIR to meet this obligation.

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[5] 14 Cal. Code Regs. § 15002(a)(1) ("CEQA Guidelines"); *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

[6] *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84.

[7] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

[8] CEQA Guidelines § 15151; *San Joaquin Raptor / Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 721-722.

[9] *See Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 568.

[10] Pub. Resources Code § 21100(b)(1); CEQA Guidelines § 15126.2(a).

[11] CEQA Guidelines § 15002(a)(2) and (3); *Berkeley Jets,* 91 Cal.App.4th at 1354; *Laurel Heights Improvement Ass'n v. Regents of the University of Cal.* (1998) 47 Cal.3d 376, 400.

[12] Pub. Resources Code §§ 21002.1(a), 21100(b)(3).

[13] *Id.*, §§ 21002-21002.1.

Under CEQA, an EIR must not only discuss measures to avoid or minimize adverse impacts, but must ensure that mitigation conditions are fully enforceable through permit conditions, agreements or other legally binding instruments.[14] A CEQA lead agency is precluded from making the required CEQA findings unless the record shows that all uncertainties regarding the mitigation of impacts have been resolved; an agency may not rely on mitigation measures of uncertain efficacy or feasibility.[15] This approach helps "insure the integrity of the process of decision by precluding stubborn problems or serious criticism from being swept under the rug."[16]

Following preliminary review of a project to determine whether an activity is subject to CEQA, a lead agency is required to prepare an initial study to determine whether to prepare an EIR or negative declaration, identify whether a program EIR, tiering, or other appropriate process can be used for analysis of the project's environmental effects, or determine whether a previously prepared EIR could be used with the project, among other purposes.[17] CEQA requires an agency to analyze the potential environmental impacts of its proposed actions in an EIR except in certain limited circumstances.[18] A negative declaration may be prepared instead of an EIR when, after preparing an initial study, a lead agency determines that a project "would not have a significant effect on the environment."[19]

When an EIR has previously been prepared that could apply to the Project, CEQA requires the lead agency to conduct subsequent or supplemental environmental review when one or more of the following events occur:

(a) Substantial changes are proposed in the project which will require major revisions of the environmental impact report;
(b) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report; or

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[14] CEQA Guidelines § 15126.4(a)(2).
[15] *Kings County Farm Bur. v. County of Hanford* (1990) 221 Cal.App.3d 692, 727-28 (a groundwater purchase agreement found to be inadequate mitigation because there was no record evidence that replacement water was available).
[16] *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935.
[17] CEQA Guidelines §§ 15060, 15063(c).
[18] *See, e.g.,* Pub. Resources Code § 21100.
[19] *Quail Botanical Gardens v. City of Encinitas* (1994) 29 Cal.App.4th 1597; Pub. Resources Code § 21080(c).

(c) New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.[20]

The CEQA Guidelines explain that the lead agency must determine, on the basis of substantial evidence in light of the whole record, if one or more of the following events occur:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant effects or a substantial increase in the severity of previously identified effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

[20] Pub. Resources Code § 21166.

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.[21]

Only where *none* of the conditions described above calling for preparation of a subsequent or supplemental EIR have occurred may the lead agency consider preparing a subsequent negative declaration, an Addendum or no further documentation.[22] For Addendums specifically, which is one of several CEQA exemption/streamlining avenues that the City claims is applicable to the Project, CEQA allows Addendums to a previously certified EIR if minor changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.[23]

Here, the City has failed to demonstrate that the Project can be lawfully approved based on the CEQA Analysis provided. Indeed, as explained in this letter, the City must disclose, analyze, and mitigate the Project's significant impacts in an EIR. Otherwise, the City's approval of the Project would violate CEQA.

A. The Project is Not Consistent with CEQA Addendum and Exemption Requirements

The City claims the Project is consistent with CEQA Guidelines Sections 15162 (Subsequent EIR and Negative Declaration), 15164 (Addendums), and 15168 (Program EIRs).[24] However, the City's reliance on these provisions is misplaced.

The CEQA Analysis does not simply provide "minor changes or additions are necessary" to the EIR as is allowed under the Addendum provision; rather, it includes substantive analysis for a large development project which was not specifically analyzed in the LMSAP EIR.[25] The City must discontinue this practice, which clearly violates CEQA. Second, as explained further below, the Project will result in new or more severe significant impacts than analyzed in previous EIRs, and there are new mitigation measures that were not considered in the previous

[21] CEQA Guidelines § 15162(a)(1)-(3).
[22] CEQA Guidelines § 15162(b).
[23] CEQA Guidelines § 15164; CEQA Analysis, p. 9.
[24] CEQA Analysis, p. 9 – 10.
[25] *Id.*, at p. 2.

EIRs, but that could reduce those impacts to a less than significant level. In any case, the City's decision must be supported by substantial evidence.[26] Here, the City's decision not to prepare a subsequent or supplemental EIR for the Project is not supported by substantial evidence.

The City also relies on additional CEQA provisions that allow approval of projects without an EIR in narrow circumstances. Specifically, the City relies on CEQA Guidelines Sections 15183 (Community Plan)[27] and 15183.3 (Qualified Infill)[28] for Project approval. However, the City's determination that exemptions also apply is not supported by substantial evidence.

The exemptions apply only when a project does not have impacts peculiar to the proposed project that are new or more significant than previously analyzed or can be substantially mitigated by uniformly applicable development policies or standards. The Project fails to meet these requirements because the site is highly contaminated and could pose a risk to construction workers and residents, which was not fully analyzed under the LMSAP. Furthermore, the Project's health risks from diesel particulate matter ("DPM") emissions during construction would be highly significant. In particular, because the LMSAP did not actually quantify project-level health risks, the absence of any previous project-specific analysis undermines the City's determination that Standard Conditions of Approval ("SCAs") would mitigate the impact. Unfortunately, the LMSAP EIR did not fully address these peculiar and more significant impacts, and there are mitigation measures not previously identified that would reduce these significant impacts.

The Memorandum responds by claiming there are no new or more severe impacts than those analyzed in the LMSAP EIR. The Memorandum also claims that the SCAs mitigate the impacts and therefore those impacts are no longer peculiar. However, as explained further below, the SCAs do not properly address the site contamination and construction health risks and therefore those impacts remain significant and were not analyzed in previous CEQA documents.

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[26] *Id.* §§ 15162 (a), 15164(e), and 15168(c)(4).
[27] CEQA Guidelines Section 15183.
[28] CEQA Guidelines Section 15183.3.

Thus, the Project will have new or more severe significant impacts than previously analyzed in the LMSAP EIR and other CEQA documents. In addition, as described below, the site-specific analysis conducted for the Project is legally deficient in several ways and the CEQA Analysis fails to incorporate all feasible mitigation. Therefore, the City may not rely on the CEQA Analysis for Project approval, and must provide detailed analysis of the Project's impacts in an EIR.

B. The CEQA Analysis Fails To Adequately Analyze and Mitigate On-Site Hazards

1. Project Site Contamination Has Not Been Adequately Addressed

As we previously commented, the CEQA Analysis states that a Phase I Environmental Site Assessment ("ESA"), which the City failed to provide Oakland Residents after several requests, identified multiple recognized environmental conditions ("RECs") at the Project site and the 301 12th Street parcel is now listed on the Cortese List[29] as a cleanup site by the California Department of Toxic Substances Control ("DTSC").[30] The CEQA Analysis further states that there are "ongoing environmental investigations" on the site.[31] As discussed in the LMSAP, federal, State, and regional regulations would apply to contaminated sites. However, CEQA still requires analysis and mitigation of significant impacts, despite the applicability of oversight by other agencies. The LMSAP did not conduct project-specific assessment of on-site hazards, and thus deferred investigation and cleanup of hazards to the Project planning stage.

SWAPE explains in its initial comments that although the Project site is highly contaminated, the CEQA Analysis fails to acknowledge that contaminants underlying the Project site have recently been found in excess of screening levels in the indoor air of existing buildings and that cleanup has yet to commence.[32] The 301 12th Street Parcel is a former automobile dealership and repair center. According to Envirostor,[33] a cleanup agreement is pending between the Developer and DTSC, but as discussed further below, no cleanup agreement is currently in place.[34]

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[29] Cal. Govt. Code section 65962.5.
[30] CEQA Analysis, p. 57.
[31] *Id.*
[32] SWAPE Comments I, p. 4 – 5.
[33] http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60002362.
[34] Ibid.

According to SWAPE, soil, soil gas and groundwater samples collected from beneath the site showed elevated concentrations of trichloroethylene ("TCE"), along with other chlorinated solvents and petroleum hydrocarbons.[35] The indoor air of the Downtown Oakland Charter School that is currently located on the property was analyzed in May 2016. SWAPE explains that the concentrations of TCE in indoor air at the school ranged from 10 to 200 µg/m3, greatly exceeding US EPA Region 9's Accelerated Response Action Level ("ARAL") for residential direct exposure (2 µg/m3).[36] A ventilation system installed at the school reduced concentrations of TCE in indoor air to less than the ARAL. On May 26, 2016, DTSC notified the school that indoor air levels of TCE had been reduced to below the ARAL for residential direct exposure.[37] SWAPE notes that although the ventilation system has been effective in reducing the indoor air concentrations of TCE, "no cleanup has been conducted and no comprehensive evaluation of the source of the TCE and the other chlorinated solvents in the subsurface has been initiated."[38]

SWAPE further explains that a "completed vapor intrusion pathway – whereby TCE and other chlorinated compounds move from contaminated groundwater, soil, and soil vapor into the air within overlying buildings – has been demonstrated at the Project site and remains viable."[39] According to SWAPE, TCE is a cancer-causing agent[40] that would pose risks to construction workers and future residents unless the pathway is cut off.[41] According to SWAPE, the vapor intrusion pathway will remain at the Project site until a comprehensive investigation and a remedial effort, where the source of the TCE is removed, has been completed.

The CEQA Analysis fails to provide for any mitigation that would target and remove the source of TCE and other chlorinated compounds. The CEQA Analysis merely includes general provisions to address the contamination and only after earth-moving activities are initiated. SCA HAZ-1 and SCA-2 call for implementation of best management practices and measures for dealing with "unexpected" soil contamination that is visually discolored or that is emanating an odor. SWAPE finds that "[t]his is entirely inappropriate for a site where

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[35] SWAPE Comments I, p. 4 – 5.
[36] http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60002362.
[37] SWAPE Comments, p. 5.
[38] *Id.*
[39] *Id.*
[40] http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=172&tid=30.
[41] SWAPE Comments I, p. 5.

groundwater, soil and soil vapor have been contaminated with TCE which can be extremely difficult to assess and remediate to health protective levels."[42]

The CEQA Analysis fails to include requirements for a site cleanup that is health-protective of construction workers and future Project workers and occupants.[43] Instead, SWAPE notes that the CEQA Analysis assumes that whatever contamination is seen or smelled during grading or trenching will be addressed through "undefined" Best Management Practices.[44] SWAPE further states that TCE contamination is often found in the form of a dense non-aqueous phase liquid ("DNAPL") where pools or layers of leaked TCE accumulates on low-permeability clays in the subsurface.[45] These DNAPLs "may be below the area to be excavated and may represent a residual, ongoing source of contamination via the vapor intrusion pathway that would be unaddressed during construction because it would be below the level of Project excavation."[46]

SWAPE finds that prior to proceeding with soil excavation and Project construction, a "thorough investigation of the contamination at the site is necessary to determine if development as a residential community is appropriate."[47] This is necessary to address during CEQA review, even if another agency such as DTSC has additional oversight. The CEQA Analysis merely assumes, without further justification, that regulations outside of the CEQA process would mitigate impacts to less than significant levels, without adequately disclosing those impacts and mitigation measures during the CEQA process. However, as case law has shown, compliance with applicable regulations does not automatically obviate the need for further analysis of impacts.[48]

Here, the City failed to provide any information explaining how compliance with the outside laws and regulations would reduce the risks posed to workers and residents from the high levels of TCE contamination on the site. The City may not rely solely on compliance with regulations or laws as reducing impacts without a

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[42] *Id.*
[43] *Id.*
[44] *Id.*
[45] *Id.*
[46] *Id.*
[47] *Id.*
[48] *Keep our Mountains Quiet v. County of Santa Clara* (2015) Case No. H039707, p. 21; *Communities for a Better Env't v. California Res. Agency* (2002) 126 Cal.Rptr.2d 441, 453; *Leonoff v. Monterey County Bd. of Supervisors* (1990) 222 Cal.App.3d 1337, 1355.

full analysis of impacts or enforceable mitigation. Furthermore, reliance on the LMSAP is improper because the LMSAP did not conduct a site-specific investigation of the highly contaminated site.

CEQA requires that the City describe all components of the Project that may have a significant impact, and adequately analyze and require mitigation for all potentially significant impacts related to on-site hazards. Here, the City failed to do so in its CEQA Analysis. SWAPE concludes that Project construction should not be allowed until a full EIR has been prepared "to document that a thorough assessment and cleanup of the contamination has been completed under regulatory oversight and that a residential land use is appropriate."[49]

2. Other Hazards on the Project Site

Regarding the Project's hazards, SWAPE submitted supplemental comments on August 3 reiterating the dangers of the highly contaminated site, including risks from TCE and other contaminants, and identifying additional hazards associated with the site, including:[50]

- A suspected waste oil underground storage tank (UST), exact location and regulatory status unknown;
- The presence of seven hydraulic lifts and two possible tanks associated with the hydraulic lifts at the southeastern part of the 301 and 345 12th Street portion of the site – no removal records were found in regulatory agency files;
- The presence of five historical aboveground storage tanks;
- The presence of an 800-gallon oil-containing UST;
- Use of the property for vehicle service and mechanical repair and the presence of a floor drain, in association with these activities;
- The presence of a floor drain in an area of paint and body repair;
- Numerous historical dry-cleaning and auto service facilities in proximity to the Project site.

SWAPE notes that "[n]o requirements for assessment and cleanup to concentrations that are health-protective of construction workers and future Project occupants are included in the Analysis."[51] Therefore, SWAPE concludes that an

[49] SWAPE Comments I, p. 4.
[50] SWAPE Comments II, p. 8.
[51] *Id.*

EIR is necessary to ensure that a thorough investigation is conducted prior to proceeding with soil excavation and Project construction, to determine if development as a residential community is appropriate on the proposed site.[52]

3. Dewatering Impacts Has Not Been Adequately Addressed

Under CEQA, a project may have a significant impact if it would violate any water quality standards or waste discharge requirement, create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality.[53] CEQA and applicable case law require the City to describe all aspects of the Project, and, as explained above, disclose the significance of all impacts and provide separate and enforceable mitigation.[54]

The CEQA Analysis states that "[s]ome dewatering may be required for construction of the proposed project, but the dewatering is not anticipated to substantially lower the groundwater level."[55] The CEQA Analysis also states that the Project "would involve grading and excavation activities up to depths of approximately 16 feet below grade to construct the building. . ."[56] Thus dewatering will most likely be required at those depths. SWAPE states that the known TCE contamination in groundwater and any residual source of TCE contamination below the water table "poses a water quality issue during dewatering."[57] SWAPE further notes that the CEQA Analysis fails to consider that groundwater that would be dewatered is known to be contaminated with TCE and other compounds.[58] Contaminated groundwater that is generated from the dewatering process would need to be handled and disposed in accordance with the San Francisco Bay Regional Water Quality Control Board's NPDES General Permit requirements,[59] but the City is still required under CEQA to fully describe, analyze, and mitigate potential impacts from dewatering in its CEQA document.

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[52] *Id.*
[53] CEQA Guidelines, Appendix G.
[54] *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645.
[55] CEQA Analysis, p. 60.
[56] *Id.*, at 47.
[57] SWAPE Comments I, p. 5.
[58] *Id.*
[59] http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2012/R2-2012-0060.pdf.

SWAPE concludes that an EIR must be prepared to analyze the impact and identify the Regional Board's dewatering requirements and how they will be met during Project construction.[60]

4. ESA Community Development's August 12 Memorandum Fails to Resolve These Issues

SWAPE notes in its August 25 comments that the CEQA Analysis only referenced the July 15, 2016 Phase 1 ESA that was prepared for the Project site.[61] The CEQA Analysis failed to cite to a July 14, 2016 Subsurface Investigation Report prepared for the 301 and 285 12th Street properties as available on Envirostor.[62] SWAPE further states that the analytical results for soil, soil vapor and groundwater in this report are only tangentially referenced in the Memorandum without direct reference to the July 14, 2016 Subsurface Investigation Report.

According to SWAPE, the July 14, 2016 Subsurface Investigation Report documents concentrations of contaminants in groundwater, soil, and soil gas well in excess of the 2016 San Francisco Bay Environmental Screening Levels.[63] The following maximum concentrations for TCE obtained from the July 14, 2016 Subsurface Investigation Report (as compared to the ESLs included in that report) were not disclosed in the CEQA Analysis:

- Deep Soil: 780 ug/kg (Residential ESL: 460 ug/kg)
- Soil Vapor: 1,620,000 ug/m3 (Residential ESL: 240 ug/m3)
- Groundwater: 1,800 ug/L (Residential groundwater ESL for vapor intrusion: 3.7 ug/L)

The soil and groundwater data, which was not disclosed in the CEQA Analysis and only indirectly referenced in the Memorandum, documents a highly contaminated Project site, according to SWAPE.[64] The maximum TCE detection in soil vapor, 1,620,000 ug/m3, has not been disclosed to the public in the CEQA Analysis or in the Memorandum, as required under CEQA.

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[60] SWAPE Comments I, p. 5.
[61] SWAPE Comments III, p. 1 – 2.
[62] http://www.envirostor.dtsc.ca.gov/public/community_involvement/3655578434/20160715%20--%20W12%20PES%20Soil%20Investigation%20%28Phase%20II%29.pdf, pages 1 – 23 as **Attachment F.**
[63] SWAPE Comments III, p. 2.
[64] *Id.*

According to a personal communication from the Project Manager at the California Department of Toxics Substances Control to SWAPE, no agreement to clean up contaminants at the site currently exists.[65] However, the Project Manager communicated that a draft plan is being prepared, although not available to the public, and future CEQA review would be conducted in connection with cleanup plans. Future CEQA evaluation related to the site is also referenced on Envirostor.[66] SWAPE notes that long-term options to address the contaminants at the site, according to DTSC, include soil removal, long term groundwater monitoring and groundwater extraction. However, under CEQA, site contamination and clean up measures must be analyzed in a full Draft Environmental Impact Report ("DEIR") *prior* to Project approval, not at a later date after a Project has been approved.

Neither the CEQA Analysis nor the Memorandum report any plan that would assess and clean up the site for the intended uses for the Project, including residential. Given contaminant concentrations documented at the site, and given the lengthy history of assessment and cleanup at DTSC sites where TCE and other chlorinated solvents have been found as noted by SWAPE,[67] the public has no way of knowing how and when the site will be cleaned up to support the intended land use.

Disclosure of the contaminants at the Project site is necessary so the public can understand the potential impacts of the contamination on the proposed land uses. Assessment and cleanup plans also need to be disclosed so impacts, including construction emissions associated with soil removal and disposal can be analyzed and mitigated under CEQA. SWAPE concludes that as a responsible agency to the Project, DTSC itself should publicly disclose the details of site cleanup prior to Project approval, including a site cleanup agreement. Furthermore, analysis of those cleanup plans and mitigation, along with analysis of impacts associated with clean up of the site, must be disclosed in a full DEIR prior to the City's approval of the Project. The DEIR should identify any additional mitigation that may be required by DTSC in addition to those measures included in SCA HAZ-1 and SCA HAZ-2.

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[65] *Id.*

[66] Envirostor, 301 12th Street Future Development (60002362), Activities, **Attachment G.**

[67] For example, SWAPE notes that the Technichem site in Emeryville where assessment of tetrachloroethylene began in 1993 and where assessment and cleanup is ongoing. http://www.envirostor.dtsc.ca.gov/public/hwmp_profile_report.asp?global_id=CAD981375983

CEQA does not allow for Project approval to take place prior to disclosure, analysis, and mitigation of all Project impacts including site contamination. CEQA also does not allow piecemealing of CEQA analysis for a project to occur.[68] In this case, SWAPE's analysis demonstrates that "the Project site is highly contaminated and therefore the Project may pose a significant risk to workers, residents, and other members of the public, which was not disclosed in the CEQA Analysis."[69] The City and DTSC may not exempt the Project from environmental review when there are unmitigated significant impacts while at the same time piecemealing environmental review of the site contamination and cleanup plans to a future date.

Therefore, a DEIR must be prepared to adequately evaluate the Project's impacts related to site contamination, including disclosing and analyzing cleanup plans and any impacts resulting from those plans.

C. The CEQA Analysis Fails To Adequately Analyze and Mitigate Project-Specific Health Risk From Diesel Particulate Matter

1. The City is Required to Quantify the Project's Health Risk from DPM Emissions During Construction

The California Air Resources Board ("CARB") identifies diesel particulate matter ("DPM") as a toxic air contaminant ("TAC") based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects.[70] In 2012, the International Agency for Research on Cancer listed diesel engine exhaust as "carcinogenic to humans."[71] As with other air pollutants, SWAPE explains that DPM emissions during development construction can impact both on-site construction workers and the surrounding community such as schools and residential sensitive receptors.[72]

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[68] CEQA Guidelines, § 15378(a); *Burbank- Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 592; *Bozung v. Local Agency Formation Commission* (1975) 13 Cal.3d 263, 283-84; *City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1452; *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 396-397.

[69] SWAPE Comments III, p. 3.

[70] http://www.arb.ca.gov/research/diesel/diesel-health.htm.

[71] *Id.*

[72] SWAPE Comments I, p. 3 – 4.

The LMSAP EIR concludes that "[d]evelopment facilitated by the proposed Plan would potentially expose sensitive receptors to substantial health risks from [TACs] from sources including both DPM and gaseous emissions."[73] Furthermore, the LMSAP EIR found that while compliance with the City's SCAs "would entail the preparation of site-specific health risk assessments which would reduce DPM exposure to a less than significant level", the SCAs would not necessarily reduce gaseous TACs to a less-than-significant level.[74] Therefore, the LMSAP EIR found the impacts related to DPM exposure would be less than significant, while the remaining TAC impacts (related to gaseous sources) would be significant and unavoidable.[75]

As we stated in our previous comments, the LMSAP EIR did not address project-level construction related exposures because "[t]he specificity of detail necessary to conduct a health risk assessment is not available at the Plan stage..."[76] The LMSAP EIR thus deferred the assessment of health risks from construction activities to the project level stage where project-specific impacts and mitigation measures could be determined to ensure that DPM exposure would not exceed applicable thresholds.

However, the CEQA Analysis completely failed to evaluate the health risk posed to nearby sensitive receptors from exposure to DPM emissions released during Project construction, despite the indication in the LMSAP EIR that a health risk assessment ("HRA") would be required.[77] The City's omission of a construction HRA is particularly egregious because of the Project's proximity to the American Indian Public Charter School, which is a charter middle school with predominantly low-income, minority students within a few blocks of the Project. As stated in the CEQA Analysis, construction-related emissions (as well as the release of potentially hazardous materials during construction as explained above) would occur for up to 2 years.[78]

The CEQA Analysis stated that although "[t]he LMSAP EIR determined that sensitive receptors in proximity to construction-related DPM emissions (generally within 200 meters) could be subject to increased cancer risk, chronic health

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[73] LMSAP DEIR, p. ES-34.
[74] *Id.*.
[75] *Id.*, at 3.3-25.
[76] *Id.*, at 3.3-39.
[77] SWAPE Comments I, p. 2 – 3.
[78] CEQA Analysis, p. 2.

problems and acute health risk," all future development projects pursuant to the LMSAP would be subject to basic construction control measures and best management practices through implementation the SCAs and thus the impact would be less than significant.[79] The Memorandum states the same.[80] SWAPE's analysis demonstrates that these justifications are misplaced.

Although the CEQA Analysis incorporates SCAs from the LMSAP, the City is not absolved of CEQA's requirement that agencies disclose significant environmental impacts to the public and mitigate those impacts.[81] The CEQA Analysis openly states that the LMSAP EIR determined that sensitive receptors may be subject to an increased cancer risk due to construction activities. Therefore, CEQA mandates that the City quantify that risk in order to determine *if* the basic construction control measures and best management practices in the SCAs will reduce DPM emissions to less than significant levels.

Furthermore, the CEQA Analysis assumed that because construction would occur over a short period of time, the health risk posed from construction activities would be negligible. SWAPE explains that this determination conflicts with most recent guidance published by the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing recommendations for health risk assessments in California. OEHHA's *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments,* which was formally adopted by OEHHA in March of 2015, describes the types of projects that warrant the preparation of a health risk assessment.[82] OEHHA guidance recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.[83]

Here, Project construction is expected to last up to 24 months and Project construction will produce emissions of DPM, as described in the CEQA Analysis. SWAPE explains that OEHHA's recommendation that such short-term projects be evaluated for cancer risks to nearby sensitive receptors "reflects the most recent

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[79] *Id.*
[80] Memorandum, p. 7 – 8.
[81] CEQA Guidelines §§ 15126.2, 15126.4.
[82] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html.
[83] *Id.*, at 8-18.

health risk assessment policy, and as such, an assessment of health risks to nearby sensitive receptors from construction should be included in a revised CEQA evaluation for the Project."[84]

2. The Project Will Result in Significant Health Risks from DPM Emissions During Construction

At the time of our August 2 comments, the City had not yet provided us with the CalEEMod output files. As a result, SWAPE was only able to provide a comparative analysis of a similar project's health risks from DPM emissions during construction, concluding that it was likely that this Project would result in health risks above significance thresholds. Shortly after we submitted those comments the City provided us with the CalEEMod files and SWAPE was able to conduct a screening level health risk assessment based on those CalEEMod files, which showed highly significant health risks. However, Sierra Research provided updated modeling in its July 5 letter, and SWAPE conducted a revised health risk assessment based on the updated modeling.[85]

SWAPE explains that as of 2011, the EPA recommends AERSCREEN as the leading air dispersion model, due to improvements in simulating local meteorological conditions based on simple input parameters.[86] The Memorandum minimizes the results of SWAPE's previous health risk assessment stating, "SWAPE's analysis used a highly conservative screening model (aerscreen) which overestimates health risk. Aermod is the analysis tool that is the industry standard for conducting HRA's because it allows a much more refined analysis."[87] However, as SWAPE previously demonstrated, AERSCREEN is included in OEHHA[88] and CAPCOA[89] guidance as the appropriate air dispersion model for Level 2 health risk

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[84] SWAPE Comments I, p. 3.
[85] SWAPE Comments III, p. 6 – 8.
[86] "AERSCREEN Released as the EPA Recommended Screening Model," USEPA, April 11, 2011, *available at:* http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[87] Memorandum, p. 8.
[88] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf
[89] "Health Risk Assessments for Proposed Land Use Projects," CAPCOA, July 2009, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf

screening assessments ("HRSAs"). SWAPE explains that the use of AERSCREEN is appropriate to prepare a screening level analysis, and if the results of the screening level analysis indicate that there is an unacceptable health risk, the City must prepare a refined health risk assessment in a DEIR, using a program such as AERMOD, as was suggested in the Memorandum.[90] However, as SWAPE notes, the City has failed to prepare any level of health risk assessment.

SWAPE's revised health risk assessment demonstrates that the excess cancer risk to adults, children, and infants during Project construction for the sensitive receptors located 25 meters away are 24.1, 139, and 371 in one million, respectively.[91] Consistent with OEHHA guidance, exposure was assumed to begin in the infantile stage of life to provide the most conservative estimates of air quality hazards. The adult, child, and infantile exposure for the sensitive receptors all far exceed the BAAQMD threshold of 10 in one million.[92]

SWAPE's analysis demonstrates that the Project poses a "significant health risk as a result of exposure to DPM emissions."[93] Therefore, a revised DEIR must be prepared to adequately evaluate the Project's health risk impact.

3. ESA Community Development's August 12 Memorandum Fails to Resolve These Issues

SWAPE's analysis demonstrates that the Project would have a significant health risk during construction. In its previous comments, SWAPE provided a list of potential mitigation measures that could reduce DPM emissions, and the corresponding health risk. The Memorandum dismisses those mitigation measures and states in response:

> "Construction associated with the Project (and other projects in the LMSAP area) would not result in a more severe impact than what was previously disclosed in the LMSAP EIR. Further, as discussed below, there is no evidence that the Project would have peculiar or unusual impacts or impacts that are new or more significant than previously analyzed in the LMSAP EIR. Consequently, the construction health risk has been adequately

[90] SWAPE Comments III, p. 6 – 7.
[91] *Id.*, at 8.
[92] *Id.*
[93] *Id.*

addressed by the planning-level review and the Project's conditions of approval. Furthermore, there is nothing in the LMSAP EIR indicating that a stand-alone HRA for construction-related impacts is required on a project-by-project basis. In fact, preparation of a construction-related HRA would result in unnecessary and duplicative studies that would ultimately reach the same conclusions and control measures already established in the LMSAP EIR.

For example, as noted on page 3.3-39 of the LMSAP EIR, construction health risks would be minimized to less than significant through application of SCA A (W12 SCA AIR-1), which indicates that diesel emissions would be minimized through the application of various measures. Specifically, subsections (g) and (h) of SCA AIR A (W12 SCA AIR-1) minimize idling; subsection (i) ensures that construction equipment is running in proper condition; subsection (j) specifies that portable equipment would be powered by electricity if available; subsection (u) requires that equipment meet emissions and performance requirements; subsection (v) requires the use of low volatile organic compound coatings; subsection (w) requires that equipment and diesel trucks be equipped with Best Available Control Technology; and subsection (x) requires that off-road heavy diesel engines meet the California Air Resources Board's most recent certification standard.

The Project sponsor would be obligated to use construction equipment that meets Tier 4 emissions standards and utilize high performance renewable diesel (diesel HPR) in order to comply with subsections (w) and (x). Tier 4 engines and diesel HPR are considered the best available technology and are readily available in the marketplace."[94]

However, SWAPE finds this justification to be "inadequate."[95] Although the Project would implement W12 SCA AIR-1 to minimize the Project's health risks, the CEQA Analysis still fails to disclose the actual health risk. SWAPE finds that without quantification of this risk, it is unclear how much the risk will be minimized, and it is unclear if this risk will be reduced to a less-than-significant level once these mitigation measures are implemented.

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[94] Memorandum, p. 7 – 8.
[95] SWAPE Comments III, p. 4.

Furthermore, SWAPE notes that both the CEQA Analysis and the Memorandum fail to actually evaluate the adequacy of the mitigation measures listed under W12 SCA AIR-1. As a result, SWAPE concludes that the Project's health risk assessment is incomplete, and should not be relied upon to determine Project significance.

The measures proposed under W12 SCA AIR-1 of the CEQA Analysis are presented in an exhaustive list and use ambiguous language stating that "the project applicant shall implement all of the following applicable air pollution control measures during construction..."[96] SWAPE notes that "[t]here is no guarantee that all of the measures listed under W12 SCA AIR-1 will be 'applicable' to the proposed Project, as the CEQA Analysis fails to actually assess the feasibility of the measures proposed."[97] As a result, the feasibility of each measure also needs to be assessed, and the health risk needs to still be quantified in order to determine what applicable measures can be implemented to reduce the construction health risk to a less than significant level and whether additional measures will be needed.

In fact, SWAPE finds the Memorandum's statement that "[t]he Project sponsor would be obligated to use construction equipment that meets Tier 4 emissions standards and utilize high performance renewable diesel (diesel HPR) in order to comply with subsections (w) and (x)"[98] to be "questionable" as the feasibility of using all Tier 4 equipment is unclear.[99] SWAPE further finds that the City and the Developer makes no effort to actually demonstrate the feasibility of implementing this measure once the Project is approved.

The California Air Resources Board does not require that off-road construction fleets be comprised solely of Tier 4 Final engines. Furthermore, even just based on availability, SWAPE finds that the City has failed to demonstrate that all of the construction equipment utilized for the Project will have Tier 4 engines and the mitigation measure does not specifically require all Tier 4 equipment during construction. Unlike SCA AIR-1, SCA AIR-2 specifically calls for Tier 4 to reduce operational impacts, but even then the measure merely requires Tier 4 "if feasible" (p. A-6 of the CEQA Analysis). The United States Environmental Protection Agency's (USEPA) 1998 nonroad engine emission standards were

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[96] CEQA Analysis, p. 99.
[97] SWAPE Comments III, p. 4.
[98] Memorandum, p. 8.
[99] SWAPE Comments III, p. 4.

structured as a three-tiered progression. Tier 1 standards were phased-in from 1996 to 2000 and Tier 2 emission standards were phased in from 2001 to 2006. Tier 3 standards, which applied to engines from 37-560 kilowatts (kW) only, were phased in from 2006 to 2008. The Tier 4 emission standards were introduced in 2004, and were phased in from 2008 – 2015.[100] These tiered emission standards, however, are only applicable to newly manufactured nonroad equipment. According to the USEPA "if products were built before EPA emission standards started to apply, they are generally not affected by the standards or other regulatory requirements."[101] Therefore, pieces of equipment manufactured prior to 2000 are not required to adhere to Tier 2 emission standards, and pieces of equipment manufactured prior to 2008 are not required to adhere to Tier 4 emission standards. Construction equipment often lasts more than 30 years; as a result, Tier 1 equipment and non-certified equipment are currently still in use.[102] It is estimated that of the two million diesel engines currently used in construction, 31% were manufactured before the introduction of emissions regulations.[103]

Furthermore, according to SWAPE, in a 2010 white paper, the California Industry Air Quality Coalition estimated that approximately 7% and less than 1% of all off-road heavy duty diesel equipment in California was equipped with Tier 2 and Tier 3 engines, respectively.[104] It goes on to explain that "cleaner burning Tier 4 engines...are not expected to come online in significant numbers until 2014." Given that significant production activities have only just begun within the last couple of years, it can be presumed that there is limited availability of Tier 4 equipment. Furthermore, due to the complexity of Tier 4 engines, it is very difficult

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[100] Emission Standards, Nonroad Diesel Engines, *available at:* https://www.dieselnet.com/standards/us/nonroad.php#tier3

[101] "Frequently Asked Questions from Owners and Operators of Nonroad Engines, Vehicles, and Equipment Certified to EPA Standards." United States Environmental Protection Agency, August 2012. *Available at:* http://www.epa.gov/oms/highway-diesel/regs/420f12053.pdf

[102] "Best Practices for Clean Diesel Construction." Northeast Diesel Collaborative, August 2012. *Available at:* http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf

[103] Northeast Diesel Collaborative Clean Construction Workgroup, *available at:* http://northeastdiesel.org/construction.html

[104] "White Paper: An Industry Perspective on the California Air Resources Board Proposed Off-Road Diesel Regulations."Construction Industry Air Quality Coalition, *available at:* http://www.agc-ca.org/uploadedFiles/Member_Services/Regulatory-Advocacy-Page-PDFs/White_Paper_CARB_OffRoad.pdf

if not nearly impossible, to retrofit older model machinery with this technology.[105] Therefore, SWAPE concludes that available off-road machinery equipped with Tier 4 engines are most likely new.

SWAPE notes that the California Air Resources Board ("CARB") currently enforces regulations with regards to construction fleets. According to CARB, large and medium fleets (fleets with over 2,500 horse power) will not be allowed to add a vehicle with a Tier 1 engine to its fleet starting on January 1, 2014. The engine tier must be Tier 2 or higher.[106] Therefore, construction equipment fleets typically include a mix of Tier 2, 3, and 4 engines, rather than Tier 4 Final equipment exclusively. Without a condition specifically requiring all Tier 4 engines and a detailed analysis regarding the feasibility of such a measure, SWAPE concludes that "the City has failed to adequately demonstrate that all of the Project's construction equipment would meet Tier 4 standards. As a result, this measure should not be relied upon to reduce the Project's construction health risk to below levels of significance."[107]

Therefore, the City has still failed to disclose the Project's health risks during construction and failed to demonstrate feasible mitigation measures. Because SWAPE's analysis has shown the Project will have significant project-specific health risks, which were not disclosed in the LMSAP EIR or any other CEQA document, the Project will have new or more severe significant impacts that were not previously analyzed. The City must prepare an EIR for the Project.

III. CONCLUSION

The City's environmental analysis for the Project fails to satisfy the requirements of CEQA. As explained in this appeal and in our previous comments, the City has failed to adequately analyze and mitigate the Project's significant site contamination and health risks during construction, which are new or more severe

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[105] "Tier 4- How it will affect your equipment, your business and your environment." Milton CAT, *available at:* http://www.miltoncat.com/News/Documents/Articles/For%20the%20Trenches%20-%20Tier%204.pdf

[106] "Enforcement of the In-Use Off-Road Vehicle Regulations." California Air Resources Board, February 2014, *available at:* http://www.arb.ca.gov/msprog/mailouts/msc1401/msc1401.pdf

[107] SWAPE Comments III, p. 6.

than previously analyzed, therefore disqualifying the Project from any CEQA exemptions or streamlining. For these reasons, we urge the City Council to reverse the Commission's Project approval and CEQA findings and order the preparation of an EIR for the Project.

Sincerely,

Laura E. Horton

LEH:ljl
Attachments

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

EXHIBIT A

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

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August 2, 2016

VIA EMAIL and
HAND DELIVERY on August 3, 2016

Chair Jim Moore and
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Re: Comments on the CEQA Analysis for the W12 Mixed-Use Project (PLN16-133)

Dear Chair Moore, Honorable Members of the Oakland Planning Commission and Ms. Ferracane:

We write on behalf of Oakland Residents for Responsible Development to comment on the City of Oakland's analysis of the W12 Mixed-Use Project ("Project) pursuant to the California Environmental Quality Act ("CEQA Analysis").[1] The Project includes the demolition of existing structures, including the Downtown Oakland Charter School, and the construction of two seven-story buildings with up to 416 residential units, approximately 25,050 square feet of commercial space, and up to 317 on-site parking spaces. The Project is located on two parcels at 301 12th Street and 285 12th Street in Oakland.

[1] Pub. Resources Code §§ 21000 et seq.

The CEQA Analysis evaluates the Project's potential environmental impacts and consistency with the Lake Merritt Station Area Plan, as well as Oakland's 1998 General Plan Land Use and Transportation Element Environmental Impact Report ("LUTE EIR"), the 2010 General Plan Housing Element Update EIR and 2014 Addendum, and the 2011 Central District Urban Renewal Plan Amendments EIR.

We reviewed the CEQA Analysis and applicable plans, and we identified a number of significant deficiencies in the analysis, as well as new or more severe impacts than previously analyzed in the LMSAP EIR. Furthermore, we identified several mitigation measures not previously analyzed that would reduce significant impacts. Specifically, the CEQA Analysis fails to analyze the Project's high levels of site contamination as well as the construction health risks to the surrounding community, which are new or more severe than previously analyzed. Therefore, the City lacks substantial evidence to support the conclusions in its CEQA Analysis and an EIR is required.

We reviewed the CEQA Analysis, LMSAP EIR, and other plans and EIRs with the help of experts Matt Hagemann and Jessie Jaeger of Soil / Water / Air Protection Enterprise ("SWAPE"). Their attached technical comments are submitted in addition to the comments in this letter.[2] Accordingly, they must be addressed and responded to separately. The curricula vitae of these experts are also attached as exhibits to this letter.

I. STATEMENT OF INTEREST

Oakland Residents for Responsible Development ("Oakland Residents") is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential impacts associated with Project development. The association includes Alan Guan, Risi Agbabiaka, Peter Lew, Bridgette Hall, Tanya Pitts, the International Brotherhood of Electrical Workers Local 595, Plumbers and Steamfitters Local 342, Sheet Metal Workers Local 104, Sprinkler Fitters Local 483, and their members and their families who live and/or work in the City of Oakland and Alameda County.

The individual members of Oakland Residents live, work, and raise their families in the City of Oakland. They would be directly affected by the Project's

[2] *See* Letter from Matt Hagemann and Jessie Jaeger, SWAPE, to Laura Horton re: Comments on the W12 Mixed-Use Project (hereinafter, "SWAPE Comments"), August 3, 2016, **Attachment A**.

impacts. Individual members may also work on the Project itself. They will therefore be first in line to be exposed to any health and safety hazards that may exist on the Project site.

The organizational members of Oakland Residents also have an interest in enforcing the City's planning and zoning laws and the State's environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making it less desirable for businesses to locate and people to live there. Indeed, continued degradation can, and has, caused restrictions on growth that reduce future employment opportunities. Finally, Oakland Residents' members are concerned about projects that present environmental and land use impacts without providing countervailing economic and community benefits.

II. THE CITY MAY NOT RELY ON PREVIOUS ENVIRONMENTAL ANALYSIS FOR PROJECT APPROVAL

CEQA has two basic purposes, neither of which is satisfied by the CEQA Analysis. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental impacts of a project before harm is done to the environment.[3] The EIR is the "heart" of this requirement.[4] The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."[5]

To fulfill this function, the discussion of impacts in an EIR must be detailed, complete, and "reflect a good faith effort at full disclosure."[6] An adequate EIR must contain facts and analysis, not just an agency's conclusions.[7] CEQA requires an

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[3] 14 Cal. Code Regs. § 15002(a)(1) ("CEQA Guidelines"); *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

[4] *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84.

[5] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

[6] CEQA Guidelines § 15151; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 721-722.

[7] *See Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 568.

EIR to disclose all potential direct and indirect, significant environmental impacts of a project.[8]

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring imposition of mitigation measures and by requiring the consideration of environmentally superior alternatives.[9] If an EIR identifies potentially significant impacts, it must then propose and evaluate mitigation measures to minimize these impacts.[10] CEQA imposes an affirmative obligation on agencies to avoid or reduce environmental harm by adopting feasible project alternatives or mitigation measures.[11] Without an adequate analysis and description of feasible mitigation measures, it would be impossible for agencies relying upon the EIR to meet this obligation.

Under CEQA, an EIR must not only discuss measures to avoid or minimize adverse impacts, but must ensure that mitigation conditions are fully enforceable through permit conditions, agreements or other legally binding instruments.[12] A CEQA lead agency is precluded from making the required CEQA findings unless the record shows that all uncertainties regarding the mitigation of impacts have been resolved; an agency may not rely on mitigation measures of uncertain efficacy or feasibility.[13] This approach helps "insure the integrity of the process of decision by precluding stubborn problems or serious criticism from being swept under the rug."[14]

Following preliminary review of a project to determine whether an activity is subject to CEQA, a lead agency is required to prepare an initial study to determine whether to prepare an EIR or negative declaration, identify whether a program EIR, tiering, or other appropriate process can be used for analysis of the project's environmental effects, or determine whether a previously prepared EIR could be

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[8] Pub. Resources Code § 21100(b)(1); CEQA Guidelines § 15126.2(a).
[9] CEQA Guidelines § 15002(a)(2) and (3); *Berkeley Jets*, 91 Cal.App.4th at 1354; *Laurel Heights Improvement Ass'n v. Regents of the University of Cal.* (1998) 47 Cal.3d 376, 400.
[10] Pub. Resources Code §§ 21002.1(a), 21100(b)(3).
[11] *Id.*, §§ 21002-21002.1.
[12] CEQA Guidelines § 15126.4(a)(2).
[13] *Kings County Farm Bur. v. County of Hanford* (1990) 221 Cal.App.3d 692, 727-28 (a groundwater purchase agreement found to be inadequate mitigation because there was no record evidence that replacement water was available).
[14] *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935.

used with the project, among other purposes.[15] CEQA requires an agency to analyze the potential environmental impacts of its proposed actions in an EIR except in certain limited circumstances.[16] A negative declaration may be prepared instead of an EIR when, after preparing an initial study, a lead agency determines that a project "would not have a significant effect on the environment."[17]

When an EIR has previously been prepared that could apply to the Project, CEQA requires the lead agency to conduct subsequent or supplemental environmental review when one or more of the following events occur:

(a) Substantial changes are proposed in the project which will require major revisions of the environmental impact report;

(b) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report; or

(c) New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.[18]

The CEQA Guidelines explain that the lead agency must determine, on the basis of substantial evidence in light of the whole record, if one or more of the following events occur:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant effects or a substantial increase in the severity of previously identified effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant

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[15] CEQA Guidelines §§ 15060, 15063(c).
[16] *See, e.g.,* Pub. Resources Code § 21100.
[17] *Quail Botanical Gardens v. City of Encinitas* (1994) 29 Cal.App.4th 1597; Pub. Resources Code § 21080(c).
[18] Pub. Resources Code § 21166.

environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.[19]

Only where ***none*** of the conditions described above calling for preparation of a subsequent or supplemental EIR have occurred may the lead agency consider preparing a subsequent negative declaration, an Addendum or no further documentation.[20] For Addendums specifically, which is one of several CEQA exemption/streamlining avenues that the City claims is applicable to the Project, CEQA allows Addendums to a previously certified EIR if minor changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.[21]

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[19] CEQA Guidelines § 15162(a)(1)-(3).
[20] CEQA Guidelines § 15162(b).
[21] CEQA Guidelines § 15164; CEQA Analysis, p. 9.

Here, the City has failed to demonstrate that the Project can be lawfully approved based on the CEQA Analysis provided. Indeed, as explained in this letter, the City must disclose, analyze, and mitigate the Project's significant impacts in an EIR. Otherwise, the City's approval of the Project would violate CEQA.

A. The Project is Not Consistent with CEQA Addendum and Exemption Requirements

The City claims the Project is consistent with CEQA Guidelines Sections 15162 (Subsequent EIR and Negative Declaration), 15164 (Addendums), and 15168 (Program EIRs).[22] However, the City's reliance on these provisions is misplaced.

The CEQA Analysis does not simply provide "minor changes or additions are necessary" to the EIR as is allowed under the Addendum provision; rather, it includes substantive analysis for a large development project which was not specifically analyzed in the LMSAP EIR.[23] The City must discontinue this practice, which clearly violates CEQA. Second, as explained further below, the Project will result in new or more severe significant impacts than analyzed in previous EIRs, and there are new mitigation measures that were not considered in the previous EIRs, but that could reduce those impacts to a less than significant level. In any case, the City's decision must be supported by substantial evidence.[24] Here, the City's decision not to prepare a subsequent or supplemental EIR for the Project is not supported by substantial evidence.

The City also relies on additional CEQA provisions that allow approval of projects without an EIR in narrow circumstances. Specifically, the City relies on CEQA Guidelines Sections 15183 (Community Plan)[25] and 15183.3 (Qualified Infill)[26] for Project approval. However, the City's determination that exemptions also apply is not supported by substantial evidence.

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[22] CEQA Analysis, p. 9 – 10.
[23] *Id.*, at p. 2. The City has also improperly used the Addendum provisions of CEQA on other recent projects as demonstrated in comments and evidence submitted by Oakland residents (*See* 226 13th Street Project (PLN15320) http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak058739.pdf; *See also* 2400 Valdez Street Project (PLN15-336), http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak057878.pdf).
[24] *Id.* §§ 15162 (a), 15164(e), and 15168(c)(4).
[25] CEQA Guidelines Section 15183.
[26] CEQA Guidelines Section 15183.3.

The exemptions apply only when a Project does not have impacts peculiar to the proposed project that are new or more significant than previously analyzed or can be substantially mitigated by uniformly applicable development policies or standards. The Project fails to meet these requirements because the site is highly contaminated and could pose a risk to construction workers and residents, which was not fully analyzed under the LMSAP. Furthermore, the Project's health risks from diesel particulate matter ("DPM") emissions during construction may be highly significant. In particular, because the LMSAP did not actually quantify project-level health risks, the absence of any previous project-specific analysis undermines the City's determination that Standard Conditions of Approval ("SCAs") would mitigate the impact. Unfortunately, the LMSAP EIR did not fully address these peculiar and more significant impacts, and there are mitigation measures not previously identified that would reduce these significant impacts.

Thus, the Project will have new or more severe significant impacts than previously analyzed in the LMSAP EIR. In addition, as described below, the site-specific analysis conducted for the Project is legally deficient in several ways and the CEQA Analysis fails to incorporate all feasible mitigation. Therefore, the City may not rely on the CEQA Analysis for Project approval, and must provide detailed analysis of the Project's impacts in an EIR.

B. The CEQA Analysis Fails To Adequately Analyze and Mitigate On-Site Hazards

1. Project Site Contamination Has Not Been Adequately Addressed

The CEQA Analysis states that a Phase I Environmental Site Assessment, which the City failed to provide Oakland Residents after several requests, identified multiple recognized environmental conditions ("RECs") at the project site and the 301 12th Street parcel is now listed on the Cortese List[27] as a cleanup site by the California Department of Toxic Substances Control ("DTSC").[28] The CEQA Analysis further states that there are "ongoing environmental investigations" on the site.[29] As discussed in the LMSAP, federal, State, and regional regulations would apply to contaminated sites. However, CEQA still requires analysis and mitigation of significant impacts, despite the applicability of oversight by other

[27] Cal. Govt. Code section 65962.5.
[28] CEQA Analysis, p. 57.
[29] *Id.*

agencies. The LMSAP did not conduct project-specific assessment of on-site hazards, and thus deferred investigation and cleanup of hazards to the project planning stage.

SWAPE explains that although the Project site is highly contaminated, the CEQA Analysis fails to acknowledge that contaminants underlying the Project site have recently been found in excess of screening levels in the indoor air of existing buildings and that cleanup has yet to commence.[30] The 301 12th Street Parcel is a former automobile dealership and repair center. According to Envirostor,[31] a cleanup agreement is pending between the Applicant and DTSC.[32]

According to SWAPE, soil, soil gas and groundwater samples collected from beneath the site showed elevated concentrations of trichloroethylene ("TCE"), along with other chlorinated solvents and petroleum hydrocarbons.[33] The indoor air of the Downtown Oakland Charter School that is currently located on the property was analyzed in May 2016. SWAPE explains that the concentrations of TCE in indoor air at the school ranged from 10 to 200 µg/m3, greatly exceeding US EPA Region 9's Accelerated Response Action Level ("ARAL") for residential direct exposure (2 µg/m3).[34] A ventilation system installed at the school reduced concentrations of TCE in indoor air to less than the ARAL. On May 26, 2016, DTSC notified the school that indoor air levels of TCE had been reduced to below the ARAL for residential direct exposure.[35] SWAPE notes that although the ventilation system has been effective in reducing the indoor air concentrations of TCE, "no cleanup has been conducted and no comprehensive evaluation of the source of the TCE and the other chlorinated solvents in the subsurface has been initiated."[36]

SWAPE further explains that a "completed vapor intrusion pathway – whereby TCE and other chlorinated compounds move from contaminated groundwater, soil, and soil vapor into the air within overlying buildings – has been demonstrated at the Project site and remains viable."[37] According to SWAPE, TCE

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[30] SWAPE Comments, p. 4 – 5.
[31] http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60002362.
[32] Ibid.
[33] SWAPE Comments, p. 4 – 5.
[34] http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60002362.
[35] SWAPE Comments, p. 5.
[36] *Id.*
[37] *Id.*

is a cancer-causing agent[38] that would pose risks to construction workers and future residents unless the pathway is cut off.[39] According to SWAPE, the vapor intrusion pathway will remain at the Project site until a comprehensive investigation and a remedial effort, where the source of the TCE is removed, has been completed.

The CEQA Analysis fails to provide for any mitigation that would target and remove the source of TCE and other chlorinated compounds. The CEQA Analysis merely includes general provisions to address the contamination and only after earth-moving activities are initiated. SCA HAZ-1 and SCA-2 call for implementation of best management practices and measures for dealing with "unexpected" soil contamination that is visually discolored or that is emanating an odor. SWAPE finds that "[t]his is entirely inappropriate for a site where groundwater, soil and soil vapor have been contaminated with TCE which can be extremely difficult to assess and remediate to health protective levels."[40]

The CEQA Analysis fails to include requirements for a site cleanup that is health-protective of construction workers and future Project workers and occupants.[41] Instead, SWAPE notes that the CEQA Analysis assumes that whatever contamination is seen or smelled during grading or trenching will be addressed through "undefined" Best Management Practices.[42] SWAPE further states that TCE contamination is often found in the form of a dense non-aqueous phase liquid ("DNAPL") where pools or layers of leaked TCE accumulates on low-permeability clays in the subsurface.[43] These DNAPLs "may be below the area to be excavated and may represent a residual, ongoing source of contamination via the vapor intrusion pathway that would be unaddressed during construction because it would be below the level of Project excavation."[44]

SWAPE finds that prior to proceeding with soil excavation and Project construction, a "thorough investigation of the contamination at the site is necessary to determine if development as a residential community is appropriate."[45] This is

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[38] http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=172&tid=30.
[39] SWAPE Comments, p. 5.
[40] *Id.*
[41] *Id.*
[42] *Id.*
[43] *Id.*
[44] *Id.*
[45] *Id.*

necessary to address during CEQA review, even if another agency such as DTSC has additional oversight. The CEQA Analysis merely assumes, without further justification, that regulations outside of the CEQA process would mitigate impacts to less than significant levels. However, as case law has shown, compliance with applicable regulations does not automatically obviate the need for further analysis of impacts.

In *Keep our Mountains Quiet v. County of Santa Clara*, neighbors of a wedding venue sued over the County's failure to prepare an EIR due to significant noise impacts. The court concluded that "a fair argument [exists] that the Project may have a significant environmental noise impact" and reasoned that although the noise levels would likely comply with local noise standards, "compliance with the ordinance does not foreclose the possibility of significant noise impacts."[46] The court ordered the County to prepare an EIR. The ruling demonstrates the possibility that a project may be in compliance with an applicable regulation and still have a significant impact.

In *Communities for a Better Env't v. California Res. Agency*, the court struck down a CEQA Guideline because it "impermissibly allow[ed] an agency to find a cumulative effect insignificant based on a project's compliance with some generalized plan rather than on the project's actual environmental impacts."[47] The court concluded that "[i]f there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding that the project complies with the specified plan or mitigation program addressing the cumulative problem, an EIR must be prepared for the project."[48] Thus, the ruling supports the notion that despite assured compliance with applicable standard outside of the CEQA process, a lead agency still has an obligation to consider substantial evidence and analyze and mitigate potentially significant impacts.

In *Leonoff v. Monterey County Bd. of Supervisors*, the court held that conditions requiring compliance with regulations are proper "where the public agency had meaningful information reasonably justifying an expectation of mitigation of environmental effects."[49] The ruling suggests that an agency that merely provides a bare assertion that the project will be in compliance with

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[46] *Keep our Mountains Quiet v. County of Santa Clara* (2015) Case No. H039707, p. 21.
[47] *Communities for a Better Env't v. California Res. Agency* (2002) 126 Cal.Rptr.2d 441, 453.
[48] *Id.*
[49] *Leonoff v. Monterey County Bd. of Supervisors* (1990) 222 Cal.App.3d 1337, 1355.

applicable regulations, without further explanation or enforceability, may not fulfill the requirements of CEQA.

Here, the City failed to provide any information explaining how compliance with the outside laws and regulations would reduce the risks posed to workers and residents from the high levels of TCE contamination on the site. The City may not rely solely on compliance with regulations or laws as reducing impacts without a full analysis of impacts or enforceable mitigation. Furthermore, reliance on the LMSAP is improper because the LMSAP did not conduct a site-specific investigation of the highly contaminated site.

CEQA requires that the City describe all components of the Project that may have a significant impact, and adequately analyze and require mitigation for all potentially significant impacts related to on-site hazards. Here, the City failed to do so in its CEQA Analysis. SWAPE concludes that Project construction should not be allowed until a full EIR has been prepared "to document that a thorough assessment and cleanup of the contamination has been completed under regulatory oversight and that a residential land use is appropriate."[50]

2. Dewatering Impacts Has Not Been Adequately Addressed

Under CEQA, a project may have a significant impact if it would violate any water quality standards or waste discharge requirement, create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality.[51] CEQA and applicable case law require the City to describe all aspects of the Project, and, as explained above, disclose the significance of all impacts and provide separate and enforceable mitigation.[52]

The CEQA Analysis states that "[s]ome dewatering may be required for construction of the proposed project, but the dewatering is not anticipated to substantially lower the groundwater level."[53] The CEQA Analysis also states that the Project "would involve grading and excavation activities up to depths of

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[50] SWAPE Comments, p. 4.
[51] CEQA Guidelines, Appendix G.
[52] *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645.
[53] CEQA Analysis, p. 60.

approximately 16 feet below grade to construct the building. . ."[54] Thus dewatering will most likely be required at those depths. SWAPE states that the known TCE contamination in groundwater and any residual source of TCE contamination below the water table "poses a water quality issue during dewatering."[55] SWAPE further notes that the CEQA Analysis fails to consider that groundwater that would be dewatered is known to be contaminated with TCE and other compounds.[56] Contaminated groundwater that is generated from the dewatering process would need to be handled and disposed in accordance with the San Francisco Bay Regional Water Quality Control Board's NPDES General Permit requirements,[57] but the City is still required under CEQA to fully describe, analyze, and mitigation potential impacts from dewatering in its CEQA document.

SWAPE concludes that an EIR must be prepared to analyze the impact and identify the Regional Board's dewatering requirements and how they will be met during Project construction.[58]

C. The CEQA Analysis Fails To Adequately Analyze and Mitigate Project-Specific Health Risk From Diesel Particulate Matter

1. The City is Required to Quantify the Project's Health Risk from DPM Emissions During Construction

The California Air Resources Board ("CARB") identifies diesel particulate matter ("DPM") as a toxic air contaminant ("TAC") based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects.[59] In 2012, the International Agency for Research on Cancer listed diesel engine exhaust as "carcinogenic to humans."[60] As with other air pollutants, SWAPE explains that DPM emissions during development construction can impact both on-site construction workers and the surrounding community such as schools and residential sensitive receptors.[61]

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[54] *Id.*, at 47.
[55] SWAPE Comments, p. 5.
[56] *Id.*
[57] http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2012/R2-2012-0060.pdf.
[58] SWAPE Comments, p. 5.
[59] http://www.arb.ca.gov/research/diesel/diesel-health.htm.
[60] *Id.*
[61] SWAPE Comments, p. 3 – 4.

The LMSAP EIR concludes that "[d]evelopment facilitated by the proposed Plan would potentially expose sensitive receptors to substantial health risks from [TACs] from sources including both DPM and gaseous emissions."[62] Furthermore, the LMSAP EIR found that while compliance with the City's SCAs "would entail the preparation of site-specific health risk assessments which would reduce DPM exposure to a less than significant level", the SCAs would not necessarily reduce gaseous TACs to a less-than-significant level.[63] Therefore, the LMSAP EIR found the impacts related to DPM exposure would be less than significant, while the remaining TAC impacts (related to gaseous sources) would be significant and unavoidable.[64]

The LMSAP EIR did not address project-level construction related exposures because "[t]he specificity of detail necessary to conduct a health risk assessment is not available at the Plan stage..."[65] The LMSAP EIR thus deferred the assessment of health risks from construction activities to the project level stage where project-specific impacts and mitigation measures could be determined to ensure that DPM exposure would not exceed applicable thresholds.

As explained by SWAPE, however, the CEQA Analysis completely fails to evaluate the health risk posed to nearby sensitive receptors from exposure to DPM emissions released during Project construction, despite the indication in the LMSAP EIR that a health risk assessment ("HRA") would be required.[66] The City's omission of a construction HRA is particularly egregious because of the Project's proximity to the American Indian Public Charter School, which is a charter middle school with predominantly low-income, minority students within a few blocks of the Project. As stated in the CEQA Analysis, construction-related emissions (as well as the release of potentially hazardous materials during construction as explained above) would occur for up to 2 years.[67]

The CEQA Analysis states that although "[t]he LMSAP EIR determined that sensitive receptors in proximity to construction-related DPM emissions (generally within 200 meters) could be subject to increased cancer risk, chronic health

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[62] LMSAP DEIR, p. ES-34.
[63] *Id.*
[64] *Id.*, at 3.3-25.
[65] *Id.*, at 3.3-39.
[66] SWAPE Comments, p. 2 – 3.
[67] CEQA Analysis, p. 2.

problems and acute health risk," all future development projects pursuant to the LMSAP would be subject to basic construction control measures and best management practices through implementation the SCAs and thus the impact would be less than significant.[68] SWAPE's analysis demonstrates that these justifications are misplaced.

Although the CEQA Analysis incorporates SCAs from the LMSAP, the City is not absolved of CEQA's requirement that agencies disclose significant environmental impacts to the public and mitigate those impacts.[69] The CEQA Analysis openly states that the LMSAP EIR determined that sensitive receptors may be subject to an increased cancer risk due to construction activities. Therefore, CEQA mandates that the City quantify that risk in order to determine ***if*** the basic construction control measures and best management practices in the SCAs will reduce DPM emissions to less than significant levels.

Furthermore, the CEQA Analysis assumes that because construction would occur over a short period of time, the health risk posed from construction activities would be negligible. SWAPE explains that this determination conflicts with most recent guidance published by the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing recommendations for health risk assessments in California. OEHHA's *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, which was formally adopted by OEHHA in March of 2015, describes the types of projects that warrant the preparation of a health risk assessment.[70] OEHHA guidance recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.[71]

Here, Project construction is expected to last up to 24 months and Project construction will produce emissions of DPM, as described in the CEQA Analysis. SWAPE explains that OEHHA's recommendation that such short-term projects be evaluated for cancer risks to nearby sensitive receptors "reflects the most recent health risk assessment policy, and as such, an assessment of health risks to nearby

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[68] *Id.*
[69] CEQA Guidelines §§ 15126.2, 15126.4.
[70] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html.
[71] *Id.*, at 8-18.

sensitive receptors from construction should be included in a revised CEQA evaluation for the Project."[72]

2. The Project May Result in Significant Health Risks from DPM Emissions During Construction

In light of the City's failure to quantify the Project's impacts from DPM emissions during construction, SWAPE provides its own analysis on the Project's significant health risks. Oakland Residents was not provided with the CalEEMod output files, thus SWAPE was unable to independently estimate the construction health risk for the proposed Project. However, based on previous analyses SWAPE has conducted on similar projects in Oakland, as described in their letter, SWAPE reasonably assumes that the proposed Project would result in significant health risks.

Although the Project would implement SCA AIR-1, without quantification of the health risk, it is unclear if risk will be reduced to a less-than-significant level once these mitigation measures are implemented. SWAPE concludes that an EIR is necessary to include a quantitative estimate of health risk and mitigation.

3. The City Fails to Incorporate all Feasible Mitigation Measures Required to Reduce Significant Impacts from DPM Emissions

SWAPE's comparison of the Project to other similar projects in Oakland demonstrates that construction of the Project could result in significant health risks that have not been quantified.[73] SWAPE has detailed list of mitigation measures that could be incorporated to reduce DPM exposure. Although the CEQA Analysis incorporates SCA AIR-1 from the LMSAP FEIR, the Project would require even further measures to reduce the significant impacts from DPM emissions to less than significant levels. SWAPE notes that additional mitigation measures can be found in the California Air Pollution Control Officers Association's ("CAPCOA") *Quantifying Greenhouse Gas Mitigation Measures,* which reduces GHG emissions, as well as reduce Criteria Air Pollutants such as particulate matter (PM).[74]

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[72] SWAPE Comments, p. 3.
[73] *Id.*, at 3 – 4.
[74] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.

Mitigation measures for particulate matter emissions, which are described in further detail in SWAPE's comments, include:[75]

- Limiting construction equipment beyond regulation requirements;
- Requiring implementation of diesel control measures as described by the Northeast Diesel Collaborative ("NEDC");
- Repowering or replacing older construction engines;
- Installing retrofit devices on existing construction equipment;
- Using electric or hybrid construction equipment;
- Instituting a Heavy-Duty Off-Road Vehicle Plan;
- Implementing a Construction Vehicle Inventory Tracking System; and
- "Enhanced Exhaust Control Practices," recommended by the Sacramento Metropolitan Air Quality Management District ("SMAQMD").[76]

The CEQA Analysis is inconsistent with the LMSAP because it fails to quantify the health risk associated with DPM emissions for this Project, as anticipated under the LMSAP EIR. In addition, the City failed to identify and incorporate feasible mitigation measures, not previously identified, that would reduce the Project's significant health risk impacts during construction. In light of the fact that the LMSAP EIR identified the health risk from DPM during construction as a less than significant impact, the evidence of significant DPM impacts associated with the Project constitutes substantial new information showing a new or more severe significant impact than previously analyzed. Furthermore, there are mitigation measures not previously identified that could potentially reduce the impact to less than significant levels. Therefore, CEQA requires the City to prepare an EIR for the Project, and the City may not rely on the CEQA Analysis for Project approval.

D. The City Failed To Provide the Public with Information Regarding Project-Specific Construction Emissions

The CEQA Analysis states that CalEEMod was used to estimate the Project's construction and operational criteria air pollutant emissions and greenhouse gas ("GHG") emissions.[77] SWAPE explains that CalEEMod provides recommended default values based on site specific information, such as land use type,

[75] SWAPE Comments, p. 4 – 9.
[76] http://www.airquality.org/ceqa/Ch3EnhancedExhaustControl_10-2013.pdf.
[77] CEQA Analysis, p. 35 – 36, 52.

meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but CEQA requires that such changes be justified by substantial evidence.[78] Once all the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters were utilized in calculating the Project's air pollution emissions, and make known which default values were changed as well as provide a justification for the values selected.[79]

However, after review of the entire CEQA Analysis, SWAPE finds that the CalEEMod output files for this Project were completely omitted, despite several attempts made by Oakland Residents to acquire and review those files. Without the output files, the public cannot verify that the assumptions used within the model were correctly applied, and thus whether the City's analysis is supported. As a result, SWAPE finds that "both the criteria air pollutant emission and GHG emission estimates provided in the CEQA Analysis are unreliable and should not be used to determine Project significance. . ."[80] SWAPE notes that the omission of these output files deviates from the technical appendices attached to CEQA documents for other construction projects in Oakland.

Therefore, SWAPE concludes that an EIR should be prepared that adequately address the air quality and GHG impacts associated with the proposed Project and provides the complete CalEEMod output files.[81]

III. CONCLUSION

The City failed to comply with CEQA's procedural and evidentiary standards in its CEQA Analysis. As explained above, the CEQA Analysis fails to analyze and mitigate the Project's high levels of TCE contamination and the Project's significant health risks posed to the surrounding community from DPM emissions. Both of these significant impacts are new or more severe than previously analyzed, and

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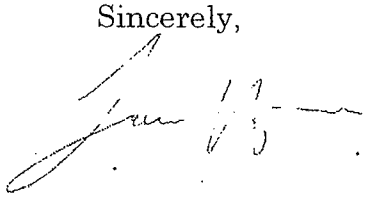
[78] CalEEMod User Guide, p. 2, 9, *available at:* http://www.caleemod.com/.
[79] CalEEMod User Guide, p. 7, 13, *available at:* http://www.caleemod.com/ (A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.)
[80] SWAPE Comments, p. 2.
[81] *Id.*

mitigation measures, which are considerably different from those analyzed in the LMSAP EIR, would substantially reduce these significant effects, but have not been required in the CEQA Analysis. The City also failed to provide the public with the information necessary to facilitate public review of the Project's air quality and GHG impacts. For these reasons, we urge the City to revise its analysis, identify feasible mitigation measure and disclose its revised analysis in an EIR, as required by CEQA, before the City considers approval of the Project.

Sincerely,



Laura E. Horton

LEH:ric
Attachments

3615-002rc

ATTACHMENT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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August 3, 2016

Laura E. Horton
Adams Broadwell Joseph & Cardozo
601 Gateway Blvd., Suite 1000
South San Francisco, CA 94080

Subject: Comments on the W12 Mixed-Use Project

Dear Ms. Horton:

We have reviewed the W12 Mixed-Use Project CEQA Analysis ("CEQA Analysis") and associated attachments/appendices for the proposed mixed-use development project ("Project") located in Oakland, California. The Project proposes to redevelop two parcels within the area of the Lake Merritt Station Area Plan (LMSAP) and plans to construct two buildings consisting of approximately 416 residential units, 317 parking spaces, and 25,050 square feet of retail space on approximately 1.72 acres. The LMSAP Environmental Impact Report (LMSAP EIR) was certified in 2014, and it analyzed program-level impacts associated with adoption and implementation of the LMSAP.

Our review concludes that the CEQA Analysis fails to adequately evaluate the Project's Air Quality and Greenhouse Gas impacts and construction health risks. The CEQA Analysis also fails to disclose that hazardous waste conditions are present at the Project site that may pose risks to construction workers and future residents and present undisclosed issues when contaminated groundwater is dewatered during project construction. A project-specific Draft Environmental Impact Report (DEIR) should be prepared to adequately address these issues and incorporate additional mitigation.

Air Quality and Greenhouse Gas

Failure to Provide CalEEMod Output Files

According to the CEQA Analysis, CalEEMod was used to estimate the Project's construction and operational criteria air pollutant emissions (Table AIR-1, p. 35, Table AIR-2, p. 36) and greenhouse gas (GHG) emissions (CEQA Analysis, p. 52). CalEEMod provides recommended default values based on site specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but CEQA requires that such changes be

justified by substantial evidence.[1] Once all the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters were utilized in calculating the Project's air pollution emissions, and make known which default values were changed as well as provide a justification for the values selected.[2]

However, after review of the entire CEQA Analysis, we find that the CalEEMod output files for this Project were completely omitted. Without the output files, we are unable to verify that the assumptions used within the model are correct and cannot determine what default values were used. While the CEQA Analysis states what assumptions were used in the model for calculating construction and operational emissions, we are unable to verify that these assumptions were correctly inputted into the model. Furthermore, we are unable to review the CalEEMod output files to determine if any other default values were changed or if project specific information was omitted from the model. As a result, both the criteria air pollutant emission and GHG emission estimates provided in the CEQA Analysis are unreliable and should not be used to determine Project significance, since there is not documentation verifying the values.

The omission of these output files deviates from the technical appendices attached to CEQA documents for other construction projects in Oakland.[3] Without providing the entire CalEEMod report, the reviewer cannot fully understand the assumptions that were made about the Project, and cannot verify whether those assumptions are justified. A DEIR should be prepared that adequately address the air quality and GHG impacts associated with the proposed Project and provides the complete CalEEMod output files.

Does Not Evaluate Diesel Particulate Matter Health Risk Emissions [illegible] Evaluate

The CEQA Analysis concludes that the health risk posed to nearby sensitive receptors from exposure to diesel particulate matter ("DPM") emissions released during Project construction would be less than significant, yet fails to quantify the risk and compare it to applicable thresholds (p. 38). The CEQA Analysis attempts to justify the omission of an actual health risk assessment ("HRA"), stating, "Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9,40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities" (p. 37). Furthermore, the CEQA

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[1] CalEEMod User Guide, p. 2, 9, *available at:* http://www.caleemod.com/

[2] CalEEMod User Guide, p. 7, 13, *available at:* http://www.caleemod.com/ (A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.)

[3] *Compare to, e.g.*, Appendix E, "Air Quality and Greenhouse Gas Emissions – CalEEmod, Report, HRA Dispersion Model and ISCST3 Model" prepared by the City of Oakland for the Jack London Square 4th & Madison project (Entire CalEEMod output files with descriptions of construction phases, equipment, and changes to default settings are provided). *Available at:* http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak054487.pdf

Analysis states that, "The LMSAP EIR determined that sensitive receptors in proximity to construction-related DPM emissions (generally within 200 meters) could be subject to increased cancer risk, chronic health problems, and acute health risk. However, all future development projects pursuant to the LMSAP would be subject to basic construction control measures through implementation of the City's SCA's (SCA-A in the LMSAP, see Attachment A). SCA AIR-1, which requires "enhanced" construction emission control measures for of all residential development in excess of 240 units, would implement construction-related Best Management Practices to substantially reduce construction-related impacts to a less-than-significant level" (p. 37-38). This justification, however, is incorrect.

Although the CEQA Analysis states that the Project would require to include construction control measures through implementation of Standard Conditions of Approval (SCAs), the risk must still be quantified to determine which measures must be applied to reduce DPM emissions and if the measures will reduce emissions to levels that will not cause a significant impact. The CEQA Analysis openly states that the LMSAP EIR determined that sensitive receptors may be subject to an increased cancer risk due to construction activities, so therefore the risk should be quantified in order to determine if the control measures will reduce DPM emissions to adequate levels, as required under CEQA.

Furthermore, the CEQA model assumes that because construction would occur over a short period of time, the health risk posed from construction activities would be negligible. This determination, however, is in contrast to the most recent guidance published by the Office of Environmental Health Hazard Assessment (OEHHA), the organization responsible for providing recommendations for health risk assessments in California. In February of 2015, OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, which was formally adopted in March of 2015.[4] This guidance document describes the types of projects that warrant the preparation of a health risk assessment. Construction of the Project will produce emissions of DPM, a human carcinogen, through the exhaust stacks of construction equipment over a one-year construction period of one years (CEQA Analysis, p. 35). The OEHHA document recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.[5] This recommendation reflects the most recent health risk assessment policy, and as such, an assessment of health risks to nearby sensitive receptors from construction should be included in a revised CEQA evaluation for the Project.

At the time of this analysis, we were not provided with the CalEEMod output files and therefore, we were unable to independently estimate the construction health risk for the proposed Project. However, based on previous analyses we conducted on similar projects nearby, we can reasonably assume that the proposed Project would result in a significant impact. Our analysis concluded that for the nearby 226 13th Street project, which is a slightly smaller mixed-use project that is also tiering from the LMSAP EIR, the construction health risk posed to nearby sensitive receptors are 50.4, 371, and 337 in one million for

[4] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html

[5] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-18

adults, children, and infants, respectively.[6] Similarly, we found the construction health risk to nearby sensitive receptors for the 2400 Valdez Street project, which proposes to construct 225 residential units and 23,465 square feet of retail , to be 40.4, 233, and 777 in one million for adults, children, and infants, respectively.[7] Both these projects propose construction of residential and commercial space in the City of Oakland, similar to the proposed Project, and are smaller than the proposed Project. Therefore, it is reasonable to assume that the construction health risk for the proposed Project will be comparable to the 226 13th Street project and the 2400 Valdez Street project, if not higher.

Although the Project would implement SCA AIR-1, without quantification of the health risk it is unclear if risk will be reduced to a less-than-significant level once these mitigation measures are implemented. A DEIR is necessary to include a quantitative estimate of health risk and mitigation, as necessary.

As demonstrated above, construction of the Project will likely result in a significant health risk impact. Therefore, additional mitigation measures should be identified and incorporated to reduce the Project's construction diesel exhaust emissions to a less-than-significant level. Additional mitigation measures can be found in the California Air Pollution Control Officers Association's ("CAPCOA") *Quantifying Greenhouse Gas Mitigation Measures,* which attempt to reduce Greenhouse Gas (GHG) levels, as well as reduce Criteria Air Pollutants such as particulate matter (PM).[8] Mitigation for particulate matter emissions should include consideration of the following measures in an effort to reduce construction emissions to a level that would result in a less-than-significant health risk impact.

Limit Construction Equipment Idling Beyond Regulation Requirements

Heavy duty vehicles will idle during loading/unloading and during layovers or rest periods with the engine still on, which requires fuel use and results in emissions. The California Air Resources Board ("CARB") Heavy-Duty Vehicle Idling Emissions Reduction Program limits idling of diesel-fueled commercial motor vehicles to five minutes. Reduction in idling time beyond the five minutes required under the regulation would further reduce fuel consumption and thus emissions. The Project applicant must develop an enforceable mechanism that monitors the idling time to ensure compliance with this mitigation measure.

Require Implementation of Diesel Control Measures

The Northeast Diesel Collaborative ("NEDC") is a regionally coordinated initiative to reduce diesel emissions, improve public health, and promote clean diesel technology. The NEDC recommends that contracts for all construction projects require the following diesel control measures: [9]

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[6] See SWAPE Comment Letter, as attached to Adams Broadwell Joseph & Cardozo Comment Letter on the CEQA Analysis for the Proposed 226 13th Street Project, dated May 31, 2016.

[7] See SWAPE Comment Letter, as attached to Adams Broadwell Joseph & Cardozo Comment Letter on the CEQA Analysis for the Proposed 2400 Valdez Street Project, dated April 13, 2016.

[8] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

[9] Diesel Emission Controls in Construction Projects, *available at:* http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf

- All diesel onroad vehicles on site for more than 10 total days must have either (1) engines that meet EPA 2007 onroad emissions standards or (2) emission control technology verified by EPA[10] or the California Air Resources Board (CARB)[11] to reduce PM emissions by a minimum of 85 percent.
- All diesel generators on site for more than 10 total days must be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85 percent.
- All diesel nonroad construction equipment on site for more than 10 total days must have either (1) engines meeting EPA Tier 4 nonroad emission standards or (2) emission control technology verified by EPA or CARB for use with nonroad engines to reduce PM emissions by a minimum of 85 percent for engines 50 horse power (hp) and greater and by a minimum of 20 percent for engines less than 50 hp.
- All diesel vehicles, construction equipment, and generators on site shall be fueled with ultra-low sulfur diesel fuel (ULSD) or a biodiesel blend[12] approved by the original engine manufacturer with sulfur content of 15 parts per million (ppm) or less.

Repower or Replace Older Construction Equipment Engines

The NEDC recognizes that availability of equipment that meets the EPA's newer standards is limited.[13] Due to this limitation, the NEDC proposes actions that can be taken to reduce emissions from existing equipment in the *Best Practices for Clean Diesel Construction* report.[14] These actions include but are not limited to:

- Repowering equipment (i.e. replacing older engines with newer, cleaner engines and leaving the body of the equipment intact).

  Engine repower may be a cost-effective emissions reduction strategy when a vehicle or machine has a long useful life and the cost of the engine does not approach the cost of the entire vehicle or machine. Examples of good potential replacement candidates include marine vessels, locomotives, and large construction machines.[15] Older diesel vehicles or machines can be repowered with newer diesel engines or in some cases with engines that operate on alternative fuels (see section "Use Alternative Fuels for Construction Equipment" for details). The original engine is taken out of service and a new engine with reduced emission characteristics is installed. Significant emission reductions can be achieved, depending on the newer engine and the vehicle or machine's ability to accept a more modern engine and emission control system. It should be noted, however, that newer engines or higher tier engines are not necessarily cleaner engines, so it is important that the Project Applicant check the actual emission standard level of

[10] For EPA's list of verified technology: http://www3.epa.gov/otaq/diesel/verification/verif-list.htm
[11] For CARB's list of verified technology: http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm
[12] Biodiesel lends are only to be used in conjunction with the technologies which have been verified for use with biodiesel blends and are subject to the following requirements:
http://www.arb.ca.gov/diesel/verdev/reg/biodieselcompliance.pdf
[13] http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf
[14] http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf
[15] http://www3.epa.gov/otaq/diesel/technologies/engines.htm

the current (existing) and new engines to ensure the repower product is reducing emissions for PM10.[16]

- Replacement of older equipment with equipment meeting the latest emission standards.

  Engine replacement can include substituting a cleaner highway engine for a nonroad engine. Diesel equipment may also be replaced with other technologies or fuels. Examples include hybrid switcher locomotives, electric cranes, LNG, CNG, LPG or propane yard tractors, forklifts or loaders. Replacements using natural gas may require changes to fueling infrastructure.[17] Replacements often require some re-engineering work due to differences in size and configuration. Typically there are benefits in fuel efficiency, reliability, warranty, and maintenance costs.[18]

Install Retrofit Devices on Existing Construction Equipment

PM emissions from alternatively-fueled construction equipment can be further reduced by installing retrofit devices on existing and/or new equipment. The most common retrofit technologies are retrofit devices for engine exhaust after-treatment. These devices are installed in the exhaust system to reduce emissions and should not impact engine or vehicle operation. [19] Below is a table, prepared by the EPA, that summarizes the commonly used retrofit technologies and the typical cost and emission reductions associated with each technology.[20] It should be noted that actual emissions reductions and costs will depend on specific manufacturers, technologies and applications.

Technology	Typical Emissions Reductions (percent)				Typical Costs ($)
	PM	NOx	HC	CO	
Diesel Oxidation Catalyst (DOC)	20-40	-	40-70	40-60	Material: $600-$4,000 Installation: 1-3 hours
Diesel Particulate Filter (DPF)	85-95	-	85-95	50-90	Material: $8,000-$50,000 Installation: 6-8 hours
Partial Diesel Particulate Filter (pDPF)	up to 60	-	40-75	Oct-60	Material: $4,000-$6,000 Installation: 6-8 hours
Selective Catalyst Reduction (SCR)	-	up to 75	-	-	$10,000-$20,000; Urea $0.80/gal
Closed Crankcase Ventilation (CCV)	varies	-	-	-	-
Exhaust Gas Recirculation (EGR)	-	25-40	-	-	-
Lean NOx Catalyst (LNC)	-	May-40	-	-	$6,500-$10,000

[16] Diesel Emissions Reduction Program (DERA): Technologies, Fleets and Projects Information, *available at:* http://www2.epa.gov/sites/production/files/2015-09/documents/420p11001.pdf
[17] http://www3.epa.gov/otaq/diesel/technologies/replacements.htm
[18] http://www3.epa.gov/otaq/diesel/technologies/engines.htm
[19] http://www3.epa.gov/otaq/diesel/technologies/index.htm
[20] http://www3.epa.gov/otaq/diesel/technologies/retrofits.htm

Use Electric and Hybrid Construction Equipment

CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*[21] report also proposes the use of electric and/or hybrid construction equipment as a way to mitigate criteria pollutant emissions, such as particulate matter. When construction equipment is powered by grid electricity rather than fossil fuel, direct emissions from fuel combustion are replaced with indirect emissions associated with the electricity used to power the equipment. Furthermore, when construction equipment is powered by hybrid-electric drives, emissions from fuel combustion are also greatly reduced and criteria air pollutants would be 100% reduced for equipment running on electricity. Electric construction equipment is available commercially from companies such as Peterson Pacific Corporation[22] and Komptech USA[23], which specialize in the mechanical processing equipment like grinders and shredders. Construction equipment powered by hybrid-electric drives is also commercially available from companies such as Caterpillar[24]. For example, Caterpillar reports that during an 8-hour shift, its D7E hybrid dozer burns 19.5 percent fewer gallons of fuel than a conventional dozer while achieving a 10.3 percent increase in productivity. The D7E model burns 6.2 gallons per hour compared to a conventional dozer which burns 7.7 gallons per hour.[25] Fuel usage and savings are dependent on the make and model of the construction equipment used. The Project Applicant should calculate project-specific savings and provide manufacturer specifications indicating fuel burned per hour.

Implement a Construction Vehicle Inventory Tracking System

CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*[26] report recommends that the Project Applicant provide a detailed plan that discusses a construction vehicle inventory tracking system to ensure compliances with construction mitigation measures. The system should include strategies such as requiring engine run time meters on equipment, documenting the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment and daily logging of the operating hours of the equipment. Specifically, for each onroad construction vehicle, nonroad construction equipment, or generator, the contractor should submit to the developer's representative a report prior to bringing said equipment on site that includes:[27]

- Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number.
- The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level.

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[21] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

[22] Peterson Electric Grinders Brochure, *available at:* http://www.petersoncorp.com/wp-content/uploads/peterson_electric_grinders1.pdf

[23] https://www.komptech.com/about-komptech/green-efficiency.html

[24] http://www.cat.com/en_US/products/new/power-systems/electric-power-generation.html

[25] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

[26] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

[27] Diesel Emission Controls in Construction Projects, *available at:* http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf

- The Certification Statement[28] signed and printed on the contractor's letterhead.

Furthermore, the contractor should submit to the developer's representative a monthly report that, for each onroad construction vehicle, nonroad construction equipment, or generator onsite, includes: [29]

- Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
- Any problems with the equipment or emission controls.
- Certified copies of fuel deliveries for the time period that identify:
    - Source of supply
    - Quantity of fuel
    - Quality of fuel, including sulfur content (percent by weight).

In addition to those measures, we also recommend that the City require the Applicant to implement the following mitigation measures, called "Enhanced Exhaust Control Practices,"[30] that are recommended by the Sacramento Metropolitan Air Quality Management District ("SMAQMD"):

1. The project representative shall submit to the lead agency and District a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.
    - The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment.
    - The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.
    - This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment.
    - The District's Equipment List Form can be used to submit this information.
    - The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.
2. The project representative shall provide a plan for approval by the lead agency and District demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NO_X reduction and 45% particulate reduction compared to the most recent CARB fleet average.
    - This plan shall be submitted in conjunction with the equipment inventory.

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[28] Diesel Emission Controls in Construction Projects, *available at:* http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf The NEDC Model Certification Statement can be found in Appendix A.

[29] Diesel Emission Controls in Construction Projects, *available at:* http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf

[30] http://www.airquality.org/ceqa/Ch3EnhancedExhaustControl_10-2013.pdf

- Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
- The District's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.

3. The project representative shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour.
    - Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency and District monthly.
    - A visual survey of all in-operation equipment shall be made at least weekly.
    - A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.
4. The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other District, state or federal rules or regulations.

When combined together, these measures offer a cost-effective way to incorporate lower-emitting equipment into the Project's construction fleet, which subsequently, reduces particulate matter emissions released during Project construction.

Hazards and Hazardous Waste

The Project overlies a contaminated site included on the Cortese List (the 301 12th Street parcel) as acknowledged in the Analysis. The CEQA Analysis fails, however, to acknowledge that contaminants underlying the Project site have recently been found in excess of screening levels in the indoor air of existing buildings and that cleanup has yet to commence. Project construction should not be allowed until a DEIR has been prepared to document that a thorough assessment and cleanup of the contamination has been completed under regulatory oversight and that a residential land use is appropriate.

The 301 12th Street Parcel (known on Envirostor as "301 12th Street Future Development"[31]) is a former automobile dealership and repair center. According to Envirostor, a cleanup agreement is pending between the developer (The Martin Group) and the California Department of Toxics Substances Control.[32]

Soil, soil gas and groundwater samples collected from beneath the site showed elevated concentrations of trichloroethylene (TCE), along with other chlorinated solvents and petroleum hydrocarbons. The

[31] http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60002362
[32] Ibid.

indoor air of the school that is currently located on the property was assessed in May 2016. The concentrations of TCE in indoor air in the school ranged from 10 to 200 µg/m3, greatly exceeding US EPA Region 9's Accelerated Response Action Level (ARAL) for residential direct exposure (2 µg/m3).[33] A ventilation system has reduced concentrations of TCE in indoor air to less than the ARAL. On May 26, 2016, DTSC notified the school that indoor air levels of TCE had been reduced to below the ARAL for residential direct exposure. Whereas the ventilation system has been effective in reducing the indoor air concentrations of TCE, no cleanup has been conducted and no comprehensive evaluation of the source of the TCE and the other chlorinated solvents in the subsurface has been initiated.

A completed vapor intrusion pathway -- whereby TCE and other chlorinated compounds, move from contaminated groundwater, soil, and soil vapor into the air within overlying buildings – has been demonstrated at the Project site and remains viable. TCE is a cancer-causing agent[34] that would pose risks to construction workers and future residents unless the pathway is cut off. The vapor intrusion pathway will remain complete at the Project site until a comprehensive investigation and a remedial effort, where the source of the TCE is removed, has been completed.

The CEQA Analysis does not provide for any mitigation that would target and remove the source of TCE and other chlorinated compounds. The CEQA Analysis only provides for general provisions to address the contamination and only after earth-moving activities are initiated. SCA HAZ-1 and SCA-2 call for implementation of best management practices and measures for dealing with "unexpected" soil contamination that is visually discolored or that is emanating an odor. This is entirely inappropriate for a site where groundwater, soil and soil vapor have been contaminated with TCE which can be extremely difficult to assess and remediate to health protective levels.

No requirements for a site cleanup that is health-protective of construction workers and future Project workers and occupants are included in the Analysis. Instead, the CEQA Analysis assumes that whatever contamination is seen or smelled during grading or trenching will be addressed through undefined BMPs. TCE contamination is often found in the form of a dense non-aqueous phase liquid (DNAPL) where pools or layers of leaked TCE accumulates on low-permeability clays in the subsurface. These DNAPLs may be below the area to be excavated and may represent a residual, ongoing source of contamination via the vapor intrusion pathway that would be unaddressed during construction because it would be below the level of Project excavation.

Prior to proceeding with soil excavation and Project construction, a thorough investigation of the contamination at the site is necessary to determine if development as a residential community is appropriate. To ensure that the investigation is thorough, DTSC oversight is necessary. DTSC oversight of the cleanup of the Project site is also necessary for the protection of the health of future residents and workers.

The known TCE contamination in groundwater and any residual source of TCE contamination below the water table also poses a water quality issue during dewatering. The Analysis states that "some

[33] Ibid.

[34] http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=172&tid=30

dewatering may be required for Project construction" but the Analysis fails to consider that groundwater that is dewatered is known to be contaminated with TCE and other compounds. Contaminated groundwater that is generated from the dewatering process needs to be handled and disposed in accordance with the San Francisco Bay Regional Water Quality Control Board's NPDES General Permit requirements.[35] A DEIR needs to be prepared to identify the Regional Board's dewatering requirements and how they will be met during Project construction.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Jessie Jaeger

[35] http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2012/R2-2012-0060.pdf

ATTACHMENT A-1

Trichloroethylene - ToxFAQs™

CAS # 79-01-6

This fact sheet answers the most frequently asked health questions (FAQs) about trichloroethylene. For more information, call the CDC Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Trichloroethylene is a colorless liquid which is used as a solvent for cleaning metal parts. Drinking or breathing high levels of trichloroethylene may cause nervous system effects, liver and lung damage, abnormal heartbeat, coma, and possibly death. Trichloroethylene has been found in at least 852 of the 1,430 National Priorities List (NPL) sites identified by the Environmental Protection Agency (EPA).

What is trichloroethylene?

Trichloroethylene (TCE) is a nonflammable, colorless liquid with a somewhat sweet odor and a sweet, burning taste. It is used mainly as a solvent to remove grease from metal parts, but it is also an ingredient in adhesives, paint removers, typewriter correction fluids, and spot removers.

Trichloroethylene is not thought to occur naturally in the environment. However, it has been found in underground water sources and many surface waters as a result of the manufacture, use, and disposal of the chemical.

What happens to trichloroethylene when it enters the environment?

- Trichloroethylene dissolves a little in water, but it can remain in ground water for a long time.
- Trichloroethylene quickly evaporates from surface water, so it is commonly found as a vapor in the air.
- Trichloroethylene evaporates less easily from the soil than from surface water. It may stick to particles and remain for a long time.
- Trichloroethylene may stick to particles in water, which will cause it to eventually settle to the bottom sediment.
- Trichloroethylene does not build up significantly in plants and animals.

How might I be exposed to trichloroethylene?

- Breathing air in and around the home which has been contaminated with trichloroethylene vapors from shower water or household products such as spot removers and typewriter correction fluid.
- Drinking, swimming, or showering in water that has been contaminated with trichloroethylene.
- Contact with soil contaminated with trichloroethylene, such as near a hazardous waste site.
- Contact with the skin or breathing contaminated air while manufacturing trichloroethylene or using it at work to wash paint or grease from skin or equipment.

How can trichloroethylene affect my health?

Breathing small amounts may cause headaches, lung irritation, dizziness, poor coordination, and difficulty concentrating.

Breathing large amounts of trichloroethylene may cause impaired heart function, unconsciousness, and death. Breathing it for long periods may cause nerve, kidney, and liver damage.

Drinking large amounts of trichloroethylene may cause nausea, liver damage, unconsciousness, impaired heart function, or death.

Drinking small amounts of trichloroethylene for long periods may cause liver and kidney damage, impaired immune system function, and impaired fetal development in pregnant women, although the extent of some of these effects is not yet clear.

Skin contact with trichloroethylene for short periods may cause skin rashes.

Trichloroethylene

CAS # 79-01-6

How likely is trichloroethylene to cause cancer?

Some studies with mice and rats have suggested that high levels of trichloroethylene may cause liver, kidney, or lung cancer. Some studies of people exposed over long periods to high levels of trichloroethylene in drinking water or in workplace air have found evidence of increased cancer. Although, there are some concerns about the studies of people who were exposed to trichloroethylene, some of the effects found in people were similar to effects in animals.

In its 9th Report on Carcinogens, the National Toxicology Program (NTP) determined that trichloroethylene is "reasonably anticipated to be a human carcinogen." The International Agency for Research on Cancer (IARC) has determined that trichloroethylene is "probably carcinogenic to humans."

Is there a medical test to show whether I've been exposed to trichloroethylene?

If you have recently been exposed to trichloroethylene, it can be detected in your breath, blood, or urine. The breath test, if it is performed soon after exposure, can tell if you have been exposed to even a small amount of trichloroethylene.

Exposure to larger amounts is assessed by blood and urine tests, which can detect trichloroethylene and many of its breakdown products for up to a week after exposure. However, exposure to other similar chemicals can produce the same breakdown products, so their detection is not absolute proof of exposure to trichloroethylene. This test isn't available at most doctors' offices, but can be done at special laboratories that have the right equipment.

Has the federal government made recommendations to protect human health?

The EPA has set a maximum contaminant level for trichloroethylene in drinking water at 0.005 milligrams per liter (0.005 mg/L) or 5 parts of TCE per billion parts water.

The EPA has also developed regulations for the handling and disposal of trichloroethylene.

The Occupational Safety and Health Administration (OSHA) has set an exposure limit of 100 parts of trichloroethylene per million parts of air (100 ppm) for an 8-hour workday, 40-hour workweek.

Glossary

Carcinogenicity: The ability of a substance to cause cancer.

CAS: Chemical Abstracts Service.

Evaporate: To change into a vapor or gas.

Milligram (mg): One thousandth of a gram.

Nonflammable: Will not burn.

ppm: Parts per million.

Sediment: Mud and debris that have settled to the bottom of a body of water.

Solvent: A chemical that dissolves other substances.

References

This ToxFAQs™ information is taken from the 1997 Toxicological Profile for Trichloroethylene (update) produced by the Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services, Public Health Service in Atlanta, GA.

Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636.

ToxFAQs™ Internet address via WWW is http://www.atsdr.cdc.gov/toxfaqs/index.asp.

ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATTACHMENT A-2

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

301 12TH STREET
OAKLAND, CA 94607
ALAMEDA COUNTY
SITE TYPE: VOLUNTARY CLEANUP

PROJECT MANAGER: HAROLD (BUD) DUKE
SUPERVISOR: JOSE SALCEDO
OFFICE: NORTHERN CALIFORNIA SCHOOLS & SANTA SUSANA
PUBLIC PARTICIPATION SPECIALIST: VERONICA LOPEZ-VILLASENOR

Site Inform

CLEANUP STATUS
ACTIVE AS OF 5/24/2016

SITE TYPE: VOLUNTARY CLEANUP
NATIONAL PRIORITIES LIST: NO
ACRES: 1.72 ACRES
APN: NONE SPECIFIED
CLEANUP OVERSIGHT AGENCIES:
DTSC - SITE CLEANUP PROGRAM - LEAD

ENVIROSTOR ID: 60002362
SITE CODE: 202101
SPECIAL PROGRAM: VOLUNTARY CLEANUP PROGRAM
FUNDING: SITE PROPONENT
ASSEMBLY DISTRICT: , 18
SENATE DISTRICT: , 09

PAST USE(S) THAT CAUSED CONTAMINATION
UNDERGROUND STORAGE TANKS, VEHICLE MAINTENANCE

POTENTIAL CONTAMINANTS OF CONCERN
PETROLEUM
TOXAPHENE
UNDER INVESTIGATION
VOLATILE ORGANICS (8260B VOCS)

POTENTIAL MEDIA AFFECTED
INDOOR AIR, OTHER GROUNDWATER AFFECTED (USES OTHER THAN DRINKING WATER), SOIL, SOIL VAPOR, UNDER INVESTIGATION

This EnviroStor project has two site codes. One site code (202101) for the buyer, and one site code (202097) for the seller.

The AMethod Public Schools Oakland Charter High School (high school) and Downtown Charter Academy (middle school) is located at 345 12th Street and 301 12th Street, respectively, in the city of Oakland, Alameda County (Site). The high school and middle school occupy conjoined 1-to 2-story buildings on the Site which are in the process of being sold for redevelopment.

In mid-May 2016, the Site was transferred from the Regional Water Quality Control Board to DTSC.

Initial draft reports identify that the location was a former automobile dealership and repair center. The property is currently owned by a trust (Richard S. Cochran and Susan L. Cochran Family Trust, et al.) and a cleanup agreement is pending. The property is being purchased by a developer (The Martin Group) who is expected to take ownership in July 2016. The buyer will enter into a California Land Reuse and Revitalization Act (CLRRA) clean-up agreement with DTSC separate from the clean-up agreement between DTSC and the seller.

As part of the due diligence process for the property purchase, the potential buyer collected soil, soil gas and groundwater samples from beneath the Site. Sample results showed elevated concentrations of trichloroethylene (TCE), along with other chlorinated solvents and petroleum hydrocarbons, and samples of indoor air were subsequently collected from the high school and middle school. Sampling results provided in May 2016 identified indoor air TCE concentrations in various rooms in the middle school ranged from 10 to 200 µg/m3, exceeding USEPA Region 9's Accelerated Response Action Level (ARAL) for residential direct exposure (2 µg/m3). Interim indoor air mitigation systems (recirculating air pump and granular activated carbon filters) were installed in the classrooms on May 18, 2016 and operated during off-hours. Confirmation indoor air samples were collected on May 24, 2016 and results indicated concentrations of TCE in indoor air had been reduced to less than the ARAL. DTSC on May 26, 2016 directed the school that the students and staff could return to the building as indoor air levels of TCE were reduced to below the ARAL for residential direct exposure.

Indoor air samples were collected from the high school and middle school on June 14, 2016. Sample results are expected to be received by DTSC the week of June 20th, 2016. Additional indoor air samples are planned to be collected the last week in June, and again in mid to late August of 2016 prior to start of the 2016/2017 school year.

The 2015/2016 school year was completed on June 10th, 2016. Summer school for the two campuses is scheduled for June 20th through July 8th, 2016. The 2016/2017 school year is scheduled to begin on August 24th, 2016.

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ATTACHMENT A-3

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

1640 5th St.., Suite 204 Santa
Santa Monica, California 90401
Tel: (949) 887-9013
Email: mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

<u>Policy:</u>

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

ATTACHMENT A-4

JESSIE MARIE JAEGER

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Mobile: (530) 867-6202
Office: (310) 452-5555
Fax: (310) 452-5550
Email: jessie@swape.com

EDUCATION

UNIVERSITY OF CALIFORNIA, LOS ANGELES **B.S. CONSERVATION BIOLOGY & ENVIRONMENTAL SCIENCES** *JUNE 2014*

PROJECT EXPERIENCE

SOIL WATER AIR PROTECTION ENTERPRISE ***SANTA MONICA, CA***

AIR QUALITY SPECIALIST

SENIOR ANALYST: CEQA ANALYSIS & MODELING

- Calculated roadway, stationary source, and cumulative impacts for risk and hazard analyses at proposed land use projects.
- Quantified criteria air pollutant and greenhouse gas emissions released during construction and operational activities of proposed land use projects using CalEEMod and EMFAC2011 emission factors.
- Utilized AERSCREEN, a screening dispersion model, to determine the ambient air concentrations at sensitive receptor locations.
- Organized presentations containing figures and tables comparing results of particulate matter analyses to CEQA thresholds.
- Prepared reports that discuss results of the health risk analyses conducted for several land use redevelopment projects.

SENIOR ANALYST: GREENHOUSE GAS MODELING AND DETERMINATION OF SIGNIFICANCE

- Quantified greenhouse gas (GHG) emissions of a "business as usual" scenario for proposed land use projects using CalEEMod.
- Determined compliance of proposed projects with AB 32 GHG reduction targets, with measures described in CARB's Scoping Plan for each land use sector, and with GHG significance thresholds recommended by various Air Quality Management Districts in California.
- Produced tables and figures that compare the results of the GHG analyses to applicable CEQA thresholds and reduction targets.

PROJECT MANAGER: OFF-GASSING OF FORMALDEHYDE FROM FLOORING PRODUCTS

- Determined the appropriate standard test methods to effectively measure formaldehyde emissions from flooring products.
- Compiled and analyzed laboratory testing data. Produced tables, charts, and graphs to exhibit emission levels.
- Compared finalized testing data to Proposition 65 No Significant Risk Level (NSRL) and to CARB's Phase 2 Standard.
- Prepared a final analytical report and organized supporting data for use as Expert testimony in environmental litigation.
- Participated in meetings with clients to discuss project strategy and identify solutions to achieve short and long term goals.

PROJECT ANALYST: EXPOSURE ASSESSMENT OF CONTAMINANTS EMITTED BY INCINERATOR

- Reviewed and organized sampling data, and determined the maximum levels of arsenic, dioxin, and lead in soil samples.
- Determined cumulative and hourly particulate deposition of incinerator and modeled particle dispersion locations using GIS and AERMOD.
- Conducted risk assessment using guidance set forth by the Office of Environmental Health Hazard Assessment (OEHHA).
- Utilized LeadSpread8 to evaluate exposure, and the potential adverse health effects from exposure, to lead in the environment.
- Compared final results of assessment to the Environmental Protection Agency's (EPA) Regional Screening Levels (RSLs).

ACCOMPLISHMENTS

- **Recipient**, Bruins Advantage Scholarship, University of California, Los Angeles *SEPT 2010 - JUNE 2014*
- **Academic Honoree,** Dean's List, University of California, Los Angeles *SEPT 2013 - JUNE 2014*
- **Academic Wellness Director**, UCLA Undergraduate Students Associated Council *SEPT 2013 - JUNE 2014*
- **Student Groups Support Committee Member**, UCLA Undergraduate Students Associated Council *SEPT 2012 - JUNE 2013*

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

EXHIBIT B

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

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August 3, 2016

VIA EMAIL and HAND DELIVERY

Chair Jim Moore and
Planning Commission
Oakland City Hall
One Frank H. Ogawa Plaza, Hearing Room No. 1
Oakland, CA 94612

Christina Ferracane
Planner III
City of Oakland
250 Frank H. Ogawa Plaza, Suite 2114
Oakland, CA 94612
Email: cferracane@oaklandnet.com

Re: Supplemental Comments on the CEQA Analysis for the W12 Mixed-Use Project (PLN16-133)

Dear Chair Moore, Honorable Members of the Oakland Planning Commission and Ms. Ferracane:

We write on behalf of Oakland Residents for Responsible Development to provide supplemental comments on the City of Oakland's analysis of the W12 Mixed-Use Project ("Project). We previously submitted comments to Ms. Ferracane on Tuesday August 2, 2016, and plan to hand-deliver them to the Commission at tonight's hearing. Immediately following our submission of the August 2 comments, which noted that the City had failed to provide us with all necessary information regarding air quality impacts and on-site hazards, the City then provided us with those documents.

We reviewed those additional documents with the help of experts Matt Hagemann and Jessie Jaeger of Soil / Water / Air Protection Enterprise ("SWAPE"). Their attached supplemental technical comments are submitted in addition to the

comments in this letter.[1] The curricula vitae of these experts were attached as exhibits to our August 2 comments. The documents reveal additional legal deficiencies in the City's analysis of hazards, as well as health risks and air quality during construction. In light of the fact that the City sent us these documents after close of business the night before the hearing, we hereby reserve the right to provide more detailed comments on these issues once we have had the opportunity to evaluate the documents in depth.

Regarding the City's air quality analysis, SWAPE finds that several of the assumptions used and values inputted into the Project's CalEEMod output files are inconsistent with information disclosed in the CEQA Analysis, thus undermining the accuracy of the model. These inconsistencies are discussed in detail in SWAPE's letter, and include (1) the City's failure to include parking land use in the model and (2) the City's incorrect assumption regarding the use of Level 3 DPF off-road equipment. Therefore, SWAPE concludes that the Project's construction emissions are artificially reduced and the City's CalEEMod air modeling should not be relied upon to determine Project significance.[2]

Regarding the Project's health risks from diesel particulate matter emissions, SWAPE conducted its own health risk assessment based on the CalEEMod files received from the City. SWAPE's model shows that the excess cancer risk to adults, children, and infants during Project construction for the sensitive receptors located 25 meters away are 6.76, 39, and 130 in one million, respectively.[3] The child and infantile exposure for the sensitive receptors far exceed the Bay Area Air Quality Management District threshold of 10 in one million.[4] As a result, SWAPE concludes that a refined health risk assessment must be prepared and included in an EIR.[5]

Regarding the Project's hazards, SWAPE reiterates the dangers of the highly contaminated site, including risks from TCE and other contaminants, and identifies additional hazards associated with the site, including:[6]

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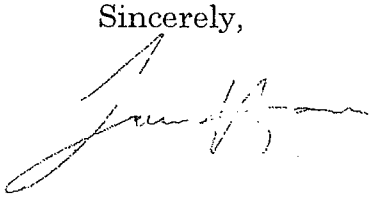
[1] *See* Letter from Matt Hagemann and Jessie Jaeger, SWAPE, to Laura Horton re: Supplemental Comments on the W12 Mixed-Use Project (hereinafter, "SWAPE Comments"), August 3, 2016, **Attachment A**.
[2] *Id.*, at 1 – 3.
[3] *Id.*, at 6.
[4] *Id.*
[5] *Id.*
[6] *Id.*, at 7.

- A suspected waste oil underground storage tank (UST), exact location and regulatory status unknown;
- The presence of seven hydraulic lifts and two possible tanks associated with the hydraulic lifts at the southeastern part of the 301 and 345 12th Street portion of the site – no removal records were found in regulatory agency files;
- The presence of five historical aboveground storage tanks;
- The presence of an 800-gallon oil-containing UST;
- Use of the property for vehicle service and mechanical repair and the presence of a floor drain, in association with these activities;
- The presence of a floor drain in an area of paint and body repair;
- Numerous historical dry-cleaning and auto service facilities in proximity to the Project site.

SWAPE notes that "[n]o requirements for assessment and cleanup to concentrations that are health-protective of construction workers and future Project occupants are included in the Analysis."[7] Therefore, SWAPE concludes that an EIR is necessary to ensure that a thorough investigation is conducted prior to proceeding with soil excavation and Project construction, to determine if development as a residential community is appropriate on the proposed site.[8]

For these reasons and the reasons identified in our August 2 comments, we urge the City to revise its analysis, identify feasible mitigation measure and disclose its revised analysis in an EIR, as required by CEQA, before the City considers approval of the Project.

Sincerely,



Laura E. Horton

LEH:ric
Attachment

[7] *Id.*
[8] *Id.*

ATTACHMENT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405
Matt Hagemann, P.G, C.Hg.
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August 3, 2016

Laura E. Horton
Adams Broadwell Joseph & Cardozo
601 Gateway Blvd., Suite 1000
South San Francisco, CA 94080

Subject: Supplemental Comments on the W12 Mixed-Use Project

Dear Ms. Horton:

We have reviewed the W12 Mixed-Use Project CEQA Analysis ("CEQA Analysis"), CalEEMod output files, and associated attachments/appendices for the proposed mixed-use development project ("Project") located in Oakland, California. The Project proposes to redevelop two parcels within the area of the Lake Merritt Station Area Plan (LMSAP) and plans to construct two buildings consisting of approximately 416 residential units, 317 parking spaces, and 25,050 square feet of retail space on approximately 1.72 acres. The LMSAP Environmental Impact Report (LMSAP EIR) was certified in 2014, and it analyzed program-level impacts associated with adoption and implementation of the LMSAP.

Our review concludes that the CEQA Analysis fails to adequately evaluate the Project's Air Quality and Hazards and Hazardous Waste impacts and construction health risks. A project-specific Draft Environmental Impact Report (DEIR) should be prepared to adequately address these issues and incorporate additional mitigation.

Air Quality and Greenhouse Gas

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The CEQA Analysis for the Project relies on emissions calculated from the California Emissions Estimator Model Version CalEEMod.2013.2.2 ("CalEEMod").[1] CalEEMod provides recommended default values based on site specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but CEQA requires that such changes be justified by substantial evidence.[2] Once all the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These

[1] CalEEMod website, *available at*: http://www.caleemod.com/
[2] CalEEMod User Guide, p. 2, 9, *available at:* http://www.caleemod.com/

output files disclose to the reader what parameters were utilized in calculating the Project's emissions, and make known which default values were changed as well as provide a justification for the values selected.[3]

When we reviewed the Project's CalEEMod output files, we found that several of the assumptions used and values inputted into the model were not consistent with information disclosed in the CEQA Analysis. As a result, a DEIR should be prepared to include an updated air pollution model that uses correct input values.

Failure to Include Parking Land Use

The proposed Project's CalEEMod output files utilized "Land Uses" inconsistent with information disclosed in the IS/MND. According to the CEQA Analysis, the Project proposes to include "317 on-site parking spaces" (p. 15). The CalEEMod output files, however, demonstrate that the model completely omitted the proposed parking land use (see excerpt below).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments High Rise	510.00	Dwelling Unit	1.72	510,000.00	1051
Strip Mall	14.70	1000sqft	0.00	14,700.00	0
High Turnover (Sit Down Restaurant)	3.50	1000sqft	0.00	3,500.00	0

This omission in the proposed "Land Uses" presents a significant issue. The land use type and size features are used throughout CalEEMod in determining default variables and emission factors that go into the model's calculations. By omitting the parking land use from the model, the emissions that would be produced during construction of the proposed parking structure are greatly underestimated. Paving for the parking spaces involves laying concrete or asphalt, which will result in air pollutant emissions during construction.[4] Furthermore, emissions from architectural coating activities, electricity usage from outdoor lighting, ventilation, and elevators in the proposed parking structures are unaccounted for.[5] For example, the architectural coating emissions generated by painting the parking surface areas will be completely omitted from the CalEEMod model emission estimates as a direct result of failing to account for the parking land use. Therefore, an updated CalEEMod model must be prepared in order for the air quality assessment to accurately estimate Project emissions.

Incorrectly Assumed the Use of Level 3 DPF Off-Road Equipment

According to the CalEEMod output files, construction emissions were modeled assuming that all off-road equipment would be equipped with Level 3 diesel particulate filters (DPF). This assumption, however, is not reflected in the CEQA Analysis, and is therefore unsubstantiated. As a result, the County's CalEEMod model artificially reduced construction-related air pollutant emissions.

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[3] CalEEMod User Guide, p. 7, 13, *available at:* http://www.caleemod.com/ (A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.)

[4] CalEEMod User Guide, pp. 25, *available at:* http://www.caleemod.com/

[5] CalEEMod User's Guide, p. 3, *available at:* http://www.caleemod.com/

The User Entered Comments & Non-Default Data section of the CalEEMod model attempts to justify the model's reliance on Level 3 DPF off-road equipment by stating, "Level 3 DPF (VDECS) assumed as mitigation consistent with SCA 19." However, the Project's Standard Condition of Approval 19 (SCA 19), which is included as Attachment A of the CEQA Analysis, does not require the Project's fleet to consist solely of Level 3 DPF equipped vehicles. In fact, with regard to construction equipment, SCA 19 simply requires that all equipment meet emissions and performance requirements one year in advance of any fleet deadlines, that all construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NO_x and PM, and that all off-road heavy diesel engines shall meet the California Air Resources Board's most recent certification standard (CEQA Analysis, Attachment A, p. A-5). SCA does not specify that the Project proponent use Level 3 DPF equipment. Additionally, nowhere in the CEQA Analysis is it stated that Level 3 DPFs are required for all construction equipment. Therefore, there is no credible basis on which to assume that the entire construction fleet will contain these filters. As a result of this unsubstantiated assumption, the Project's construction emissions are greatly underestimated.

A DEIR must be prepared to either explicitly state that Level 3 DPFs are a mandatory mitigation measure for all construction equipment, or a revised air quality analysis must be prepared that more accurately models the Project's construction air quality impact.

For the reasons discussed above, because the CEQA Analysis' CalEEMod model relies on input values that are not consistent with information disclosed in the CEQA Analysis, the Project's construction emissions are artificially reduced. Due to these inconsistencies, we find the CalEEMod model to be unreliable and inaccurate and conclude that it should not be relied upon to determine Project significance. An updated model should be prepared that more accurately represents the proposed Project's emissions.

Diesel Particulate Matter Health Risk Emissions Not Adequately Analyzed

The CEQA Analysis concludes that the health risk posed to nearby sensitive receptors from exposure to diesel particulate matter ("DPM") emissions released during Project construction would be less than significant, yet fails to quantify the risk and compare it to applicable thresholds (p. 38). The CEQA Analysis attempts to justify the omission of an actual health risk assessment ("HRA"), stating, "Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9,40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities" (p. 37). Furthermore, the CEQA Analysis states that, "The LMSAP EIR determined that sensitive receptors in proximity to construction-related DPM emissions (generally within 200 meters) could be subject to increased cancer risk, chronic health problems, and acute health risk. However, all future development projects pursuant to the LMSAP would be subject to basic construction control measures through implementation of the City's SCA's (SCA-A in the LMSAP, see Attachment A). SCA AIR-1, which requires "enhanced" construction emission control measures for of all residential development in excess of 240 units, would implement

construction-related Best Management Practices to substantially reduce construction-related impacts to a less-than-significant level" (p. 37-38). This justification, however, is incorrect.

Although the CEQA Analysis states that the Project would require to include construction control measures through implementation of Standard Conditions of Approval (SCAs), the risk must still be quantified to determine which measures must be applied to reduce DPM emissions and if the measures will reduce emissions to levels that will not cause a significant impact. The CEQA Analysis openly states that the LMSAP EIR determined that sensitive receptors may be subject to an increased cancer risk due to construction activities, so therefore the risk should be quantified in order to determine if the control measures will reduce DPM emissions to adequate levels, as required under CEQA.

Furthermore, the CEQA model assumes that because construction would occur over a short period of time, the health risk posed from construction activities would be negligible. This determination, however, is in contrast to the most recent guidance published by the Office of Environmental Health Hazard Assessment (OEHHA), the organization responsible for providing recommendations for health risk assessments in California. In February of 2015, OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, which was formally adopted in March of 2015.[6] This guidance document describes the types of projects that warrant the preparation of a health risk assessment. Construction of the Project will produce emissions of DPM, a human carcinogen, through the exhaust stacks of construction equipment over a one-year construction period (CEQA Analysis, p. 35). The OEHHA document recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.[7] This recommendation reflects the most recent health risk assessment policy, and as such, an assessment of health risks to nearby sensitive receptors from construction should be included in a revised CEQA evaluation for the Project. In an effort to demonstrate this, we prepared a simple screening-level health risk assessment. The results of our assessment, as described below, demonstrate that construction-related DPM emissions may result in a potentially significant health risk impact.

As of 2011, the EPA recommends AERSCREEN as the leading air dispersion model, due to improvements in simulating local meteorological conditions based on simple input parameters.[8] The model replaced SCREEN3, and AERSCREEN is included in OEHHA[9] and CAPCOA[10] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality

[6] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html

[7] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-18

[8] "AERSCREEN Released as the EPA Recommended Screening Model," USEPA, April 11, 2011, *available at:* http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf

[9] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf

[10] "Health Risk Assessments for Proposed Land Use Projects," CAPCOA, July 2009, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf

hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary health risk screening assessment of the Project's construction emissions using the total exhaust PM_{10} emissions from the CEQA Analysis' CalEEMod output file. Unmitigated construction emissions were utilized because, as discussed previously, the Project's CalEEMod model incorrectly includes Level 3 DPF mitigation to the entire construction fleet, thereby artificially reducing construction emissions.

The output file indicates that construction activities will generate approximately 334.4 pounds of DPM over a 342-day construction period. The AERSCREEN model relies on a continuous average emissions rate to simulate maximum downwind concentrations from point, area, and volume emissions sources. To account for the variability in construction equipment usage over the six phases of Project construction, we calculated an average DPM emission rate by the following equation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{334.4\ lbs}{342\ days} \times \frac{453.6\ grams}{lb} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} \approx 0.0051\ g/s$$

Construction activity was simulated as a 1.72 acre rectangular area source in AERSCREEN, with dimensions of 140 meters by 50 meters. A release height of three meters was selected to represent the height of exhaust stacks on construction equipment, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generated maximum reasonable estimates of single hour downwind DPM concentrations from the Project site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant may be estimated by multiplying the single-hour concentration by 10%.[11] The maximum single-hour downwind concentration in the AERSCREEN output was approximately 15.85 $\mu g/m^3$ DPM 25 meters downwind, a distance that is most representative of sensitive receptor locations adjacent to the Project site. The annualized average concentration for the sensitive receptors was estimated to be 1.58 $\mu g/m^3$.

We calculated the excess cancer risk for each sensitive receptor location, for adults, children, and/or infant receptors using applicable HRA methodologies prescribed by OEHHA. OEHHA recommends the use of Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution.[12] According to the revised guidance, quantified cancer risk should be multiplied by a factor of ten during the first two years of life (infant), and by a factor of three for the subsequent fourteen years of life (child aged two until sixteen). Furthermore, in accordance with guidance set forth by the BAAQMD, we used 95th percentile breathing rates for infants and children and

[11] http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf

[12] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf

80th percentile breathing rates for adults.[13] We used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days. The results of our calculations are shown below.

Parameter	Description	Units	Adult	Child	Infant
C_{air}	Concentration	ug/m^3	1.58	1.58	1.58
DBR	Daily breathing rate	L/kg-day	302	581	581
EF	Exposure Frequency	days/year	350	350	350
ED	Exposure Duration	years	0.94	0.94	0.94
AT	Averaging Time	days	25550	25550	25550
	Inhaled Dose	(mg/kg-day)	6.1E-06	1.2E-05	1.2E-05
CPF	Cancer Potency Factor	1/(mg/kg-day)	1.1	1.1	1.1
ASF	Age Sensitivity Factor	-	1	3	10
	Cancer Risk		**6.76E-06**	**3.90E-05**	**1.30E-04**

The excess cancer risk to adults, children, and infants during Project construction for the sensitive receptors located 25 meters away are 6.76, 39, and 130 in one million, respectively. Consistent with OEHHA guidance, exposure was assumed to begin in the infantile stage of life to provide the most conservative estimates of air quality hazards. The child and infantile exposure for the sensitive receptors exceed the BAAQMD threshold of 10 in one million. As a result, a refined health risk assessment must be prepared and included in a DEIR to examine air quality impacts generated by Project construction using site-specific meteorology and specific equipment usage schedules.

It should be noted that the Project's health risk impact may be greater than what is estimated in our independent screening-level assessment, as the DPM emission value relied upon to conduct this analysis was taken from the CEQA Analysis' CalEEMod model. As was discussed in the previous sections, the CalEEMod model relies upon incorrect input parameters that artificially reduce the Project's construction emissions. Therefore, the health risk posed to nearby sensitive receptors as a result of Project construction may be greater.

Even though our assessment may still underestimate the Project's health risk impact, our analysis still demonstrates that the Project poses a significant health risk as a result of exposure to DPM emissions. Therefore, a revised DEIR must be prepared to adequately evaluate the Project's health risk impact. Furthermore, the reductions from proposed mitigation measures should be quantified to determine if the impact can be reduced to a less than significant impact.

Hazards and Hazardous Waste

The Project overlies a contaminated site included on the Cortese List (the 301 12th Street parcel) as acknowledged in the Analysis. Other parcels underlying the Project site are also potentially contaminated. The CEQA Analysis fails to acknowledge that contaminants underlying the Project site

[13] "Air Toxics NSR Program Health Risk Screening Analysis (HRSA) Guidelines," BAAQMD, January 2010, *available at:* http://www.baaqmd.gov/~/media/Files/Engineering/Air%20Toxics%20Programs/hrsa_guidelines.ashx, p. 2-3

have recently been found in excess of screening levels in the indoor air of existing buildings and that cleanup has yet to commence. Project construction should not be allowed until a DEIR has been prepared to document that a thorough assessment and cleanup of the contamination has been completed under regulatory oversight and that a residential land use is appropriate.

The 301 12th Street Parcel (known on Envirostor as "301 12th Street Future Development"[14]) is a former automobile dealership and repair center. According to Envirostor, a cleanup agreement is pending between the developer (The Martin Group) and the California Department of Toxics Substances Control.[15] The 345 12th Street parcel, also underlying the Project site, was used for vehicle parking, tune-up and alignment, and mechanical repair where hydraulic lifts were used, according to a July 14, 2016 Phase I Environmental Site Assessment prepared for the Project site.[16]

Soil, soil gas and groundwater samples collected from beneath the 301 12th Street Future Development site showed elevated concentrations of trichloroethylene (TCE), along with other chlorinated solvents and petroleum hydrocarbons. The indoor air of the school that is currently located on the property was assessed in May 2016. The concentrations of TCE in indoor air in the school ranged from 10 to 200 µg/m3, greatly exceeding US EPA Region 9's Accelerated Response Action Level (ARAL) for residential direct exposure (2 µg/m3).[17] A ventilation system has reduced concentrations of TCE in indoor air to less than the ARAL. On May 26, 2016, DTSC notified the school that indoor air levels of TCE had been reduced to below the ARAL for residential direct exposure. Whereas the ventilation system has been effective in reducing the indoor air concentrations of TCE, no cleanup has been conducted and no comprehensive evaluation of the source of the TCE and the other chlorinated solvents in the subsurface has been initiated.

A completed vapor intrusion pathway -- whereby TCE and other chlorinated compounds, move from contaminated groundwater, soil, and soil vapor into the air within overlying buildings – has been demonstrated at the Project site and remains viable. TCE is a cancer-causing agent[18] that would pose risks to construction workers and future residents unless the pathway is cut off. The vapor intrusion pathway will remain complete at the Project site until a comprehensive investigation and a remedial effort, where the source of the TCE is removed, has been completed.

The CEQA Analysis does not provide for any mitigation that would target and remove the source of TCE and other chlorinated compounds. The CEQA Analysis only provides for general provisions to address the contamination and only after earth-moving activities are initiated. SCA HAZ-1 and SCA-2 call for implementation of best management practices and measures for dealing with "unexpected" soil contamination that is visually discolored or that is emanating an odor. This is entirely inappropriate for a site where groundwater, soil and soil vapor are known to have been contaminated with TCE. TCE-

[14] http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60002362
[15] Ibid.
[16] Phase I Environmental Site Assessment for 301, 345, and 285 12th Street (Site) in Oakland, California, Langan Treadwell Rollo, July 14, 2016
[17] Ibid.
[18] http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=172&tid=30

contaminated sites can be extremely difficult to assess and remediate to health protective levels. TCE contamination is often found in the form of a dense non-aqueous phase liquid (DNAPL) where pools or layers of leaked TCE accumulates on low-permeability clays in the subsurface. These DNAPLs may be below the area to be excavated and may represent a residual, ongoing source of contamination via the vapor intrusion pathway that would be unaddressed during construction because it would be below the level of Project excavation.

Reliance on SCA HAZ-1 and SCA-2 is also falls short in protecting construction workers and future occupants from other potential sources of contamination at the Project site which, according to the Phase I ESA, include:

- a suspected waste oil underground storage tank (UST), exact location and regulatory status unknown;
- the presence of seven hydraulic lifts and two possible tanks associated with the hydraulic lifts at the southeastern part of the 301 and 345 12th Street portion of the site – no removal records were found in regulatory agency files;
- the presence of five historical aboveground storage tanks;
- the presence of an 800-gallon oil-containing UST;
- use of the property for vehicle service and mechanical repair and the presence of a floor drain, in association with these activities;
- the presence of a floor drain in an area of paint and body repair;
- numerous historical dry-cleaning and auto service facilities in proximity to the Project site.

No requirements for assessment and cleanup to concentrations that are health-protective of construction workers and future Project occupants are included in the Analysis. Instead, the CEQA Analysis assumes that whatever contamination that may be seen or smelled from this myriad of known and suspected contamination sources during grading or trenching will be addressed through undefined BMPs.

Prior to proceeding with soil excavation and Project construction, a thorough investigation of the contamination at the site is necessary to determine if development as a residential community is appropriate. To ensure that the investigation is thorough, DTSC oversight is necessary. DTSC oversight of the cleanup of the Project site is also necessary for the protection of the health of future residents and workers.

The known TCE contamination in groundwater and any residual source of TCE contamination below the water table also poses a water quality issue during dewatering. The Analysis states that "some dewatering may be required for Project construction" but the Analysis fails to consider that groundwater that is dewatered is known to be contaminated with TCE and other compounds. Contaminated groundwater that is generated from the dewatering process needs to be handled and disposed in accordance with the San Francisco Bay Regional Water Quality Control Board's NPDES

General Permit requirements.[19] A DEIR needs to be prepared to identify the Regional Board's dewatering requirements and how they will be met during Project construction.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Jessie Jaeger

[19] http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2012/R2-2012-0060.pdf

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

EXHIBIT C

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

ESA Community Development

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memorandum

DATE: August 12, 2016

TO: Christina Ferracane, Planner III
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FROM: Elizabeth Kanner
Senior Managing Associate
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SUBJECT: **W12 Response to Comment Letters from Adams and Broadwell Joseph & Cardozo**

The CEQA Analysis for the W12 Mixed-Use Project (Project) was published on July 15, 2016. This memorandum provides responses to the letters providing comments on the CEQA Analysis for the W12 Project (PLN16-133) prepared by Adams Broadwell Joseph & Cardozo dated August 2nd and August 3rd, 2016 (hereafter, "Adams Broadwell letters"), as well as the technical comments prepared by SWAPE, which were attached to each letter (hereafter, "SWAPE letters"). The responses are organized into the following topics, which correspond with the topics in the Adams Broadwell letters:

A) Consistency with the CEQA Addendum and Exemption Requirements

B) Adequacy of the On-Site Hazards Analysis and Mitigation

C) Adequacy of the Project-Specific Health Risk from Diesel Particulate Matter (DPM) Analysis and Mitigation

D) Adequacy of the Project-Specific Construction Emissions Analysis and Mitigation[1]

[1] Section D in the Adams and Broadwell Letter dated 8/2 requested the CalEEMod files used to estimate the Project's construction emissions. This request was met and the Adams and Broadwell 8/3 letter comments on these files. Therefore, for ease of review, section D of this memorandum responds to the comments presented in the Adams and Broadwell 8/3 letter.

A. Response to Comment Regarding the Consistency with the CEQA Addendum and Exemption Requirements

Section II. A of the Adams Broadwell letter asserts that the City may not rely on previous environmental analysis for project approval. Specifically, the Adams Broadwell letter asserts that the Project is not consistent with CEQA Addendum and Exemption requirements. Therefore, the Project allegedly would result in new or more severe significant impacts than were analyzed in the Lake Merritt Station Area Plan Environmental Impact Report (LMSAP EIR).[2]

RESPONSE:

The LMSAP EIR analyzed the environmental impacts of the adoption and implementation of the LMSAP at full build out and provided project-level review for reasonably foreseeable development, such as the Project. The City Council certified the LMSAP EIR in accordance with CEQA in November 2014 and the analysis now is presumptively valid under California law. Since that certification, the City has created and relied upon a framework for analyzing projects within the LMSAP area called "CEQA Analysis," which separately and independently provides a basis for CEQA compliance. This framework relies on the applicable streamlining and tiering sections of CEQA: Community Plan Exemption, Qualified Infill Exemption and/or Addendum, as detailed in the CEQA section of the August 3, 2016 Planning Commission Report.

As outlined in exhausting detail, the assumptions and conclusions in the Project's CEQA Analysis are supported by substantial evidence in accordance with CEQA, while none of the assertions presented by Adams Broadwell provides credible, persuasive, or substantial evidence that the Project would result in a new, peculiar, significant environmental impact or a substantial increase in the severity of a significant environmental impact than determined in the LMSAP EIR. In fact, they make numerous misinterpretations of applicable CEQA thresholds for determining significance, and misrepresent many material facts about the Project to justify its conclusions.

Significant impacts also are not "peculiar" to a project or property where uniform policies or standards apply that would mitigate the impact. Site specific analysis is not required where, like here, Standard Conditions of Approval (SCA) apply to mitigate the impact identified and where, as indicated under Appendix M to the CEQA Guidelines, recommendations established by a qualified consultant are implemented. The Project will be required to comply with SCA HAZ-2, and condition of approval number 40, which requires compliance with all federal, state, regional and local law/codes, requirement, regulations and guidelines. In particular, as noted in the Phase I and recognized in the Adams Broadwell letters, the Site is being evaluated by the Department of Toxic Substances Control (DTSC) for additional investigation, mitigation, and remediation of contaminated media. Such actions will comply with these laws, codes, requirements, regulations and guidelines and will render the site

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2 The City of Oakland (City) certified an EIR for the LMSAP in November 2014, pursuant to CEQA. The LMSAP EIR can be obtained from the City of Oakland Bureau of Planning at 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, California 94612, and/or located at http://www2.oaklandnet.com/Government/o/PBN/OurServices/Application/DOWD009157.

impacts to a less than significant level. Impacts identified by Adams Broadwell are therefore not peculiar and the Community Plan and Qualified Infill Exemptions are appropriate.

Finally, contrary to Adams Broadwell's claim, the substantive nature of the CEQA Analysis prepared is not relevant to a determination of whether an Addendum is appropriate. An Addendum to previously certified EIRs is appropriate as long as the project changes, changed circumstances or new information does not require a subsequent EIR. CEQA makes clear that the only relevant test in whether to prepare an Addendum is whether the provision of CEQA Section 15162 can be satisfied. As the CEQA Analysis correctly concludes, none of these provisions requiring preparation of a supplemental or subsequent EIR applies to the Project. Therefore, an Addendum is appropriate.

Adams and Broadwell's comment regarding the substantive nature and length of the Addendum is irrelevant. (See *Fund for Envt'l Defense v County of Orange* (1988) 204 CA3d 1538 (where a lengthy and detailed addendum was prepared with comprehensive discussions and analysis).) Moreover, the discussions merely document the Project's consistency with the LMSAP and its EIR, and satisfy CEQA's primary function as a disclosure tool. The detail and scope of the analysis is a result of the various air quality, GHG and transportation model runs and should not be criticized for being overly informative.

Therefore, the conclusions in the CEQA Analysis are valid and preparation of an EIR is not warranted. The Planning staff can appropriately rely on the CEQA Analysis to support its recommended approval of the Project.

B. Response to Comment Regarding the Adequacy of the On-Site Hazards Analysis and Mitigation

Section II. B of the Adams Broadwell letter asserts that the CEQA Analysis did not adequately address on-site contamination analysis and mitigation.

RESPONSE: Substantial evidence supports the City's determination that the Project's impacts related to hazards will be equal or less severe compared to those identified in previous CEQA documents.

The CEQA Analysis discloses that the Phase I Environmental Site Assessment for the Project identified recognized environmental conditions (RECs) at the Project site. The LMSAP EIR fully analyzed the potential hazards impacts of such contaminated sites, and it determined that state regulatory programs and SCAs will reduce those impacts to a less than significant level. In particular, as detailed in the LMSAP, the applicant will need to comply with regulatory programs established by the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB), including by applying for permits, conducting further investigation, and performing cleanup and remediation actions, as dictated by the regulations and the agencies.

It is entirely appropriate for the City to rely on these regulatory standards as mitigation, and Adams Broadwell appears to ignore the long-standing case law precedent supporting this approach. (See *Perley v Board of Supervisors* (1982) 137 CA3d 424 (upholding reliance on compliance with environmental agency requirements as

mitigation); *Sundstrom v. County of Mendocino* (1988) 202 CA3d 296 (finding that the County's reliance on compliance with air and water quality standards to mitigate air and water quality impact was appropriate); *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 234 CA4th 214 (finding the Department of Fish and Wildlife's reliance on compliance with federal regulations for a hatchery genetic management plan was appropriate); and *Leonoff v Monterey County Bd. of Supervisors* (1990) 222 CA3d 1337 (finding that the County's reliance on compliance with environmental laws on registering hazardous materials and monitoring of underground tanks for leaks was appropriate).

Moreover, in *Oakland Heritage Alliance v. City of Oakland* (2011) 195 CA4th 884, 906, the Court of Appeals held that "a condition requiring compliance with regulations is a common and reasonable mitigation measure and may be proper where it is reasonable to expect compliance." (emphasis added). Because the City requires compliance with all applicable state, federal and regulatory requirements prior to commencing construction, as set forth under SCA HAZ-2 and condition of approval number 40, it is reasonable to expect compliance with the regulatory standards and requirements established for contaminant.

The City's standard conditions of approval (SCAs) will ensure that potential impacts are mitigated to a less than significant level. SCA HAZ-1 *(Hazardous Materials Related to Construction)* requires the use of best management practices and includes provisions in the event that soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities. And SCA-HAZ-2 *(Site Contamination)* requires the implementation of Phase I and II ESA recommendations and a Health and Safety Plan to protect workers during construction.[3] This SCA would require implementation of specific sampling and handling and transport procedures for reuse or disposal in accordance with applicable local, state, and federal requirements. The exact method employed or plan to be implemented will be identified in a Site Management Plan, which will be prepared by the Project sponsor and approved by DTSC and will require compliance with identified federal, state or local regulations or requirements and specific performance criteria. The Project sponsor is obligated to develop measures that comply with the requirements and criteria identified. The Health and Safety Plan would adequately protect workers consistent with applicable worker health and safety standards. SCA-HAZ-2 also requires the implementation of best management practices for the handling of contaminated soil and groundwater discovered during construction activities to ensure their proper storage, treatment, transport, and disposal. Specifically, SCA-HAZ-2 would require that all suspect soil be stockpiled on-site in a secure and safe manner and adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Likewise, groundwater encountered will be staged and sampled prior to discharge to the sewer under permit, or offsite disposal at an appropriate location

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[3] In the case of this project, the "recommendations" to protect workers from site contamination will be encompassed within the Remedy to be prepared under and approved by DTSC. This is assured by Health & Safety Code Section 25356.1(d), which requires remedial action plans supervised by DTSC or the Regional Water Quality Control Boards to be based, in part, on Subpart E of the National Oil and Hazardous Substances Pollution Contingency Plan (40 C.F.R. 300.400 et seq.) (the "NCP"). Subpart E of the NCP contains detailed requirements for Hazardous Substance Response. The NCP further requires that all response actions under the NCP will comply with the provisions for worker safety and health in 29 C.F.R. 1910.120. 40 C.F.R. 300.150. 29 C.F.R. 1910.120 contains detailed requirements for worker health and safety during hazardous waste operations and emergency response.

CEQA and established case law also makes clear that the CEQA Analysis can wait to specify how the measures/conditions identified will be achieved, provided that a determination of impact has been made prior to approval and where known measures/conditions exist that are feasible for the impact identified. Here, the City has determined the impact of the Project will be less than significant. The City's determination was based on the detailed analysis regarding Hazards and Hazardous Materials prepared as part of the LMSAP EIR and the CEQA Analysis and technical studies prepared. The LMSAP EIR analysis included an overview of the regulatory scheme, evaluated potentially significant impacts associated with development in the LMSAP area, analyzed applicable state, federal and local regulatory schemes that would apply, summarized a listing of known contaminated sites in the area and determined that compliance with the SCAs and/or Mitigation Measures would reduce any hazardous impact, and any cumulative hazardous impact, to a less than significant level. The regulations or requirements identified include specific performance criteria that must be met before starting construction and the Project must comply with the mitigation measures and regulatory schemes that were identified to reduce the impacts as identified in the CEQA Analysis and the accompanying technical studies. Additionally, the Project sponsor has committed to devising measures to satisfy those requirements, but there is no requirement under CEQA to devise those measures now, where, as indicated in the LMSAP EIR and the CEQA Analysis, a reasonable basis exists to conclude the impact will be adequately mitigated. (See *Sacramento Old City Ass'n v City Council* (1991) 229 CA3d 1011; *Defend the Bay v City of Irvine* (2004) 119 CA 4th 1261).

The Adams Broadwell letter claims that recent sampling at the Downtown Oakland Charter School shows elevated concentrations of tricholorethylene, other chlorinated solvents, and petroleum hydrocarbons. This information, however, does not show a new or more severe hazards impact. To the contrary, the existing mitigations, SCAs, and regulatory requirements will ensure that any impacts related to these contaminants will be mitigated to a less than significant level. Indeed, the presence of these constituents was fully disclosed in the Phase I ESA and supporting documents that were utilized to prepare the CEQA Analysis. In particular, as noted in the CEQA Analysis, as a DTSC Cleanup Site, the regulatory framework within California requires remediation of soil, soil vapor, and groundwater and other measures, as needed, to render the site suitable for residential development and to protect construction workers during construction. Such actions would reduce the potential impacts from contaminants to a less than significant level.

The Adams Broadwell letter expresses specific concerns about vapor intrusion pathways, the potential presence of TCE dense nonaqueous phase liquid ("DNAPL") and the need to address this potential presence during construction. First, under the direction and oversight of DTSC and the BAAQMD, the vapor intrusion pathway into the existing building (which will be replaced by the new residential structure) has been addressed by the installation of a temporary sub-slab depressurization/soil vapor extraction system. This system removes and treats VOC vapors from the subsurface before they can accumulate in the indoor air at concentrations of concern, and demonstrates that even a temporary retrofitted vapor intrusion mitigation system can be effective to prevent VOC vapor intrusion at this site, and indeed can be effective even before the subsurface source of the VOCs has been remediated under DTSC supervision and pursuant to applicable standards. While the existing environmental conditions are not the result of the Project, the performance of mitigation measures to date indicates that the

Project will not result in or increase the risk of vapor intrusion, but instead that the Project will greatly reduce that risk.

Second, while it is true that TCE can at some sites be found in the form of a DNAPL, it is unlikely that TCE at the Project site has taken that form. The maximum concentration of TCE detected in soil samples is 780 micrograms per kilogram (µg/kg). This value, which is less than the residential soil Regional Screening Level (RSL) of 940 µg/kg but greater than the residential Environmental Screening Level (ESL), is not indicative of the presence of a DNAPL[4]. Likewise, the maximum concentration of TCE detected in groundwater is 1,800 micrograms per liter (µg/l), which is less than 1% of the solubility of TCE in water (14,720 µg/l). Typically, if a groundwater concentration is greater than 1% of the aqueous solubility, this may indicate the presence of a DNAPL[5]. Here, because the maximum concentration of TCE detected in groundwater is less than 1% of the aqueous solubility of TCE, the groundwater data do not support the conclusion that a DNAPL is present at the site. Furthermore, while TCE concentrations in vapor samples are high at the site, according to EPA "[b]ecause some DNAPLs can completely vaporize in relatively short time periods (yet the vapors will persist much longer), the presence of vapors and the mapping of a vapor-phase plume should generally not be used in isolation to conclude that DNAPL is present in the vadose zone, or to delineate the spatial extent of the DNAPL source."[6]. As such, the available data do not indicate that a DNAPL is present at the site.

Finally, given the above considerations, the concerns about the potential for encountering DNAPL during construction are exaggerated. Regardless, should DNAPLs be encountered they would be properly addressed under the construction worker health and safety component of the remedy to be developed under DTSC's guidance and oversight, in accordance with the SCAs.

Therefore, the conclusions in the CEQA Analysis are valid and preparation of an EIR is not warranted. The Planning staff can appropriately rely on the CEQA Analysis to support its recommended approval of the Project.

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4 The presence of DNAPLs has been inferred from soil chemical data where the concentration of DNAPL chemicals in soil are greater than one percent by mass, or 10,000 ppm (EPA, 1994. *DNAPL Site Characterization. OSWER Publication 9355.4-16FS*). 780 µg/kg is considerably less than 10,000 ppm, which is equivalent to 10,000,000 µg/kg.

5 EPA, 1992. *Estimating Potential for Occurrence of DNAPL at Superfund Sites. OSWER Publication 9355.4-07FS.* January.

6 EPA, 2009. *Assessment and Delineation of DNAPL Source Zones at Hazardous Waste Sites.* EPA/600/R-09/119. September

C. Response to Comment Regarding the Adequacy of the Project-Specific Health Risk from Diesel Particulate Matter (DPM) Analysis and Mitigation

Section II. C of the Adams Broadwell letter asserts that the CEQA Analysis fails to assess the health risk impacts from construction-related DPM emissions. The letter also states that the LMSAP EIR deferred the assessment of construction-related health risks to a stage where project-specific impacts and mitigation measures could be determined.

SUMMARY RESPONSE: The following provides a response to SWAPE's comments regarding the need for a construction Health Risk Assessment (HRA):

- The LMSAP EIR disclosed that construction-related health risks would be less than significant with implementation of construction-related best management practices identified in SCA A of the LMSAP EIR. These measures are found in W12 SCA AIR-1 in Attachment A of the CEQA Analysis.
- Project construction would not result in a more severe impact than what was disclosed in the LMSAP EIR.
- The LMSAP EIR does not stipulate that a stand-alone HRA is necessary for construction-related impacts.
- Preparing an additional construction-related HRA would result in unnecessary and duplicative studies.

DETAILED RESPONSE: Impact AIR-3 (construction health risks) was determined to be less than significant in the LMSAP EIR with implementation of SCA A (referred to as SCA AIR-1 in the W12 CEQA Analysis). As stated on page 3.3-39 of the LMSAP EIR, "...SCA A would implement construction-related Best Management Practices to substantially reduce construction-related impacts to a less-than-significant level."

Construction associated with the Project (and other projects in the LMSAP area) would not result in a more severe impact than what was previously disclosed in the LMSAP EIR. Further, as discussed below, there is no evidence that the Project would have peculiar or unusual impacts or impacts that are new or more significant than previously analyzed in the LMSAP EIR. Consequently, the construction health risk has been adequately addressed by the planning-level review and the Project's conditions of approval. Furthermore, there is nothing in the LMSAP EIR indicating that a stand-alone HRA for construction-related impacts is required on a project-by-project basis. In fact, preparation of a construction-related HRA would result in unnecessary and duplicative studies that would ultimately reach the same conclusions and control measures already established in the LMSAP EIR.

For example, as noted on page 3.3-39 of the LMSAP EIR, construction health risks would be minimized to less than significant through application of SCA A (W12 SCA AIR-1), which indicates that diesel emissions would be minimized through the application of various measures. Specifically, subsections (g) and (h) of SCA AIR A (W12 SCA AIR-1) minimize idling; subsection (i) ensures that construction equipment is running in proper condition; subsection (j) specifies that portable equipment would be powered by electricity if available; subsection (u) requires that equipment meet emissions and performance requirements; subsection (v) requires the

use of low volatile organic compound coatings; subsection (w) requires that equipment and diesel trucks be equipped with Best Available Control Technology; and subsection (x) requires that off-road heavy diesel engines meet the California Air Resources Board's most recent certification standard.

The Project sponsor would be obligated to use construction equipment that meets Tier 4 emissions standards and utilize high performance renewable diesel (diesel HPR) in order to comply with subsections (w) and (x). Tier 4 engines and diesel HPR are considered the best available technology and are readily available in the marketplace. Use of Tier 4 engines would reduce total PM2.5 exhaust emissions from construction by approximately 75 percent and diesel HPR would reduce total PM2.5 exhaust emissions from construction by a further 34 percent, relative to unmitigated conditions.

Section II. C of the Adams Broadwell letter also asserts that the guidance set forth by the Office of Environmental Health Hazard Assessment (OEHHA), which recommends that all short term-projects lasting longer than two months be evaluated for cancer risks to nearby sensitive receptors, is applicable to the Project.

RESPONSE: The Adams Broadwell letter incorrectly suggests that OEHHA's recommended methodology is a formal part of the BAAQMD's applicable guidance. In fact, the OEHHA has no binding authority on the Project that would require a stand-alone construction HRA for the Project. BAAQMD has only adopted this methodology with respect to HRAs that are required pursuant to Regulation 2 Permits, Rule 1 General Requirements or Rule 5 New Source Review of Toxic Air Contaminants. BAAQMD has not formally adopted the methodology to sources outside of its permit authority, such as mobile construction equipment. Regardless of the use of OEHHA's recommended methodology, which describes how (and not when) an HRA should be conducted, a stand-alone construction HRA for the Project is not required for the aforementioned reasons.

Further, a cursory review of SWAPE's preliminary health risk screening assessment of the Project's construction emissions revealed that the analysis is overly conservative and, as a result, overstates the Project's construction emissions. SWAPE's analysis used a highly conservative screening model (aerscreen) which overestimates health risk. Aermod is the analysis tool that is the industry standard for conducting HRA's because it allows a much more refined analysis. In addition, SWAPE's analysis used unmitigated data that did not consider SCA AIR-1 which requires all construction equipment and generators shall be equipped with Best Available Control Technology (BACT) for emission reductions of PM which can reduce PM emissions by 75 to 85 percent.

Section II. C The Adams Broadwell letter, based on the list of mitigation measures in the SWAPE letter, lists mitigation measures that could be incorporated to reduce DPM exposure above and beyond SCA AIR-1 (LMSAP SCA A).

RESPONSE: As noted above, LMSAP Impact AIR-3 (construction health risks) was determined to be less than significant in the LMSAP EIR with implementation of LMSAP SCA A (referred to as SCA AIR-1 in the W12 CEQA Analysis), which included the use of best available control technologies for all construction equipment, diesel trucks, and generators, as well as diesel engines that meet the California Air Resources Board's most recent certification standard, which are currently Tier 4. The LMSAP EIR was publicly reviewed and the impact

conclusions certified by the City. Consistent with CEQA Guidelines, the Project tiers from the analysis completed for the LMSAP EIR and, likewise, concludes that construction-related health risks would be less than significant with implementation of SCA AIR-1. Because the Project is consistent with the CEQA streamlining provisions discussed above and the CEQA Analysis is appropriately tiered from the LMSAP EIR, the control measures outlined in W12 SCA AIR-1 represent feasible mitigation required to minimize the impacts. While other control measures could be added to the control measures outlined in W12 SCA AIR-1, they would not be required because the impacts already would be mitigated to less than significant levels. Nonetheless, the following measures proposed in the SWAPE letter are evaluated for their feasibility and redundancy with W12 SCA AIR-1.

Limit Construction Equipment Idling Beyond Regulation Requirements

Subsection (h) of SCA AIR-1 requires idling times on all diesel-fueled off-road vehicles over 25 horsepower to be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes consistent with California Air Resources Board Off-Road Diesel Regulations. Further reduction in idling time allowances is a feasible measure as it is also identified as an operational control for trucks in SCA AIR-2.

Require Implementation of Diesel Control Measures as described by the Northeast Diesel Collaborative (NEDC).

The first NEDC measure cited is for all diesel vehicles onsite for more than 10 days to have emission control technology verified by EPA or CARB to reduce particulate emissions by 85 percent. Subsection (w) of SCA AIR-1 requires that diesel trucks be equipped with Best Available Control Technology. Currently this represents trucks with Level 3 verified diesel Emission Control strategies (particulate filters), which would reduce diesel PM by approximately 85 percent. Consequently, SCA AIR-1 already implements this suggested measure.

The second NEDC measure cited is for all diesel generators on the site to be equipped with emission control technology verified by EPA or CARB to reduce particulate emissions by 85 percent. Again, subsection (w) of SCA AIR-1 requires that diesel equipment be equipped with Best Available Control Technology. Currently this represents generators with Tier 4 engines, which would reduce diesel PM by approximately 85 percent. Consequently, SCA AIR-1 already implements this suggested measure.

The third NEDC measure cited is for all non-road diesel equipment to have engines meeting the EPA Tier 4 standard. Again, subsection (w) of SCA AIR-1 requires that diesel equipment be equipped with Best Available Control Technology. Currently this represents equipment with Tier 4 engines. Consequently, SCA AIR-1 already implements this suggested measure.

The last NEDC measure cited is for all diesel vehicles to be fueled ultra-low sulfur diesel fuel or a biodiesel blend. All commercially available diesel in California has been ultra-low sulfur diesel since 2006. Consequently, this measure no longer represents a meaningful mitigation.

Repower or Replace Older Construction Equipment Engines

This measure is an offset strategy for criteria pollutant emissions and would not serve to reduce local diesel PM risks surrounding the Project site since Tier 4 equipment would already be required for on-site equipment pursuant to SCA AIR-1

Install Retrofit Devices on Existing Construction Equipment

This measure is also an offset strategy for criteria pollutant emissions and would not serve to reduce local diesel PM risks surrounding the Project site since Tier 4 equipment would already be required for on-site equipment pursuant to SCA AIR-1

Use Electric and Hybrid Construction Equipment

While hybrid construction equipment is currently available for purchase for certain equipment types (loaders, rollers, excavators, and dozers), there is currently no regulatory mechanism requiring contractors to acquire equipment using this technology for their equipment fleets as there is for equipment with Tier 4 engines. As a consequence, unlike Tier 4 equipment, the availability of such equipment in contractor fleets cannot be reasonably assured, rendering this potential measure infeasible.

Instituting a Heavy-Duty Off-road Vehicle Plan

This is a potentially feasible component of a Mitigation Monitoring and Reporting Program but would not, through its implementation, result in meaningfully reduced diesel PM emissions or associated risks beyond those realized with implementation of SCA AIR-1.

Implement a Construction Vehicle Inventory Tracking System

A few jurisdictions (Cities of San Francisco and Sacramento) require a tracking system to ensure compliance with specified equipment requirements. This is a potentially feasible component of a Mitigation Monitoring and Reporting Program but would not necessarily equate to a reduction in diesel PM emissions or associated risks than those realized with implementation of SCA AIR-1.

Implement Enhanced Exhaust Control Practices of the Sacramento Metropolitan Air Quality Management District (SMAQMD).

The first two measures of SMAQMD's Enhanced Exhaust Control Practices are the same as the two previously discussed above for the Off-road Vehicle Plan and the Construction Vehicle Tracking System. The third measure would implement an opacity reaction of 40 percent. This would be a feasible mitigation measure, if mitigation were warranted, and if health risks were not reduced to less than significant level by other measures. The last Enhanced Exhaust Control Practice is for the SMAQMD to conduct compliance inspections. However, this measure was developed by SMAQMD which, therefore has agreed to conduct compliance inspections for its

recommended Enhanced Exhaust Control Practices. Since the proposed project is within the jurisdiction of the Bay Area Air Quality Management District, not SMAQMD, it cannot be assured that BAAQMD is adequately staffed or amenable to conducting inspections for control practices not developed are adopted by BAAQMD. Additionally, this measure, if implemented, would be a potentially feasible component of a Mitigation Monitoring and Reporting Program but would not necessarily equate to a reduction in emissions.

Therefore, beyond SCA AIR-1, there are no additional control measures required to further reduce construction-related DPM emissions.

D. Response to Comment Regarding the Adequacy of the Project-Specific Construction Emissions Analysis and Mitigation

Section II. D of the Adams Broadwell letter asserts that the CEQA Analysis incorrectly assumed the Use of Level 3 DPF Off-Road Equipment.

RESPONSE: Although the CalEEMod output contained a note regarding Level 3 PDF, as can be seen in the mitigated output, these emissions reductions were not included in the analysis or reported in the CEQA analysis. In fact, SWAPE performed a screening level assessment using these emission values that did not assume Level 3 PDF. SCA AIR-1 in the CEQA analysis states that all construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology (BACT) for emission reductions of NO_x and PM. At present, the BACT for PM control on off-road equipment is either Level 3 PDF or Tier 4 engines, the latter of which the applicant has now committed to.

Section II. D of the Adams Broadwell letter asserts that the CEQA Analysis fails to provide the public with information regarding project-specific construction emissions.

RESPONSE: While construction-related emissions associated with the parking component of the Project would result in an incremental increase not included in the CEQA Analysis for the W12 Project, this increase would be marginal and would not result in significant criteria air pollutant impacts.

Construction associated with the parking component of the Project would not result in a more severe impact than what was previously disclosed in the CEQA Analysis for the Project. Specifically, the construction of parking would result in an additional 3 pounds per day of ROG and NOx and a statistically insignificant increase in particulate emissions. Construction-related criteria pollutant emissions would still be less than half of the applicable significance thresholds for all four criteria pollutants analyzed, while Project-related emissions of criteria pollutants would be a less than significant air quality impact. CalEEMod files have since been provided to Adams Broadwell, which prove this out.

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

EXHIBIT D

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

Item #5: Additional Construction Emissions Analysis

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July 5, 2016

Memo to: Justin Osler, The Martin Group

From: Allan Daly

Subject: Evaluation of Construction Phase Emissions for the Webster & 12th (W12) Project, Oakland, California

Introduction

Sierra Research evaluated the construction phase emissions of criteria pollutants and greenhouse gases (GHGs) from the Webster & 12th (W12) Project in Oakland, California. The project consists of the redevelopment of one whole city block (60,000 sq. ft. site area) plus one-quarter of a second city block (15,000 sq. ft. site area) with a mixed-use development comprised of the following:

- 416 dwelling units (300,330 sq. ft.);
- 58,385 sq. ft. of leasing, lobby, amenity, multipurpose, and common areas;
- 25,050 sq. ft. of commercial retail space; and
- Multi-level parking with 317 stalls.

The above elements will be arranged in three, 8-level[1] residential towers with street-level commercial retail units and lobby areas (two towers on the whole-block portion and one tower on the quarter-block portion). For the whole-block portion, the parking structure will include three levels, including a basement level. For the quarter-block portion, the parking structure will include two levels (with no basement level).

The whole-block portion of the site (bounded by 11th, 12th, Webster, and Harrison Streets) is currently developed with several one- and two-story buildings that have recently been used for indoor parking and as a charter school. The quarter-block portion of the site is currently developed as a sports hardcourt for the charter school, including one small structure. All of the existing structures currently present on the project area will be demolished.

[1] The towers alternatively may be considered as 7-story buildings if parking levels are not considered—six residential floors over one retail floor.

Construction Emission Sources

Construction of the project will entail a variety of activities that emit criteria air pollutants and GHGs. These activities may be grouped by whether they create fugitive emissions or engine exhaust emissions. Fugitive dust is particulate matter, fractions of which are the pollutants categorized as respirable particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$), based on the aerodynamic diameter of the particles. Other fugitive emissions originate from asphalt off-gassing and the application of architectural coatings, adhesives/sealants, and solvents, all of which emit volatile organic compounds (VOCs). Engine exhaust emissions include all criteria pollutants and GHGs; they are directly emitted at the project construction site and indirectly emitted by vehicles traveling to and from the project, such as trips made by construction worker vehicles, vendor vehicles, and material haul trucks.

Sources of ffugitive emissions from construction of the W12 project are listed below.

- Dust entrained during building demolition and debris loading
- Dust entrained during site preparation and grading and excavation
- Dust created from on-road vehicle travel on public roadways
- VOC emissions from asphalt off-gassing during paving activities
- VOC emissions from the application and use of architectural coatings, adhesives, sealants, and solvents

Sources of engine exhaust emissions from construction of the W12 project include those listed below.

- Equipment used for site preparation, grading, excavation, and trenching
- Equipment used for erecting structures (cranes, forklifts, compressors, generators, etc.)
- Equipment used for paving
- Water trucks used to control construction dust emissions
- Haul trucks used to remove demolition debris and excavated materials
- Vendor vehicles delivering materials, concrete, fuel, and other supplies to the construction site
- Automobiles used by workers to commute to the construction site.

Model Selection, Project Inputs, and Mitigation Measures

Model Selection – Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2013.2.2. CalEEMod is the statewide land use emissions computer model designed to assist government agencies, land use planners, and environmental professionals in quantifying potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects, including those within the Bay Area Air Quality Management District

(BAAQMD).[2] Because the scope of this analysis includes emissions from construction only, all CalEEMod inputs and outputs related to operational emissions are not relied upon. The relevant CalEEMod output reports are included as an attachment to this memo.

Project Inputs – CalEEMod requires a number of project inputs in order to accurately quantify emissions. In cases where project-specific information is not known, the program applies default values based on data derived from special studies or industry-accepted sources.

On the "Land Use" screen, the project was input as four land use subtypes. The residential portion of the project was input as 416 dwelling units of the "Apartments Mid Rise" subtype, with 1.72 acres of lot area, and 300,330 sq. ft. of building area. The leasing, lobby, amenity, multipurpose, and common areas were input as 58,385 sq. ft. of the "General Office Building" subtype, and the street level retail was input as 25,050 sq. ft. of the "Strip Mall" subtype. The parking structures were input as 317 spaces of the "Enclosed Parking with Elevator" subtype.

Due to uncertainty regarding the total time the construction phase may require, emissions were calculated for two different phasing schedules, which were input on the "Construction" screen. The first, shorter construction phasing schedule is based on the default schedule generated by CalEEMod, with the exception that the "Demolition" and "Grading" phases were lengthened to two calendar months each to account for the level of demolition and excavating required for the whole-block portion of the project. Also, the dates of the "Architectural Coating" phase were set to coincide with those of the "Building Construction" phase as it is expected that painting of various sections of the project will be concurrent with construction, rather than the whole project being painted at the end of construction. This construction phasing schedule is 15.6 months in length.

Because construction could continue for a much longer period—up to 30 months—a second phasing schedule was input to ensure that total project emissions would not be underestimated. For the 30-month schedule, the "Grading" phase was likewise proportionally lengthened, and the "Architectural Coating" phase dates were set to coincide with the "Building Construction" dates. The remaining phase schedules were proportionately lengthened so that the entire construction length is 30 months.

For both construction schedules, the default construction start date of January 1, 2017, was retained. Because the shorter construction schedule of 15.6 months may be somewhat compressed compared to the actual construction schedule of up to 30 months, the shorter schedule will result in a conservatively high estimation of emissions on a pounds-per-day basis for some pollutants. The longer construction schedule will result in an overall increase in total project construction emissions for all pollutants.

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[2] It is noted that the BAAQMD *California Environmental Quality Act, Air Quality Guidelines*, (Updated May 2012) indicates that the Urban Land Use Emissions Model (URBEMIS) should be used to quantify construction emissions (See p. 8-1). However, current BAAQMD guidance recommends the use of the latest version of CalEEMod, the currently supported statewide model.

An area of 90,000 sq. ft. was input as the estimated total building area to be demolished. For the whole-block portion of the site area, it was assumed that the entire 60,000 sq. ft. area would need to be excavated ten additional feet to accommodate the basement parking garage, totaling 22,222 cubic yards of material to be exported (in addition to the demolition debris). It was further assumed that the entire 75,000 sq. ft. site area would require three feet of aggregate base, totaling 8,333 cubic yards of material to be imported. The CalEEMod option for "phased" material import/export was selected.

And finally, the surface area to be painted for the "Parking" land use type was decreased from 200% of the parking lot area to 6% of the parking lot area, as described in Appendix E. This corrects a known calculation error within CalEEMod.

Mitigation Measures – The BAAQMD's *California Environmental Quality Act, Air Quality Guidelines* (Updated May 2012) recommends the implementation of all "Basic Construction Mitigation Measures," listed in Table 8.1 of the guidelines.[3] These mitigation measures are shown in Table 1 below.

The mitigation measures listed in Table 1 were input into CalEEMod on the "Mitigation" screen, "Construction" tab. The CalEEMod measures were selected for watering exposed areas (two times per day), limiting vehicle speed on unpaved roads to 15 miles per hour,[4] and cleaning paved roads. For "cleaning paved roads," a 16% reduction in particulate matter was assumed.[5] The remainder of the mitigation measures listed in Table 1 do not result in calculable emissions reductions in CalEEMod, but will likewise be implemented.

[3] Page 8-1.

[4] It is noted that all onroad vehicle trips are assumed to occur on paved roads, so selecting this option within CalEEMod will not reduce the calculated emissions.

[5] From SCAQMD Mitigation Measures and Control Efficiencies, Fugitive Dust Table XI-C, value for "Local streets" implementing a street sweeping program with Rule 1186 compliant PM10 efficient vacuum units (14-day frequency).

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

W12 Project Construction Emissions

The maximum daily emissions from the W12 project are shown in Table 2 (for the 15.6-month schedule) and Table 3 (for the 30-month schedule). Annual emission are shown in Table 4 (for the 15.6-month schedule) and Table 5 (for the 30-month schedule). For daily construction emissions, CalEEMod calculates emissions for both "summer" and "winter." Minor changes in engine exhaust emissions due to ambient temperature account for the differences, and the maximum of either summer or winter is shown in Tables 2 and 3.

Table 2
Maximum Daily Emissions (lbs/day)
15.6-Month Default Construction Phasing Schedule

	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$	CO_2	CH_4	N_2O	CO_2e
Demolition	4.3	45.3	37.3	0.0	3.4	2.2	4,869	1.1	0.0	4,892
Site Preparation	4.9	51.9	40.3	0.0	11.1	7.0	4,172	1.2	0.0	4,198
Grading	5.0	53.7	45.0	0.1	6.3	3.9	7,991	1.0	0.0	8,012
Building Construction	5.5	35.6	50.2	0.1	6.0	2.9	8,051	0.8	0.0	8,069
Architectural Coating	28.5	2.6	5.7	0.0	0.9	0.4	994	0.1	0.0	995
Paving	1.5	14.4	13.2	0.0	1.0	0.8	2,026	0.6	0.0	2,038
Maximum	**34.0**	**53.7**	**55.9**	**0.1**	**11.1**	**7.0**	**9,045**	**1.2**	**0.0**	**9,064**

Table 3
Maximum Daily Emissions (lbs/day)
30-Month Extended Construction Phasing Schedule

	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$	CO_2	CH_4	N_2O	CO_2e
Demolition	4.2	44.1	36.1	0.0	2.8	2.1	4,539	1.1	0.0	4,563
Site Preparation	4.9	51.9	40.3	0.0	7.4	5.1	4,172	1.2	0.0	4,198
Grading	4.3	45.2	35.9	0.1	3.2	2.3	5,675	1.0	0.0	5,695
Building Construction	5.5	35.6	50.2	0.1	6.0	2.9	8,051	0.8	0.0	8,069
Architectural Coating	15.1	2.6	5.7	0.0	0.9	0.4	994	0.1	0.0	995
Paving	1.3	12.7	13.0	0.0	0.9	0.7	1,990	0.6	0.0	2,002
Maximum	**20.6**	**51.9**	**55.9**	**0.1**	**7.4**	**5.1**	**9,045**	**1.2**	**0.0**	**9,064**

Table 4
Annual and Total Project Emissions (TPY or Metric TPY for GHGs)
15.6-Month Default Construction Phasing Schedule

	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$	CO_2	CH_4	N_2O	CO_2e
Demolition	0.09	1.00	0.81	0.00	0.07	0.05	97.0	0.02	0.00	97.4
Site Preparation	0.01	0.13	0.10	0.00	0.03	0.02	9.4	0.00	0.00	9.5
Grading	0.11	1.15	0.90	0.00	0.09	0.06	155.6	0.02	0.00	156.0
Building Construction[a]	0.59	3.94	5.31	0.01	0.66	0.32	808.48	0.09	0.00	810.3
Architectural Coating[a]	3.28	0.29	0.62	0.00	0.10	0.04	97.88	0.01	0.00	98.0
Paving	0.01	0.13	0.12	0.00	0.01	0.01	16.4	0.00	0.00	16.5
Total 2017	**3.05**	**5.46**	**6.23**	**0.01**	**0.75**	**0.39**	**928.3**	**0.11**	**0.00**	**930.7**
Total 2018	**1.04**	**1.17**	**1.63**	**0.00**	**0.21**	**0.10**	**256.4**	**0.03**	**0.00**	**257.1**
Total Project	**4.09**	**6.63**	**7.86**	**0.01**	**0.96**	**0.49**	**1,184.8**	**0.14**	**0.00**	**1,187.8**

a. This phase occurs in both 2017 and 2018.

Table 5
Annual and Total Project Emissions (TPY or Metric TPY for GHGs)
30-Month Extended Construction Phasing Schedule

	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$	CO_2	CH_4	N_2O	CO_2e
Demolition	0.18	1.85	1.50	0.00	0.12	0.09	172.6	0.04	0.00	173.5
Site Preparation	0.02	0.23	0.18	0.00	0.03	0.02	17.0	0.01	0.00	17.1
Grading	0.18	1.87	1.42	0.00	0.13	0.10	213.2	0.04	0.00	213.9
Building Construction[a]	1.03	6.95	9.70	0.02	1.23	0.57	1,525.9	0.16	0.00	1,529.3
Architectural Coating[a]	3.33	0.52	1.12	0.00	0.19	0.07	184.4	0.01	0.00	184.7
Paving	0.02	0.22	0.23	0.00	0.02	0.01	31.4	0.01	0.00	31.6
Total 2017	**1.23**	**5.55**	**5.31**	**0.01**	**0.57**	**0.34**	**735.9**	**0.12**	**0.00**	**738.4**
Total 2018	**2.57**	**4.40**	**6.38**	**0.01**	**0.84**	**0.38**	**1,010.4**	**0.10**	**0.00**	**1,012.5**
Total 2019	**0.95**	**1.70**	**2.47**	**0.01**	**0.31**	**0.14**	**398.2**	**0.05**	**0.00**	**399.2**
Total Project	**4.75**	**11.65**	**14.16**	**0.03**	**1.72**	**0.87**	**2,144.5**	**0.27**	**0.00**	**2,150.1**

a. This phase occurs in 2017, 2018, and 2019.

Significance of Construction Emissions

The BAAQMD adopted CEQA thresholds of significance on June 2, 2010. On March 5, 2012, the Alameda County Superior Court issued a judgment finding that the Air District had failed to comply with CEQA when it adopted those thresholds. The Court did not determine whether the thresholds were valid on the merits, but found that the adoption of the thresholds was a project under CEQA. The court issued a writ of mandate ordering the BAAQMD to set aside the thresholds and cease dissemination of them until the BAAQMD had complied with CEQA.

The BAAQMD appealed the decision, and The Court of Appeal of the State of California, First Appellate District, reversed the trial court's decision. The Court of Appeal's decision was appealed to the California Supreme Court, which granted limited review, and as of the date of this memo, the matter is currently pending there.

In view of the trial court's order, which remains in place pending final resolution of the case, the BAAQMD is no longer recommending that the June 2, 2010 thresholds be relied upon. Rather, Lead Agencies must determine their own appropriate air quality thresholds of significance based on substantial evidence in the record. However, it is noted that based on the mitigation applied (see Table 1), and the daily emission rates of ROG, NOx, PM_{10}, and $PM_{2.5}$, the W12 project would not have exceeded the BAAQMD's June 2, 2010 thresholds of significance pertaining to construction emissions that were set aside.

According to the BAAQMD, Lead Agencies may continue to rely on the Air District's 1999 thresholds of significance, and they may continue to make determinations regarding the significance of an individual project's air quality impacts based on the substantial evidence in the record for that project. For determining the significance of construction emissions, BAAQMD's 1999 CEQA guidance sets forth the following threshold:

> *If all of the control measures indicated in Table 2[6] (as appropriate, depending on the size of the project area) will be implemented, then air pollutant emissions from construction activities would be considered a less than significant impact.*

In reviewing the Basic Construction Mitigation Measures shown in Table 1 of this memo, which will be applied to the project, it is considered that they are equivalent to the measures listed in Table 2 of the BAAQMD's 1999 CEQA Guidelines that can be appropriately applied to a project with a site area of 75,000 sq. ft. (1.25 city blocks).

For the W12 project, the primary construction-phase air quality impact of concern would be the potential for temporary, localized exceedances of ambient air quality standards (AAQSs), primarily due to emissions of fugitive dust. Other air districts have adopted mass-based screening thresholds coupled with mitigation requirements for assessing this impact. For example, in the Sacramento Metropolitan Air Quality Management District (SMAQMD):

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[6] Referring to Table 2 of the *BAAQMD CEQA Guidelines*, December 1999, available at: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqaguid.pdf?la=en

> *Construction of a project that does not exceed the screening level, meets all the screening parameters in Section 3.3.1, and implements the District's Basic Construction Emission Control Practices (also known as Best Management Practices (BMPs)) will be considered to have a less-than-significant impact on air quality.*[7]

Similarly, in the San Joaquin Valley Air Pollution Control District (SJVAPCD), for project construction emissions:

> *The District recommends that an ambient air quality analysis be performed when emissions of any criteria pollutant related to construction activities exceed the 100 pounds per day screening level, after compliance with Rule 9510 requirements and implementation of all enforceable mitigation measures.*[8]

While the construction mitigation measures that will be applied to the W12 project (shown in Table 1) may differ slightly from basic construction mitigation measures in other air districts, the concept of using best management practices (BMPs) during construction is the same. After application of BMPs, the W12 project would not exceed the screening levels of either the SMAQMD or SJVAPCD, and therefore would not cause an exceedance of an AAQS.

Based on all of the above, impacts of the W12 project's construction emissions are less than significant.

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[7] SMAQMD *Guide to Air Quality Assessment in Sacramento* County, Revised March 2016, p. 3-7. On p. 3-4, SMAQMD identifies the screening level as a 35-acre project size. This size, in conjunction with the additional screening parameters, is used to estimate whether the construction NOx threshold of 85 lbs/day would be exceeded. If 85 lbs/day NOx is not exceeded, the qualitative threshold based on the application of BMPs may be applied.

[8] SJVAPCD, *Guidance for Assessing and Mitigation Air Quality Impacts,* March 19, 2015, p. 96.

Attachment

CalEEMod Output Reports

Default 15.6-Month Construction Phasing Schedule

Webster & 12th Construction - 15.6 Months

Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	58.38	1000sqft	1.34	58,385.00	0
Enclosed Parking with Elevator	317.00	Space	0.00	126,800.00	0
Apartments Mid Rise	416.00	Dwelling Unit	1.72	300,330.00	1190
Strip Mall	25.05	1000sqft	0.00	25,050.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Specifications

Construction Phase - Demolition, Grading, and Architechtual Coating Phases increased to 60 calendar days.

Demolition -

Grading - Project Specifications

Architectural Coating - Corrects known error where parking lot is treated as Non-Residential space coated at twice the floor area. Parking lot coating reduced to 6% of area per Appendix E, or 9,999 sq. ft.

Construction Off-road Equipment Mitigation - From SCAQMD Mitigation Measures and Control Efficiencies, Fugitive Dust Table XI-C, value for "Local streets" implementing a street sweeping program with Rule 1186 compliant PM10 efficient vacuum units (14-day frequency).

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	16
tblConstructionPhase	NumDays	18.00	230.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	8.00	43.00
tblConstructionPhase	PhaseEndDate	2/12/2019	3/27/2018
tblConstructionPhase	PhaseEndDate	4/20/2018	4/22/2018
tblConstructionPhase	PhaseStartDate	3/28/2018	5/10/2017
tblGrading	MaterialExported	0.00	22,222.00
tblGrading	MaterialImported	0.00	8,333.00
tblLandUse	LandUseSquareFeet	58,380.00	58,385.00
tblLandUse	LandUseSquareFeet	416,000.00	300,330.00
tblLandUse	LotAcreage	2.85	0.00
tblLandUse	LotAcreage	10.95	1.72
tblLandUse	LotAcreage	0.58	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,778.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	33.8118	52.7600	51.5438	0.1014	18.2360	2.7555	20.9915	9.9757	2.5351	12.5108	0.0000	9,045.2549	9,045.2549	1.2348	0.0000	9,071.1848
2018	33.0907	33.2658	47.8390	0.1013	4.8159	1.7708	6.5867	1.2880	1.6713	2.9593	0.0000	8,824.8628	8,824.8628	0.8704	0.0000	8,843.1416
Total	**66.9025**	**86.0258**	**99.3828**	**0.2027**	**23.0519**	**4.5263**	**27.5782**	**11.2637**	**4.2064**	**15.4701**	**0.0000**	**17,870.1177**	**17,870.1177**	**2.1052**	**0.0000**	**17,914.3264**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	33.8118	52.7600	51.5438	0.1014	8.2996	2.7555	11.0551	4.5138	2.5351	7.0489	0.0000	9,045.2549	9,045.2549	1.2348	0.0000	9,071.1848
2018	33.0907	33.2658	47.8390	0.1013	4.8159	1.7708	6.5867	1.2880	1.6713	2.9593	0.0000	8,824.8628	8,824.8628	0.8704	0.0000	8,843.1416
Total	**66.9025**	**86.0258**	**99.3828**	**0.2027**	**13.1155**	**4.5263**	**17.6418**	**5.8018**	**4.2064**	**10.0082**	**0.0000**	**17,870.1177**	**17,870.1177**	**2.1052**	**0.0000**	**17,914.3264**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	43.10	0.00	36.03	48.49	0.00	35.31	0.00	0.00	0.00	0.00	0.00	0.00

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	3/2/2017	5	44	
2	Site Preparation	Site Preparation	3/3/2017	3/9/2017	5	5	
3	Grading	Grading	3/10/2017	5/9/2017	5	43	
4	Building Construction	Building Construction	5/10/2017	3/27/2018	5	230	
5	Architectural Coating	Architectural Coating	5/10/2017	3/27/2018	5	230	
6	Paving	Paving	3/28/2018	4/22/2018	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 608,168; Residential Outdoor: 202,723; Non-Residential Indoor: 315,353; Non-Residential Outdoor: 105,118 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Demolition	Excavators	3	8.00	162	0.38
Grading	Excavators	1	8.00	162	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	409.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,778.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	379.00	79.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	76.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0135	0.0000	2.0135	0.3049	0.0000	0.3049			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**2.0135**	**2.1252**	**4.1387**	**0.3049**	**1.9797**	**2.2846**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1862	2.4046	1.8443	6.9700e-003	0.1620	0.0319	0.1939	0.0444	0.0293	0.0737		691.6457	691.6457	5.0000e-003		691.7506
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		140.6558	140.6558	6.8500e-003		140.7996
Total	**0.2405**	**2.4698**	**2.6054**	**8.7100e-003**	**0.3034**	**0.0330**	**0.3364**	**0.0819**	**0.0303**	**0.1122**		**832.3015**	**832.3015**	**0.0119**		**832.5502**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9061	0.0000	0.9061	0.1372	0.0000	0.1372			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**0.9061**	**2.1252**	**3.0313**	**0.1372**	**1.9797**	**2.1169**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1862	2.4046	1.8443	6.9700e-003	0.1620	0.0319	0.1939	0.0444	0.0293	0.0737		691.6457	691.6457	5.0000e-003		691.7506
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		140.6558	140.6558	6.8500e-003		140.7996
Total	**0.2405**	**2.4698**	**2.6054**	**8.7100e-003**	**0.3034**	**0.0330**	**0.3364**	**0.0819**	**0.0303**	**0.1122**		**832.3015**	**832.3015**	**0.0119**		**832.5502**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0652	0.0783	0.9133	2.0900e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462		168.7869	168.7869	8.2200e-003		168.9595
Total	**0.0652**	**0.0783**	**0.9133**	**2.0900e-003**	**0.1698**	**1.3000e-003**	**0.1711**	**0.0450**	**1.2000e-003**	**0.0462**		**168.7869**	**168.7869**	**8.2200e-003**		**168.9595**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**8.1298**	**2.7542**	**10.8840**	**4.4688**	**2.5339**	**7.0027**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0652	0.0783	0.9133	2.0900e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462		168.7869	168.7869	8.2200e-003		168.9595
Total	**0.0652**	**0.0783**	**0.9133**	**2.0900e-003**	**0.1698**	**1.3000e-003**	**0.1711**	**0.0450**	**1.2000e-003**	**0.0462**		**168.7869**	**168.7869**	**8.2200e-003**		**168.9595**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2994	0.0000	1.2994	0.6387	0.0000	0.6387			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757		3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**1.2994**	**2.0388**	**3.3382**	**0.6387**	**1.8757**	**2.5144**		**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2939	16.7124	12.8181	0.0485	1.1257	0.2217	1.3474	0.3082	0.2039	0.5121		4,807.0300	4,807.0300	0.0347		4,807.7593
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		140.6558	140.6558	6.8500e-003		140.7996
Total	**1.3483**	**16.7776**	**13.5792**	**0.0502**	**1.2671**	**0.2228**	**1.4900**	**0.3458**	**0.2049**	**0.5507**		**4,947.6858**	**4,947.6858**	**0.0416**		**4,948.5589**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5847	0.0000	0.5847	0.2874	0.0000	0.2874			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**0.5847**	**2.0388**	**2.6235**	**0.2874**	**1.8757**	**2.1631**	**0.0000**	**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2939	16.7124	12.8181	0.0485	1.1257	0.2217	1.3474	0.3082	0.2039	0.5121		4,807.0300	4,807.0300	0.0347		4,807.7593
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		140.6558	140.6558	6.8500e-003		140.7996
Total	**1.3483**	**16.7776**	**13.5792**	**0.0502**	**1.2671**	**0.2228**	**1.4900**	**0.3458**	**0.2049**	**0.5507**		**4,947.6858**	**4,947.6858**	**0.0416**		**4,948.5589**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8122	6.8628	8.4609	0.0188	0.5252	0.1017	0.6269	0.1500	0.0935	0.2435		1,857.4430	1,857.4430	0.0142		1,857.7411
Worker	1.3731	1.6480	19.2296	0.0440	3.5741	0.0274	3.6015	0.9479	0.0252	0.9732		3,553.9026	3,553.9026	0.1730		3,557.5366
Total	**2.1853**	**8.5108**	**27.6905**	**0.0628**	**4.0993**	**0.1291**	**4.2284**	**1.0979**	**0.1187**	**1.2166**		**5,411.3456**	**5,411.3456**	**0.1872**		**5,415.2777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8122	6.8628	8.4609	0.0188	0.5252	0.1017	0.6269	0.1500	0.0935	0.2435		1,857.4430	1,857.4430	0.0142		1,857.7411
Worker	1.3731	1.6480	19.2296	0.0440	3.5741	0.0274	3.6015	0.9479	0.0252	0.9732		3,553.9026	3,553.9026	0.1730		3,557.5366
Total	**2.1853**	**8.5108**	**27.6905**	**0.0628**	**4.0993**	**0.1291**	**4.2284**	**1.0979**	**0.1187**	**1.2166**		**5,411.3456**	**5,411.3456**	**0.1872**		**5,415.2777**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7269	6.2178	7.7014	0.0188	0.5251	0.0942	0.6193	0.1499	0.0866	0.2366		1,824.8213	1,824.8213	0.0139		1,825.1140
Worker	1.2329	1.4838	17.2848	0.0440	3.5741	0.0265	3.6005	0.9479	0.0245	0.9724		3,422.3734	3,422.3734	0.1591		3,425.7150
Total	**1.9598**	**7.7016**	**24.9861**	**0.0627**	**4.0992**	**0.1207**	**4.2199**	**1.0979**	**0.1111**	**1.2089**		**5,247.1946**	**5,247.1946**	**0.1731**		**5,250.8290**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7269	6.2178	7.7014	0.0188	0.5251	0.0942	0.6193	0.1499	0.0866	0.2366		1,824.8213	1,824.8213	0.0139		1,825.1140
Worker	1.2329	1.4838	17.2848	0.0440	3.5741	0.0265	3.6005	0.9479	0.0245	0.9724		3,422.3734	3,422.3734	0.1591		3,425.7150
Total	**1.9598**	**7.7016**	**24.9861**	**0.0627**	**4.0992**	**0.1207**	**4.2199**	**1.0979**	**0.1111**	**1.2089**		**5,247.1946**	**5,247.1946**	**0.1731**		**5,250.8290**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.9165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**28.2488**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2754	0.3305	3.8561	8.8200e-003	0.7167	5.4900e-003	0.7222	0.1901	5.0600e-003	0.1952		712.6559	712.6559	0.0347		713.3846
Total	**0.2754**	**0.3305**	**3.8561**	**8.8200e-003**	**0.7167**	**5.4900e-003**	**0.7222**	**0.1901**	**5.0600e-003**	**0.1952**		**712.6559**	**712.6559**	**0.0347**		**713.3846**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.9165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**28.2488**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2754	0.3305	3.8561	8.8200e-003	0.7167	5.4900e-003	0.7222	0.1901	5.0600e-003	0.1952		712.6559	712.6559	0.0347		713.3846
Total	**0.2754**	**0.3305**	**3.8561**	**8.8200e-003**	**0.7167**	**5.4900e-003**	**0.7222**	**0.1901**	**5.0600e-003**	**0.1952**		**712.6559**	**712.6559**	**0.0347**		**713.3846**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.9165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**28.2151**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2472	0.2975	3.4661	8.8200e-003	0.7167	5.3000e-003	0.7220	0.1901	4.9000e-003	0.1950		686.2807	686.2807	0.0319		686.9508
Total	**0.2472**	**0.2975**	**3.4661**	**8.8200e-003**	**0.7167**	**5.3000e-003**	**0.7220**	**0.1901**	**4.9000e-003**	**0.1950**		**686.2807**	**686.2807**	**0.0319**		**686.9508**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.9165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**28.2151**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2472	0.2975	3.4661	8.8200e-003	0.7167	5.3000e-003	0.7220	0.1901	4.9000e-003	0.1950		686.2807	686.2807	0.0319		686.9508
Total	**0.2472**	**0.2975**	**3.4661**	**8.8200e-003**	**0.7167**	**5.3000e-003**	**0.7220**	**0.1901**	**4.9000e-003**	**0.1950**		**686.2807**	**686.2807**	**0.0319**		**686.9508**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4060	14.3192	12.2631	0.0187		0.8272	0.8272		0.7628	0.7628		1,845.0348	1,845.0348	0.5587		1,856.7667
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4060**	**14.3192**	**12.2631**	**0.0187**		**0.8272**	**0.8272**		**0.7628**	**0.7628**		**1,845.0348**	**1,845.0348**	**0.5587**		**1,856.7667**

3.7 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0651	0.0783	0.9121	2.3200e-003	0.1886	1.4000e-003	0.1900	0.0500	1.2900e-003	0.0513		180.6002	180.6002	8.4000e-003		180.7765
Total	**0.0651**	**0.0783**	**0.9121**	**2.3200e-003**	**0.1886**	**1.4000e-003**	**0.1900**	**0.0500**	**1.2900e-003**	**0.0513**		**180.6002**	**180.6002**	**8.4000e-003**		**180.7765**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4060	14.3192	12.2631	0.0187		0.8272	0.8272		0.7628	0.7628	0.0000	1,845.0348	1,845.0348	0.5587		1,856.7667
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4060**	**14.3192**	**12.2631**	**0.0187**		**0.8272**	**0.8272**		**0.7628**	**0.7628**	**0.0000**	**1,845.0348**	**1,845.0348**	**0.5587**		**1,856.7667**

3.7 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0651	0.0783	0.9121	2.3200e-003	0.1886	1.4000e-003	0.1900	0.0500	1.2900e-003	0.0513		180.6002	180.6002	8.4000e-003		180.7765
Total	**0.0651**	**0.0783**	**0.9121**	**2.3200e-003**	**0.1886**	**1.4000e-003**	**0.1900**	**0.0500**	**1.2900e-003**	**0.0513**		**180.6002**	**180.6002**	**8.4000e-003**		**180.7765**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	20.2384	41.9700	189.3043	0.3071	21.0068	0.6409	21.6477	5.6191	0.5879	6.2070		28,365.9907	28,365.9907	1.3633		28,394.6199
Unmitigated	20.2384	41.9700	189.3043	0.3071	21.0068	0.6409	21.6477	5.6191	0.5879	6.2070		28,365.9907	28,365.9907	1.3633		28,394.6199

Webster & 12th Construction - 15.6 Months

Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	58.38	1000sqft	1.34	58,385.00	0
Enclosed Parking with Elevator	317.00	Space	0.00	126,800.00	0
Apartments Mid Rise	416.00	Dwelling Unit	1.72	300,330.00	1190
Strip Mall	25.05	1000sqft	0.00	25,050.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Specifications

Construction Phase - Demolition, Grading, and Architechtual Coating Phases increased to 60 calendar days.

Demolition -

Grading - Project Specifications

Architectural Coating - Corrects known error where parking lot is treated as Non-Residential space coated at twice the floor area. Parking lot coating reduced to 6% of area per Appendix E, or 9,999 sq. ft.

Construction Off-road Equipment Mitigation - From SCAQMD Mitigation Measures and Control Efficiencies, Fugitive Dust Table XI-C, value for "Local streets" implementing a street sweeping program with Rule 1186 compliant PM10 efficient vacuum units (14-day frequency).

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	16
tblConstructionPhase	NumDays	18.00	230.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	8.00	43.00
tblConstructionPhase	PhaseEndDate	2/12/2019	3/27/2018
tblConstructionPhase	PhaseEndDate	4/20/2018	4/22/2018
tblConstructionPhase	PhaseStartDate	3/28/2018	5/10/2017
tblGrading	MaterialExported	0.00	22,222.00
tblGrading	MaterialImported	0.00	8,333.00
tblLandUse	LandUseSquareFeet	58,380.00	58,385.00
tblLandUse	LandUseSquareFeet	416,000.00	300,330.00
tblLandUse	LotAcreage	2.85	0.00
tblLandUse	LotAcreage	10.95	1.72
tblLandUse	LotAcreage	0.58	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,778.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	34.0164	53.6774	55.7874	0.0972	18.2360	2.7555	20.9915	9.9757	2.5351	12.5108	0.0000	8,700.6422	8,700.6422	1.2348	0.0000	8,726.5721
2018	33.2454	33.9767	51.9420	0.0971	4.8159	1.7717	6.5877	1.2880	1.6722	2.9601	0.0000	8,492.2943	8,492.2943	0.8708	0.0000	8,510.5811
Total	**67.2618**	**87.6541**	**107.7295**	**0.1944**	**23.0519**	**4.5273**	**27.5792**	**11.2637**	**4.2073**	**15.4709**	**0.0000**	**17,192.9365**	**17,192.9365**	**2.1056**	**0.0000**	**17,237.1532**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	34.0164	53.6774	55.7874	0.0972	8.2996	2.7555	11.0551	4.5138	2.5351	7.0489	0.0000	8,700.6422	8,700.6422	1.2348	0.0000	8,726.5721
2018	33.2454	33.9767	51.9420	0.0971	4.8159	1.7717	6.5877	1.2880	1.6722	2.9601	0.0000	8,492.2943	8,492.2943	0.8708	0.0000	8,510.5811
Total	**67.2618**	**87.6541**	**107.7295**	**0.1944**	**13.1155**	**4.5273**	**17.6427**	**5.8018**	**4.2073**	**10.0090**	**0.0000**	**17,192.9365**	**17,192.9365**	**2.1056**	**0.0000**	**17,237.1532**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	43.10	0.00	36.03	48.49	0.00	35.30	0.00	0.00	0.00	0.00	0.00	0.00

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	3/2/2017	5	44	
2	Site Preparation	Site Preparation	3/3/2017	3/9/2017	5	5	
3	Grading	Grading	3/10/2017	5/9/2017	5	43	
4	Building Construction	Building Construction	5/10/2017	3/27/2018	5	230	
5	Architectural Coating	Architectural Coating	5/10/2017	3/27/2018	5	230	
6	Paving	Paving	3/28/2018	4/22/2018	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 608,168; Residential Outdoor: 202,723; Non-Residential Indoor: 315,353; Non-Residential Outdoor: 105,118 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Demolition	Excavators	3	8.00	162	0.38
Grading	Excavators	1	8.00	162	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	409.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,778.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	379.00	79.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	76.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0135	0.0000	2.0135	0.3049	0.0000	0.3049			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**2.0135**	**2.1252**	**4.1387**	**0.3049**	**1.9797**	**2.2846**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2215	2.5344	2.7105	6.9700e-003	0.1620	0.0320	0.1940	0.0444	0.0294	0.0738		690.0284	690.0284	5.0600e-003		690.1347
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		129.7647	129.7647	6.8500e-003		129.9085
Total	**0.2756**	**2.6151**	**3.4478**	**8.5800e-003**	**0.3034**	**0.0331**	**0.3365**	**0.0819**	**0.0304**	**0.1123**		**819.7931**	**819.7931**	**0.0119**		**820.0432**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9061	0.0000	0.9061	0.1372	0.0000	0.1372			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**0.9061**	**2.1252**	**3.0313**	**0.1372**	**1.9797**	**2.1169**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2215	2.5344	2.7105	6.9700e-003	0.1620	0.0320	0.1940	0.0444	0.0294	0.0738		690.0284	690.0284	5.0600e-003		690.1347
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		129.7647	129.7647	6.8500e-003		129.9085
Total	**0.2756**	**2.6151**	**3.4478**	**8.5800e-003**	**0.3034**	**0.0331**	**0.3365**	**0.0819**	**0.0304**	**0.1123**		**819.7931**	**819.7931**	**0.0119**		**820.0432**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0650	0.0969	0.8848	1.9300e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462		155.7176	155.7176	8.2200e-003		155.8902
Total	**0.0650**	**0.0969**	**0.8848**	**1.9300e-003**	**0.1698**	**1.3000e-003**	**0.1711**	**0.0450**	**1.2000e-003**	**0.0462**		**155.7176**	**155.7176**	**8.2200e-003**		**155.8902**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**8.1298**	**2.7542**	**10.8840**	**4.4688**	**2.5339**	**7.0027**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0650	0.0969	0.8848	1.9300e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462		155.7176	155.7176	8.2200e-003		155.8902
Total	**0.0650**	**0.0969**	**0.8848**	**1.9300e-003**	**0.1698**	**1.3000e-003**	**0.1711**	**0.0450**	**1.2000e-003**	**0.0462**		**155.7176**	**155.7176**	**8.2200e-003**		**155.8902**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2994	0.0000	1.2994	0.6387	0.0000	0.6387			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757		3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**1.2994**	**2.0388**	**3.3382**	**0.6387**	**1.8757**	**2.5144**		**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5393	17.6142	18.8381	0.0484	1.1257	0.2223	1.3480	0.3082	0.2045	0.5127		4,795.7896	4,795.7896	0.0352		4,796.5286
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		129.7647	129.7647	6.8500e-003		129.9085
Total	**1.5935**	**17.6949**	**19.5755**	**0.0500**	**1.2671**	**0.2234**	**1.4906**	**0.3458**	**0.2055**	**0.5512**		**4,925.5542**	**4,925.5542**	**0.0420**		**4,926.4371**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5847	0.0000	0.5847	0.2874	0.0000	0.2874			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**0.5847**	**2.0388**	**2.6235**	**0.2874**	**1.8757**	**2.1631**	**0.0000**	**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5393	17.6142	18.8381	0.0484	1.1257	0.2223	1.3480	0.3082	0.2045	0.5127		4,795.7896	4,795.7896	0.0352		4,796.5286
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		129.7647	129.7647	6.8500e-003		129.9085
Total	**1.5935**	**17.6949**	**19.5755**	**0.0500**	**1.2671**	**0.2234**	**1.4906**	**0.3458**	**0.2055**	**0.5512**		**4,925.5542**	**4,925.5542**	**0.0420**		**4,926.4371**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0228	7.1826	13.4250	0.0188	0.5252	0.1028	0.6280	0.1500	0.0945	0.2444		1,843.1942	1,843.1942	0.0146		1,843.5001
Worker	1.3681	2.0396	18.6295	0.0406	3.5741	0.0274	3.6015	0.9479	0.0252	0.9732		3,278.7204	3,278.7204	0.1730		3,282.3543
Total	**2.3909**	**9.2222**	**32.0545**	**0.0593**	**4.0993**	**0.1301**	**4.2294**	**1.0979**	**0.1197**	**1.2176**		**5,121.9146**	**5,121.9146**	**0.1876**		**5,125.8544**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0228	7.1826	13.4250	0.0188	0.5252	0.1028	0.6280	0.1500	0.0945	0.2444		1,843.1942	1,843.1942	0.0146		1,843.5001
Worker	1.3681	2.0396	18.6295	0.0406	3.5741	0.0274	3.6015	0.9479	0.0252	0.9732		3,278.7204	3,278.7204	0.1730		3,282.3543
Total	**2.3909**	**9.2222**	**32.0545**	**0.0593**	**4.0993**	**0.1301**	**4.2294**	**1.0979**	**0.1197**	**1.2176**		**5,121.9146**	**5,121.9146**	**0.1876**		**5,125.8544**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9001	6.5048	12.6305	0.0187	0.5251	0.0951	0.6203	0.1499	0.0875	0.2374		1,810.7827	1,810.7827	0.0143		1,811.0834
Worker	1.2174	1.8369	16.5966	0.0405	3.5741	0.0265	3.6005	0.9479	0.0245	0.9724		3,157.0484	3,157.0484	0.1591		3,160.3901
Total	**2.1175**	**8.3417**	**29.2271**	**0.0592**	**4.0992**	**0.1216**	**4.2208**	**1.0979**	**0.1119**	**1.2098**		**4,967.8311**	**4,967.8311**	**0.1735**		**4,971.4735**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9001	6.5048	12.6305	0.0187	0.5251	0.0951	0.6203	0.1499	0.0875	0.2374		1,810.7827	1,810.7827	0.0143		1,811.0834
Worker	1.2174	1.8369	16.5966	0.0405	3.5741	0.0265	3.6005	0.9479	0.0245	0.9724		3,157.0484	3,157.0484	0.1591		3,160.3901
Total	**2.1175**	**8.3417**	**29.2271**	**0.0592**	**4.0992**	**0.1216**	**4.2208**	**1.0979**	**0.1119**	**1.2098**		**4,967.8311**	**4,967.8311**	**0.1735**		**4,971.4735**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.9165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**28.2488**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2744	0.4090	3.7357	8.1300e-003	0.7167	5.4900e-003	0.7222	0.1901	5.0600e-003	0.1952		657.4743	657.4743	0.0347		658.2030
Total	**0.2744**	**0.4090**	**3.7357**	**8.1300e-003**	**0.7167**	**5.4900e-003**	**0.7222**	**0.1901**	**5.0600e-003**	**0.1952**		**657.4743**	**657.4743**	**0.0347**		**658.2030**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.9165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**28.2488**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2744	0.4090	3.7357	8.1300e-003	0.7167	5.4900e-003	0.7222	0.1901	5.0600e-003	0.1952		657.4743	657.4743	0.0347		658.2030
Total	**0.2744**	**0.4090**	**3.7357**	**8.1300e-003**	**0.7167**	**5.4900e-003**	**0.7222**	**0.1901**	**5.0600e-003**	**0.1952**		**657.4743**	**657.4743**	**0.0347**		**658.2030**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.9165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**28.2151**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2441	0.3684	3.3281	8.1300e-003	0.7167	5.3000e-003	0.7220	0.1901	4.9000e-003	0.1950		633.0757	633.0757	0.0319		633.7458
Total	**0.2441**	**0.3684**	**3.3281**	**8.1300e-003**	**0.7167**	**5.3000e-003**	**0.7220**	**0.1901**	**4.9000e-003**	**0.1950**		**633.0757**	**633.0757**	**0.0319**		**633.7458**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.9165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**28.2151**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2441	0.3684	3.3281	8.1300e-003	0.7167	5.3000e-003	0.7220	0.1901	4.9000e-003	0.1950		633.0757	633.0757	0.0319		633.7458
Total	**0.2441**	**0.3684**	**3.3281**	**8.1300e-003**	**0.7167**	**5.3000e-003**	**0.7220**	**0.1901**	**4.9000e-003**	**0.1950**		**633.0757**	**633.0757**	**0.0319**		**633.7458**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4060	14.3192	12.2631	0.0187		0.8272	0.8272		0.7628	0.7628		1,845.0348	1,845.0348	0.5587		1,856.7667
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4060**	**14.3192**	**12.2631**	**0.0187**		**0.8272**	**0.8272**		**0.7628**	**0.7628**		**1,845.0348**	**1,845.0348**	**0.5587**		**1,856.7667**

3.7 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0642	0.0969	0.8758	2.1400e-003	0.1886	1.4000e-003	0.1900	0.0500	1.2900e-003	0.0513		166.5989	166.5989	8.4000e-003		166.7752
Total	**0.0642**	**0.0969**	**0.8758**	**2.1400e-003**	**0.1886**	**1.4000e-003**	**0.1900**	**0.0500**	**1.2900e-003**	**0.0513**		**166.5989**	**166.5989**	**8.4000e-003**		**166.7752**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4060	14.3192	12.2631	0.0187		0.8272	0.8272		0.7628	0.7628	0.0000	1,845.0348	1,845.0348	0.5587		1,856.7667
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4060**	**14.3192**	**12.2631**	**0.0187**		**0.8272**	**0.8272**		**0.7628**	**0.7628**	**0.0000**	**1,845.0348**	**1,845.0348**	**0.5587**		**1,856.7667**

3.7 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0642	0.0969	0.8758	2.1400e-003	0.1886	1.4000e-003	0.1900	0.0500	1.2900e-003	0.0513		166.5989	166.5989	8.4000e-003		166.7752
Total	**0.0642**	**0.0969**	**0.8758**	**2.1400e-003**	**0.1886**	**1.4000e-003**	**0.1900**	**0.0500**	**1.2900e-003**	**0.0513**		**166.5989**	**166.5989**	**8.4000e-003**		**166.7752**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	21.6261	46.6487	215.9693	0.2886	21.0068	0.6470	21.6538	5.6191	0.5935	6.2126		26,643.3740	26,643.3740	1.3644		26,672.0254
Unmitigated	21.6261	46.6487	215.9693	0.2886	21.0068	0.6470	21.6538	5.6191	0.5935	6.2126		26,643.3740	26,643.3740	1.3644		26,672.0254

Webster & 12th Construction - 15.6 Months

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	58.38	1000sqft	1.34	58,385.00	0
Enclosed Parking with Elevator	317.00	Space	0.00	126,800.00	0
Apartments Mid Rise	416.00	Dwelling Unit	1.72	300,330.00	1190
Strip Mall	25.05	1000sqft	0.00	25,050.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Specifications

Construction Phase - Demolition, Grading, and Architechtual Coating Phases increased to 60 calendar days.

Demolition -

Grading - Project Specifications

Architectural Coating - Corrects known error where parking lot is treated as Non-Residential space coated at twice the floor area. Parking lot coating reduced to 6% of area per Appendix E, or 9,999 sq. ft.

Construction Off-road Equipment Mitigation - From SCAQMD Mitigation Measures and Control Efficiencies, Fugitive Dust Table XI-C, value for "Local streets" implementing a street sweeping program with Rule 1186 compliant PM10 efficient vacuum units (14-day frequency).

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	16
tblConstructionPhase	NumDays	18.00	230.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	8.00	43.00
tblConstructionPhase	PhaseEndDate	2/12/2019	3/27/2018
tblConstructionPhase	PhaseEndDate	4/20/2018	4/22/2018
tblConstructionPhase	PhaseStartDate	3/28/2018	5/10/2017
tblGrading	MaterialExported	0.00	22,222.00
tblGrading	MaterialImported	0.00	8,333.00
tblLandUse	LandUseSquareFeet	58,380.00	58,385.00
tblLandUse	LandUseSquareFeet	416,000.00	300,330.00
tblLandUse	LotAcreage	2.85	0.00
tblLandUse	LotAcreage	10.95	1.72
tblLandUse	LotAcreage	0.58	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,778.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	3.0512	5.4592	6.2260	0.0111	0.5400	0.2785	0.8185	0.1588	0.2608	0.4196	0.0000	928.3245	928.3245	0.1128	0.0000	930.6941
2018	1.0380	1.1746	1.6330	3.2100e-003	0.1453	0.0624	0.2077	0.0390	0.0587	0.0977	0.0000	256.4498	256.4498	0.0291	0.0000	257.0612
Total	**4.0892**	**6.6338**	**7.8591**	**0.0143**	**0.6853**	**0.3409**	**1.0262**	**0.1978**	**0.3195**	**0.5173**	**0.0000**	**1,184.7743**	**1,184.7743**	**0.1420**	**0.0000**	**1,187.7553**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	3.0512	5.4592	6.2260	0.0111	0.4754	0.2785	0.7539	0.1339	0.2608	0.3947	0.0000	928.3240	928.3240	0.1128	0.0000	930.6937
2018	1.0380	1.1746	1.6330	3.2100e-003	0.1453	0.0624	0.2077	0.0390	0.0587	0.0977	0.0000	256.4497	256.4497	0.0291	0.0000	257.0611
Total	**4.0892**	**6.6338**	**7.8590**	**0.0143**	**0.6208**	**0.3409**	**0.9616**	**0.1729**	**0.3195**	**0.4924**	**0.0000**	**1,184.7738**	**1,184.7738**	**0.1420**	**0.0000**	**1,187.7548**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**9.42**	**0.00**	**6.29**	**12.59**	**0.00**	**4.81**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.7815	0.0490	3.9950	1.7500e-003		0.1436	0.1436		0.1436	0.1436	14.7866	16.0524	30.8390	0.0553	5.7000e-004	32.1771
Energy	0.0269	0.2337	0.1260	1.4700e-003		0.0186	0.0186		0.0186	0.0186	0.0000	1,272.6834	1,272.6834	0.0506	0.0143	1,278.1780
Mobile	3.2417	7.2958	32.0696	0.0473	3.2935	0.1047	3.3982	0.8838	0.0961	0.9799	0.0000	3,962.6211	3,962.6211	0.2014	0.0000	3,966.8501
Waste						0.0000	0.0000		0.0000	0.0000	55.2034	0.0000	55.2034	3.2624	0.0000	123.7144
Water						0.0000	0.0000		0.0000	0.0000	12.4794	86.9505	99.4299	1.2855	0.0310	136.0437
Total	**6.0500**	**7.5785**	**36.1906**	**0.0505**	**3.2935**	**0.2669**	**3.5603**	**0.8838**	**0.2582**	**1.1420**	**82.4694**	**5,338.3074**	**5,420.7768**	**4.8552**	**0.0459**	**5,536.9632**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	3/2/2017	5	44	
2	Site Preparation	Site Preparation	3/3/2017	3/9/2017	5	5	
3	Grading	Grading	3/10/2017	5/9/2017	5	43	
4	Building Construction	Building Construction	5/10/2017	3/27/2018	5	230	
5	Architectural Coating	Architectural Coating	5/10/2017	3/27/2018	5	230	
6	Paving	Paving	3/28/2018	4/22/2018	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 608,168; Residential Outdoor: 202,723; Non-Residential Indoor: 315,353; Non-Residential Outdoor: 105,118 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Demolition	Excavators	3	8.00	162	0.38
Grading	Excavators	1	8.00	162	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	409.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,778.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	379.00	79.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	76.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0443	0.0000	0.0443	6.7100e-003	0.0000	6.7100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0891	0.9393	0.7457	8.8000e-004		0.0468	0.0468		0.0436	0.0436	0.0000	80.5601	80.5601	0.0221	0.0000	81.0242
Total	**0.0891**	**0.9393**	**0.7457**	**8.8000e-004**	**0.0443**	**0.0468**	**0.0911**	**6.7100e-003**	**0.0436**	**0.0503**	**0.0000**	**80.5601**	**80.5601**	**0.0221**	**0.0000**	**81.0242**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4700e-003	0.0549	0.0502	1.5000e-004	3.4400e-003	7.0000e-004	4.1500e-003	9.5000e-004	6.5000e-004	1.5900e-003	0.0000	13.7904	13.7904	1.0000e-004	0.0000	13.7925
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1100e-003	1.6200e-003	0.0156	4.0000e-005	2.9900e-003	2.0000e-005	3.0200e-003	8.0000e-004	2.0000e-005	8.2000e-004	0.0000	2.6131	2.6131	1.4000e-004	0.0000	2.6160
Total	**5.5800e-003**	**0.0565**	**0.0658**	**1.9000e-004**	**6.4300e-003**	**7.2000e-004**	**7.1700e-003**	**1.7500e-003**	**6.7000e-004**	**2.4100e-003**	**0.0000**	**16.4034**	**16.4034**	**2.4000e-004**	**0.0000**	**16.4084**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0199	0.0000	0.0199	3.0200e-003	0.0000	3.0200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0891	0.9393	0.7457	8.8000e-004		0.0468	0.0468		0.0436	0.0436	0.0000	80.5600	80.5600	0.0221	0.0000	81.0241
Total	**0.0891**	**0.9393**	**0.7457**	**8.8000e-004**	**0.0199**	**0.0468**	**0.0667**	**3.0200e-003**	**0.0436**	**0.0466**	**0.0000**	**80.5600**	**80.5600**	**0.0221**	**0.0000**	**81.0241**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4700e-003	0.0549	0.0502	1.5000e-004	3.4400e-003	7.0000e-004	4.1500e-003	9.5000e-004	6.5000e-004	1.5900e-003	0.0000	13.7904	13.7904	1.0000e-004	0.0000	13.7925
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1100e-003	1.6200e-003	0.0156	4.0000e-005	2.9900e-003	2.0000e-005	3.0200e-003	8.0000e-004	2.0000e-005	8.2000e-004	0.0000	2.6131	2.6131	1.4000e-004	0.0000	2.6160
Total	**5.5800e-003**	**0.0565**	**0.0658**	**1.9000e-004**	**6.4300e-003**	**7.2000e-004**	**7.1700e-003**	**1.7500e-003**	**6.7000e-004**	**2.4100e-003**	**0.0000**	**16.4034**	**16.4034**	**2.4000e-004**	**0.0000**	**16.4084**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1294	0.0985	1.0000e-004		6.8900e-003	6.8900e-003		6.3300e-003	6.3300e-003	0.0000	9.0789	9.0789	2.7800e-003	0.0000	9.1373
Total	**0.0121**	**0.1294**	**0.0985**	**1.0000e-004**	**0.0452**	**6.8900e-003**	**0.0521**	**0.0248**	**6.3300e-003**	**0.0312**	**0.0000**	**9.0789**	**9.0789**	**2.7800e-003**	**0.0000**	**9.1373**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.2000e-004	2.1300e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3563	0.3563	2.0000e-005	0.0000	0.3567
Total	**1.5000e-004**	**2.2000e-004**	**2.1300e-003**	**0.0000**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3563**	**0.3563**	**2.0000e-005**	**0.0000**	**0.3567**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0203	0.0000	0.0203	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1294	0.0985	1.0000e-004		6.8900e-003	6.8900e-003		6.3300e-003	6.3300e-003	0.0000	9.0788	9.0788	2.7800e-003	0.0000	9.1373
Total	**0.0121**	**0.1294**	**0.0985**	**1.0000e-004**	**0.0203**	**6.8900e-003**	**0.0272**	**0.0112**	**6.3300e-003**	**0.0175**	**0.0000**	**9.0788**	**9.0788**	**2.7800e-003**	**0.0000**	**9.1373**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.2000e-004	2.1300e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3563	0.3563	2.0000e-005	0.0000	0.3567
Total	**1.5000e-004**	**2.2000e-004**	**2.1300e-003**	**0.0000**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3563**	**0.3563**	**2.0000e-005**	**0.0000**	**0.3567**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0279	0.0000	0.0279	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0743	0.7736	0.5457	6.4000e-004		0.0438	0.0438		0.0403	0.0403	0.0000	59.3651	59.3651	0.0182	0.0000	59.7471
Total	**0.0743**	**0.7736**	**0.5457**	**6.4000e-004**	**0.0279**	**0.0438**	**0.0718**	**0.0137**	**0.0403**	**0.0541**	**0.0000**	**59.3651**	**59.3651**	**0.0182**	**0.0000**	**59.7471**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0303	0.3729	0.3411	1.0400e-003	0.0234	4.7700e-003	0.0282	6.4300e-003	4.3900e-003	0.0108	0.0000	93.6665	93.6665	6.8000e-004	0.0000	93.6808
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0800e-003	1.5900e-003	0.0153	3.0000e-005	2.9300e-003	2.0000e-005	2.9500e-003	7.8000e-004	2.0000e-005	8.0000e-004	0.0000	2.5537	2.5537	1.3000e-004	0.0000	2.5565
Total	**0.0314**	**0.3744**	**0.3564**	**1.0700e-003**	**0.0263**	**4.7900e-003**	**0.0311**	**7.2100e-003**	**4.4100e-003**	**0.0116**	**0.0000**	**96.2202**	**96.2202**	**8.1000e-004**	**0.0000**	**96.2373**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0126	0.0000	0.0126	6.1800e-003	0.0000	6.1800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0743	0.7736	0.5457	6.4000e-004		0.0438	0.0438		0.0403	0.0403	0.0000	59.3650	59.3650	0.0182	0.0000	59.7470
Total	**0.0743**	**0.7736**	**0.5457**	**6.4000e-004**	**0.0126**	**0.0438**	**0.0564**	**6.1800e-003**	**0.0403**	**0.0465**	**0.0000**	**59.3650**	**59.3650**	**0.0182**	**0.0000**	**59.7470**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0303	0.3729	0.3411	1.0400e-003	0.0234	4.7700e-003	0.0282	6.4300e-003	4.3900e-003	0.0108	0.0000	93.6665	93.6665	6.8000e-004	0.0000	93.6808
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0800e-003	1.5900e-003	0.0153	3.0000e-005	2.9300e-003	2.0000e-005	2.9500e-003	7.8000e-004	2.0000e-005	8.0000e-004	0.0000	2.5537	2.5537	1.3000e-004	0.0000	2.5565
Total	**0.0314**	**0.3744**	**0.3564**	**1.0700e-003**	**0.0263**	**4.7900e-003**	**0.0311**	**7.2100e-003**	**4.4100e-003**	**0.0116**	**0.0000**	**96.2202**	**96.2202**	**8.1000e-004**	**0.0000**	**96.2373**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2606	2.2181	1.5229	2.2500e-003		0.1496	0.1496		0.1405	0.1405	0.0000	201.1625	201.1625	0.0495	0.0000	202.2022
Total	**0.2606**	**2.2181**	**1.5229**	**2.2500e-003**		**0.1496**	**0.1496**		**0.1405**	**0.1405**	**0.0000**	**201.1625**	**201.1625**	**0.0495**	**0.0000**	**202.2022**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0765	0.5960	0.9227	1.5800e-003	0.0427	8.5800e-003	0.0513	0.0123	7.8900e-003	0.0201	0.0000	141.0877	141.0877	1.0900e-003	0.0000	141.1106
Worker	0.1071	0.1566	1.5072	3.4400e-003	0.2888	2.3000e-003	0.2911	0.0768	2.1200e-003	0.0789	0.0000	252.0917	252.0917	0.0132	0.0000	252.3686
Total	**0.1837**	**0.7526**	**2.4298**	**5.0200e-003**	**0.3315**	**0.0109**	**0.3424**	**0.0891**	**0.0100**	**0.0991**	**0.0000**	**393.1793**	**393.1793**	**0.0143**	**0.0000**	**393.4792**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2606	2.2181	1.5229	2.2500e-003		0.1496	0.1496		0.1405	0.1405	0.0000	201.1622	201.1622	0.0495	0.0000	202.2019
Total	**0.2606**	**2.2181**	**1.5229**	**2.2500e-003**		**0.1496**	**0.1496**		**0.1405**	**0.1405**	**0.0000**	**201.1622**	**201.1622**	**0.0495**	**0.0000**	**202.2019**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0765	0.5960	0.9227	1.5800e-003	0.0427	8.5800e-003	0.0513	0.0123	7.8900e-003	0.0201	0.0000	141.0877	141.0877	1.0900e-003	0.0000	141.1106
Worker	0.1071	0.1566	1.5072	3.4400e-003	0.2888	2.3000e-003	0.2911	0.0768	2.1200e-003	0.0789	0.0000	252.0917	252.0917	0.0132	0.0000	252.3686
Total	**0.1837**	**0.7526**	**2.4298**	**5.0200e-003**	**0.3315**	**0.0109**	**0.3424**	**0.0891**	**0.0100**	**0.0991**	**0.0000**	**393.1793**	**393.1793**	**0.0143**	**0.0000**	**393.4792**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0827	0.7211	0.5435	8.3000e-004		0.0463	0.0463		0.0436	0.0436	0.0000	73.3986	73.3986	0.0180	0.0000	73.7758
Total	**0.0827**	**0.7211**	**0.5435**	**8.3000e-004**		**0.0463**	**0.0463**		**0.0436**	**0.0436**	**0.0000**	**73.3986**	**73.3986**	**0.0180**	**0.0000**	**73.7758**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0251	0.1992	0.3169	5.8000e-004	0.0158	2.9300e-003	0.0187	4.5200e-003	2.7000e-003	7.2200e-003	0.0000	51.1531	51.1531	4.0000e-004	0.0000	51.1615
Worker	0.0353	0.0520	0.4974	1.2700e-003	0.1066	8.2000e-004	0.1074	0.0284	7.6000e-004	0.0291	0.0000	89.5827	89.5827	4.4800e-003	0.0000	89.6766
Total	**0.0603**	**0.2513**	**0.8143**	**1.8500e-003**	**0.1223**	**3.7500e-003**	**0.1261**	**0.0329**	**3.4600e-003**	**0.0363**	**0.0000**	**140.7358**	**140.7358**	**4.8800e-003**	**0.0000**	**140.8381**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0827	0.7211	0.5435	8.3000e-004		0.0463	0.0463		0.0436	0.0436	0.0000	73.3985	73.3985	0.0180	0.0000	73.7757
Total	**0.0827**	**0.7211**	**0.5435**	**8.3000e-004**		**0.0463**	**0.0463**		**0.0436**	**0.0436**	**0.0000**	**73.3985**	**73.3985**	**0.0180**	**0.0000**	**73.7757**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0251	0.1992	0.3169	5.8000e-004	0.0158	2.9300e-003	0.0187	4.5200e-003	2.7000e-003	7.2200e-003	0.0000	51.1531	51.1531	4.0000e-004	0.0000	51.1615
Worker	0.0353	0.0520	0.4974	1.2700e-003	0.1066	8.2000e-004	0.1074	0.0284	7.6000e-004	0.0291	0.0000	89.5827	89.5827	4.4800e-003	0.0000	89.6766
Total	**0.0603**	**0.2513**	**0.8143**	**1.8500e-003**	**0.1223**	**3.7500e-003**	**0.1261**	**0.0329**	**3.4600e-003**	**0.0363**	**0.0000**	**140.7358**	**140.7358**	**4.8800e-003**	**0.0000**	**140.8381**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.3450					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0279	0.1835	0.1569	2.5000e-004		0.0146	0.0146		0.0146	0.0146	0.0000	21.4473	21.4473	2.2600e-003	0.0000	21.4949
Total	**2.3729**	**0.1835**	**0.1569**	**2.5000e-004**		**0.0146**	**0.0146**		**0.0146**	**0.0146**	**0.0000**	**21.4473**	**21.4473**	**2.2600e-003**	**0.0000**	**21.4949**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0215	0.0314	0.3022	6.9000e-004	0.0579	4.6000e-004	0.0584	0.0154	4.2000e-004	0.0158	0.0000	50.5514	50.5514	2.6400e-003	0.0000	50.6069
Total	**0.0215**	**0.0314**	**0.3022**	**6.9000e-004**	**0.0579**	**4.6000e-004**	**0.0584**	**0.0154**	**4.2000e-004**	**0.0158**	**0.0000**	**50.5514**	**50.5514**	**2.6400e-003**	**0.0000**	**50.6069**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.3450					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0279	0.1835	0.1569	2.5000e-004		0.0146	0.0146		0.0146	0.0146	0.0000	21.4473	21.4473	2.2600e-003	0.0000	21.4949
Total	**2.3729**	**0.1835**	**0.1569**	**2.5000e-004**		**0.0146**	**0.0146**		**0.0146**	**0.0146**	**0.0000**	**21.4473**	**21.4473**	**2.2600e-003**	**0.0000**	**21.4949**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0215	0.0314	0.3022	6.9000e-004	0.0579	4.6000e-004	0.0584	0.0154	4.2000e-004	0.0158	0.0000	50.5514	50.5514	2.6400e-003	0.0000	50.6069
Total	**0.0215**	**0.0314**	**0.3022**	**6.9000e-004**	**0.0579**	**4.6000e-004**	**0.0584**	**0.0154**	**4.2000e-004**	**0.0158**	**0.0000**	**50.5514**	**50.5514**	**2.6400e-003**	**0.0000**	**50.6069**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8654					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2600e-003	0.0622	0.0575	9.0000e-005		4.6700e-003	4.6700e-003		4.6700e-003	4.6700e-003	0.0000	7.9151	7.9151	7.5000e-004	0.0000	7.9309
Total	**0.8747**	**0.0622**	**0.0575**	**9.0000e-005**		**4.6700e-003**	**4.6700e-003**		**4.6700e-003**	**4.6700e-003**	**0.0000**	**7.9151**	**7.9151**	**7.5000e-004**	**0.0000**	**7.9309**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0700e-003	0.0104	0.0997	2.5000e-004	0.0214	1.6000e-004	0.0215	5.6800e-003	1.5000e-004	5.8400e-003	0.0000	17.9638	17.9638	9.0000e-004	0.0000	17.9827
Total	**7.0700e-003**	**0.0104**	**0.0997**	**2.5000e-004**	**0.0214**	**1.6000e-004**	**0.0215**	**5.6800e-003**	**1.5000e-004**	**5.8400e-003**	**0.0000**	**17.9638**	**17.9638**	**9.0000e-004**	**0.0000**	**17.9827**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8654					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2600e-003	0.0622	0.0575	9.0000e-005		4.6700e-003	4.6700e-003		4.6700e-003	4.6700e-003	0.0000	7.9151	7.9151	7.5000e-004	0.0000	7.9309
Total	**0.8747**	**0.0622**	**0.0575**	**9.0000e-005**		**4.6700e-003**	**4.6700e-003**		**4.6700e-003**	**4.6700e-003**	**0.0000**	**7.9151**	**7.9151**	**7.5000e-004**	**0.0000**	**7.9309**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0700e-003	0.0104	0.0997	2.5000e-004	0.0214	1.6000e-004	0.0215	5.6800e-003	1.5000e-004	5.8400e-003	0.0000	17.9638	17.9638	9.0000e-004	0.0000	17.9827
Total	**7.0700e-003**	**0.0104**	**0.0997**	**2.5000e-004**	**0.0214**	**1.6000e-004**	**0.0215**	**5.6800e-003**	**1.5000e-004**	**5.8400e-003**	**0.0000**	**17.9638**	**17.9638**	**9.0000e-004**	**0.0000**	**17.9827**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0127	0.1289	0.1104	1.7000e-004		7.4500e-003	7.4500e-003		6.8700e-003	6.8700e-003	0.0000	15.0641	15.0641	4.5600e-003	0.0000	15.1599
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0127**	**0.1289**	**0.1104**	**1.7000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8700e-003**	**6.8700e-003**	**0.0000**	**15.0641**	**15.0641**	**4.5600e-003**	**0.0000**	**15.1599**

3.7 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	8.0000e-004	7.6200e-003	2.0000e-005	1.6300e-003	1.0000e-005	1.6500e-003	4.3000e-004	1.0000e-005	4.5000e-004	0.0000	1.3725	1.3725	7.0000e-005	0.0000	1.3739
Total	**5.4000e-004**	**8.0000e-004**	**7.6200e-003**	**2.0000e-005**	**1.6300e-003**	**1.0000e-005**	**1.6500e-003**	**4.3000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3725**	**1.3725**	**7.0000e-005**	**0.0000**	**1.3739**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0127	0.1289	0.1104	1.7000e-004		7.4500e-003	7.4500e-003		6.8700e-003	6.8700e-003	0.0000	15.0641	15.0641	4.5600e-003	0.0000	15.1599
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0127**	**0.1289**	**0.1104**	**1.7000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8700e-003**	**6.8700e-003**	**0.0000**	**15.0641**	**15.0641**	**4.5600e-003**	**0.0000**	**15.1599**

3.7 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	8.0000e-004	7.6200e-003	2.0000e-005	1.6300e-003	1.0000e-005	1.6500e-003	4.3000e-004	1.0000e-005	4.5000e-004	0.0000	1.3725	1.3725	7.0000e-005	0.0000	1.3739
Total	**5.4000e-004**	**8.0000e-004**	**7.6200e-003**	**2.0000e-005**	**1.6300e-003**	**1.0000e-005**	**1.6500e-003**	**4.3000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3725**	**1.3725**	**7.0000e-005**	**0.0000**	**1.3739**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.2417	7.2958	32.0696	0.0473	3.2935	0.1047	3.3982	0.8838	0.0961	0.9799	0.0000	3,962.6211	3,962.6211	0.2014	0.0000	3,966.8501
Unmitigated	3.2417	7.2958	32.0696	0.0473	3.2935	0.1047	3.3982	0.8838	0.0961	0.9799	0.0000	3,962.6211	3,962.6211	0.2014	0.0000	3,966.8501

Extended 30-Month Construction Phasing Schedule

Webster & 12th Construction - 30 Months

Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	58.38	1000sqft	1.34	58,385.00	0
Enclosed Parking with Elevator	317.00	Space	0.00	126,800.00	0
Apartments Mid Rise	416.00	Dwelling Unit	1.72	300,330.00	1190
Strip Mall	25.05	1000sqft	0.00	25,050.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Specifications

Construction Phase - Custom 30.0 Month Schedule

Demolition -

Grading - Project Specifications

Architectural Coating - Corrects known error where parking lot is treated as Non-Residential space coated at twice the floor area. Parking lot coating reduced to 6% of area per Appendix E, or 9,999 sq. ft.

Construction Off-road Equipment Mitigation - From SCAQMD Mitigation Measures and Control Efficiencies, Fugitive Dust Table XI-C, value for "Local streets" implementing a street sweeping program with Rule 1186 compliant PM10 efficient vacuum units (14-day frequency).

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	16
tblConstructionPhase	NumDays	18.00	442.00
tblConstructionPhase	NumDays	230.00	442.00
tblConstructionPhase	NumDays	20.00	84.00
tblConstructionPhase	NumDays	8.00	83.00
tblConstructionPhase	NumDays	18.00	35.00
tblConstructionPhase	NumDays	5.00	9.00
tblConstructionPhase	PhaseEndDate	1/22/2021	5/15/2019
tblConstructionPhase	PhaseStartDate	5/16/2019	9/5/2017
tblGrading	MaterialExported	0.00	22,222.00
tblGrading	MaterialImported	0.00	8,333.00
tblLandUse	LandUseSquareFeet	58,380.00	58,385.00
tblLandUse	LandUseSquareFeet	416,000.00	300,330.00
tblLandUse	LotAcreage	2.85	0.00
tblLandUse	LotAcreage	10.95	1.72
tblLandUse	LotAcreage	0.58	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,778.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	20.4220	51.8317	51.5438	0.1014	10.2066	2.7555	12.9621	5.5621	2.5351	8.0971	0.0000	9,045.2549	9,045.2549	1.2348	0.0000	9,071.1848
2018	19.7009	33.2658	47.8390	0.1013	4.8159	1.7708	6.5867	1.2880	1.6713	2.9593	0.0000	8,824.8628	8,824.8628	0.8704	0.0000	8,843.1416
2019	19.1732	30.1018	45.1308	0.1013	4.8159	1.5324	6.3483	1.2879	1.4464	2.7343	0.0000	8,616.9108	8,616.9108	0.8430	0.0000	8,634.6131
Total	***59.2961***	***115.1993***	***144.5136***	***0.3040***	***19.8384***	***6.0587***	***25.8971***	***8.1380***	***5.6527***	***13.7907***	***0.0000***	**26,487.0285**	**26,487.0285**	***2.9482***	***0.0000***	**26,548.9395**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	20.4220	51.8317	51.5438	0.1014	4.8160	2.7555	7.4418	2.5277	2.5351	5.0628	0.0000	9,045.2549	9,045.2549	1.2348	0.0000	9,071.1848
2018	19.7009	33.2658	47.8390	0.1013	4.8159	1.7708	6.5867	1.2880	1.6713	2.9593	0.0000	8,824.8628	8,824.8628	0.8704	0.0000	8,843.1416
2019	19.1732	30.1018	45.1308	0.1013	4.8159	1.5324	6.3483	1.2879	1.4464	2.7343	0.0000	8,616.9108	8,616.9108	0.8430	0.0000	8,634.6131
Total	**59.2961**	**115.1993**	**144.5136**	**0.3040**	**14.4478**	**6.0587**	**20.3768**	**5.1036**	**5.6527**	**10.7563**	**0.0000**	**26,487.0285**	**26,487.0285**	**2.9482**	**0.0000**	**26,548.9395**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	27.17	0.00	21.32	37.29	0.00	22.00	0.00	0.00	0.00	0.00	0.00	0.00

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	4/27/2017	5	84	
2	Site Preparation	Site Preparation	4/28/2017	5/10/2017	5	9	
3	Grading	Grading	5/11/2017	9/4/2017	5	83	
4	Building Construction	Building Construction	9/5/2017	5/15/2019	5	442	
5	Architectural Coating	Architectural Coating	9/5/2017	5/15/2019	5	442	
6	Paving	Paving	5/16/2019	7/3/2019	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 608,168; Residential Outdoor: 202,723; Non-Residential Indoor: 315,353; Non-Residential Outdoor: 105,118 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Demolition	Excavators	3	8.00	162	0.38
Grading	Excavators	1	8.00	162	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	409.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,778.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	379.00	79.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	76.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0547	0.0000	1.0547	0.1597	0.0000	0.1597			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**1.0547**	**2.1252**	**3.1799**	**0.1597**	**1.9797**	**2.1394**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0975	1.2596	0.9661	3.6500e-003	0.0848	0.0167	0.1016	0.0232	0.0154	0.0386		362.2906	362.2906	2.6200e-003		362.3456
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		140.6558	140.6558	6.8500e-003		140.7996
Total	**0.1519**	**1.3248**	**1.7271**	**5.3900e-003**	**0.2263**	**0.0178**	**0.2441**	**0.0608**	**0.0164**	**0.0771**		**502.9464**	**502.9464**	**9.4700e-003**		**503.1452**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4746	0.0000	0.4746	0.0719	0.0000	0.0719			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**0.4746**	**2.1252**	**2.5998**	**0.0719**	**1.9797**	**2.0516**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0975	1.2596	0.9661	3.6500e-003	0.0848	0.0167	0.1016	0.0232	0.0154	0.0386		362.2906	362.2906	2.6200e-003		362.3456
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		140.6558	140.6558	6.8500e-003		140.7996
Total	**0.1519**	**1.3248**	**1.7271**	**5.3900e-003**	**0.2263**	**0.0178**	**0.2441**	**0.0608**	**0.0164**	**0.0771**		**502.9464**	**502.9464**	**9.4700e-003**		**503.1452**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					10.0368	0.0000	10.0368	5.5171	0.0000	5.5171			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**10.0368**	**2.7542**	**12.7910**	**5.5171**	**2.5339**	**8.0509**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0652	0.0783	0.9133	2.0900e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462		168.7869	168.7869	8.2200e-003		168.9595
Total	**0.0652**	**0.0783**	**0.9133**	**2.0900e-003**	**0.1698**	**1.3000e-003**	**0.1711**	**0.0450**	**1.2000e-003**	**0.0462**		**168.7869**	**168.7869**	**8.2200e-003**		**168.9595**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5166	0.0000	4.5166	2.4827	0.0000	2.4827			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**4.5166**	**2.7542**	**7.2708**	**2.4827**	**2.5339**	**5.0166**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0652	0.0783	0.9133	2.0900e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462		168.7869	168.7869	8.2200e-003		168.9595
Total	**0.0652**	**0.0783**	**0.9133**	**2.0900e-003**	**0.1698**	**1.3000e-003**	**0.1711**	**0.0450**	**1.2000e-003**	**0.0462**		**168.7869**	**168.7869**	**8.2200e-003**		**168.9595**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6732	0.0000	0.6732	0.3309	0.0000	0.3309			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757		3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**0.6732**	**2.0388**	**2.7120**	**0.3309**	**1.8757**	**2.2066**		**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6703	8.6582	6.6407	0.0251	0.5832	0.1149	0.6981	0.1597	0.1056	0.2653		2,490.3890	2,490.3890	0.0180		2,490.7669
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		140.6558	140.6558	6.8500e-003		140.7996
Total	**0.7247**	**8.7234**	**7.4018**	**0.0268**	**0.7246**	**0.1160**	**0.8406**	**0.1972**	**0.1066**	**0.3038**		**2,631.0448**	**2,631.0448**	**0.0248**		**2,631.5665**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3029	0.0000	0.3029	0.1489	0.0000	0.1489			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**0.3029**	**2.0388**	**2.3417**	**0.1489**	**1.8757**	**2.0246**	**0.0000**	**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6703	8.6582	6.6407	0.0251	0.5832	0.1149	0.6981	0.1597	0.1056	0.2653		2,490.3890	2,490.3890	0.0180		2,490.7669
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		140.6558	140.6558	6.8500e-003		140.7996
Total	**0.7247**	**8.7234**	**7.4018**	**0.0268**	**0.7246**	**0.1160**	**0.8406**	**0.1972**	**0.1066**	**0.3038**		**2,631.0448**	**2,631.0448**	**0.0248**		**2,631.5665**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8122	6.8628	8.4609	0.0188	0.5252	0.1017	0.6269	0.1500	0.0935	0.2435		1,857.4430	1,857.4430	0.0142		1,857.7411
Worker	1.3731	1.6480	19.2296	0.0440	3.5741	0.0274	3.6015	0.9479	0.0252	0.9732		3,553.9026	3,553.9026	0.1730		3,557.5366
Total	**2.1853**	**8.5108**	**27.6905**	**0.0628**	**4.0993**	**0.1291**	**4.2284**	**1.0979**	**0.1187**	**1.2166**		**5,411.3456**	**5,411.3456**	**0.1872**		**5,415.2777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8122	6.8628	8.4609	0.0188	0.5252	0.1017	0.6269	0.1500	0.0935	0.2435		1,857.4430	1,857.4430	0.0142		1,857.7411
Worker	1.3731	1.6480	19.2296	0.0440	3.5741	0.0274	3.6015	0.9479	0.0252	0.9732		3,553.9026	3,553.9026	0.1730		3,557.5366
Total	**2.1853**	**8.5108**	**27.6905**	**0.0628**	**4.0993**	**0.1291**	**4.2284**	**1.0979**	**0.1187**	**1.2166**		**5,411.3456**	**5,411.3456**	**0.1872**		**5,415.2777**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7269	6.2178	7.7014	0.0188	0.5251	0.0942	0.6193	0.1499	0.0866	0.2366		1,824.8213	1,824.8213	0.0139		1,825.1140
Worker	1.2329	1.4838	17.2848	0.0440	3.5741	0.0265	3.6005	0.9479	0.0245	0.9724		3,422.3734	3,422.3734	0.1591		3,425.7150
Total	**1.9598**	**7.7016**	**24.9861**	**0.0627**	**4.0992**	**0.1207**	**4.2199**	**1.0979**	**0.1111**	**1.2089**		**5,247.1946**	**5,247.1946**	**0.1731**		**5,250.8290**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7269	6.2178	7.7014	0.0188	0.5251	0.0942	0.6193	0.1499	0.0866	0.2366		1,824.8213	1,824.8213	0.0139		1,825.1140
Worker	1.2329	1.4838	17.2848	0.0440	3.5741	0.0265	3.6005	0.9479	0.0245	0.9724		3,422.3734	3,422.3734	0.1591		3,425.7150
Total	**1.9598**	**7.7016**	**24.9861**	**0.0627**	**4.0992**	**0.1207**	**4.2199**	**1.0979**	**0.1111**	**1.2089**		**5,247.1946**	**5,247.1946**	**0.1731**		**5,250.8290**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6746	5.6787	7.2517	0.0187	0.5251	0.0875	0.6126	0.1499	0.0805	0.2304		1,793.4417	1,793.4417	0.0136		1,793.7274
Worker	1.1277	1.3517	15.7576	0.0440	3.5741	0.0259	3.6000	0.9479	0.0240	0.9719		3,299.5984	3,299.5984	0.1480		3,302.7064
Total	**1.8023**	**7.0303**	**23.0092**	**0.0627**	**4.0992**	**0.1134**	**4.2126**	**1.0978**	**0.1045**	**1.2023**		**5,093.0400**	**5,093.0400**	**0.1616**		**5,096.4338**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6746	5.6787	7.2517	0.0187	0.5251	0.0875	0.6126	0.1499	0.0805	0.2304		1,793.4417	1,793.4417	0.0136		1,793.7274
Worker	1.1277	1.3517	15.7576	0.0440	3.5741	0.0259	3.6000	0.9479	0.0240	0.9719		3,299.5984	3,299.5984	0.1480		3,302.7064
Total	**1.8023**	**7.0303**	**23.0092**	**0.0627**	**4.0992**	**0.1134**	**4.2126**	**1.0978**	**0.1045**	**1.2023**		**5,093.0400**	**5,093.0400**	**0.1616**		**5,096.4338**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.5267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**14.8590**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2754	0.3305	3.8561	8.8200e-003	0.7167	5.4900e-003	0.7222	0.1901	5.0600e-003	0.1952		712.6559	712.6559	0.0347		713.3846
Total	**0.2754**	**0.3305**	**3.8561**	**8.8200e-003**	**0.7167**	**5.4900e-003**	**0.7222**	**0.1901**	**5.0600e-003**	**0.1952**		**712.6559**	**712.6559**	**0.0347**		**713.3846**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.5267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**14.8590**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2754	0.3305	3.8561	8.8200e-003	0.7167	5.4900e-003	0.7222	0.1901	5.0600e-003	0.1952		712.6559	712.6559	0.0347		713.3846
Total	**0.2754**	**0.3305**	**3.8561**	**8.8200e-003**	**0.7167**	**5.4900e-003**	**0.7222**	**0.1901**	**5.0600e-003**	**0.1952**		**712.6559**	**712.6559**	**0.0347**		**713.3846**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.5267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**14.8253**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2472	0.2975	3.4661	8.8200e-003	0.7167	5.3000e-003	0.7220	0.1901	4.9000e-003	0.1950		686.2807	686.2807	0.0319		686.9508
Total	**0.2472**	**0.2975**	**3.4661**	**8.8200e-003**	**0.7167**	**5.3000e-003**	**0.7220**	**0.1901**	**4.9000e-003**	**0.1950**		**686.2807**	**686.2807**	**0.0319**		**686.9508**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.5267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**14.8253**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2472	0.2975	3.4661	8.8200e-003	0.7167	5.3000e-003	0.7220	0.1901	4.9000e-003	0.1950		686.2807	686.2807	0.0319		686.9508
Total	**0.2472**	**0.2975**	**3.4661**	**8.8200e-003**	**0.7167**	**5.3000e-003**	**0.7220**	**0.1901**	**4.9000e-003**	**0.1950**		**686.2807**	**686.2807**	**0.0319**		**686.9508**

3.6 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.5267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		281.9473
Total	**14.7931**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**281.9473**

3.6 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2261	0.2711	3.1598	8.8100e-003	0.7167	5.1900e-003	0.7219	0.1901	4.8100e-003	0.1949		661.6609	661.6609	0.0297		662.2841
Total	**0.2261**	**0.2711**	**3.1598**	**8.8100e-003**	**0.7167**	**5.1900e-003**	**0.7219**	**0.1901**	**4.8100e-003**	**0.1949**		**661.6609**	**661.6609**	**0.0297**		**662.2841**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.5267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		281.9473
Total	**14.7931**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**281.9473**

3.6 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2261	0.2711	3.1598	8.8100e-003	0.7167	5.1900e-003	0.7219	0.1901	4.8100e-003	0.1949		661.6609	661.6609	0.0297		662.2841
Total	**0.2261**	**0.2711**	**3.1598**	**8.8100e-003**	**0.7167**	**5.1900e-003**	**0.7219**	**0.1901**	**4.8100e-003**	**0.1949**		**661.6609**	**661.6609**	**0.0297**		**662.2841**

3.7 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2520	12.5889	12.1441	0.0187		0.7111	0.7111		0.6560	0.6560		1,816.2490	1,816.2490	0.5585		1,827.9782
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2520**	**12.5889**	**12.1441**	**0.0187**		**0.7111**	**0.7111**		**0.6560**	**0.6560**		**1,816.2490**	**1,816.2490**	**0.5585**		**1,827.9782**

3.7 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0595	0.0713	0.8315	2.3200e-003	0.1886	1.3700e-003	0.1900	0.0500	1.2700e-003	0.0513		174.1213	174.1213	7.8100e-003		174.2853
Total	**0.0595**	**0.0713**	**0.8315**	**2.3200e-003**	**0.1886**	**1.3700e-003**	**0.1900**	**0.0500**	**1.2700e-003**	**0.0513**		**174.1213**	**174.1213**	**7.8100e-003**		**174.2853**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2520	12.5889	12.1441	0.0187		0.7111	0.7111		0.6560	0.6560	0.0000	1,816.2490	1,816.2490	0.5585		1,827.9782
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2520**	**12.5889**	**12.1441**	**0.0187**		**0.7111**	**0.7111**		**0.6560**	**0.6560**	**0.0000**	**1,816.2490**	**1,816.2490**	**0.5585**		**1,827.9782**

3.7 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0595	0.0713	0.8315	2.3200e-003	0.1886	1.3700e-003	0.1900	0.0500	1.2700e-003	0.0513		174.1213	174.1213	7.8100e-003		174.2853
Total	**0.0595**	**0.0713**	**0.8315**	**2.3200e-003**	**0.1886**	**1.3700e-003**	**0.1900**	**0.0500**	**1.2700e-003**	**0.0513**		**174.1213**	**174.1213**	**7.8100e-003**		**174.2853**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	20.2384	41.9700	189.3043	0.3071	21.0068	0.6409	21.6477	5.6191	0.5879	6.2070		28,365.9907	28,365.9907	1.3633		28,394.6199
Unmitigated	20.2384	41.9700	189.3043	0.3071	21.0068	0.6409	21.6477	5.6191	0.5879	6.2070		28,365.9907	28,365.9907	1.3633		28,394.6199

Webster & 12th Construction - 30 Months

Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	58.38	1000sqft	1.34	58,385.00	0
Enclosed Parking with Elevator	317.00	Space	0.00	126,800.00	0
Apartments Mid Rise	416.00	Dwelling Unit	1.72	300,330.00	1190
Strip Mall	25.05	1000sqft	0.00	25,050.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Specifications

Construction Phase - Custom 30.0 Month Schedule

Demolition -

Grading - Project Specifications

Architectural Coating - Corrects known error where parking lot is treated as Non-Residential space coated at twice the floor area. Parking lot coating reduced to 6% of area per Appendix E, or 9,999 sq. ft.

Construction Off-road Equipment Mitigation - From SCAQMD Mitigation Measures and Control Efficiencies, Fugitive Dust Table XI-C, value for "Local streets" implementing a street sweeping program with Rule 1186 compliant PM10 efficient vacuum units (14-day frequency).

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	16
tblConstructionPhase	NumDays	18.00	442.00
tblConstructionPhase	NumDays	230.00	442.00
tblConstructionPhase	NumDays	20.00	84.00
tblConstructionPhase	NumDays	8.00	83.00
tblConstructionPhase	NumDays	18.00	35.00
tblConstructionPhase	NumDays	5.00	9.00
tblConstructionPhase	PhaseEndDate	1/22/2021	5/15/2019
tblConstructionPhase	PhaseStartDate	5/16/2019	9/5/2017
tblGrading	MaterialExported	0.00	22,222.00
tblGrading	MaterialImported	0.00	8,333.00
tblLandUse	LandUseSquareFeet	58,380.00	58,385.00
tblLandUse	LandUseSquareFeet	416,000.00	300,330.00
tblLandUse	LotAcreage	2.85	0.00
tblLandUse	LotAcreage	10.95	1.72
tblLandUse	LotAcreage	0.58	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,778.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	20.6266	51.8503	55.7874	0.0972	10.2066	2.7555	12.9621	5.5621	2.5351	8.0971	0.0000	8,700.6422	8,700.6422	1.2348	0.0000	8,726.5721
2018	19.8556	33.9767	51.9420	0.0971	4.8159	1.7717	6.5877	1.2880	1.6722	2.9601	0.0000	8,492.2943	8,492.2943	0.8708	0.0000	8,510.5811
2019	19.3009	30.7478	49.1015	0.0971	4.8159	1.5333	6.3491	1.2879	1.4471	2.7351	0.0000	8,295.6378	8,295.6378	0.8434	0.0000	8,313.3483
Total	**59.7831**	**116.5748**	**156.8310**	**0.2915**	**19.8384**	**6.0605**	**25.8989**	**8.1380**	**5.6544**	**13.7923**	**0.0000**	**25,488.5743**	**25,488.5743**	**2.9489**	**0.0000**	**25,550.5016**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	20.6266	51.8503	55.7874	0.0972	4.8160	2.7555	7.4418	2.5277	2.5351	5.0628	0.0000	8,700.6422	8,700.6422	1.2348	0.0000	8,726.5721
2018	19.8556	33.9767	51.9420	0.0971	4.8159	1.7717	6.5877	1.2880	1.6722	2.9601	0.0000	8,492.2943	8,492.2943	0.8708	0.0000	8,510.5811
2019	19.3009	30.7478	49.1015	0.0971	4.8159	1.5333	6.3491	1.2879	1.4471	2.7351	0.0000	8,295.6378	8,295.6378	0.8434	0.0000	8,313.3483
Total	**59.7831**	**116.5748**	**156.8310**	**0.2915**	**14.4478**	**6.0605**	**20.3786**	**5.1036**	**5.6544**	**10.7580**	**0.0000**	**25,488.5743**	**25,488.5743**	**2.9489**	**0.0000**	**25,550.5016**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	27.17	0.00	21.31	37.29	0.00	22.00	0.00	0.00	0.00	0.00	0.00	0.00

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	4/27/2017	5	84	
2	Site Preparation	Site Preparation	4/28/2017	5/10/2017	5	9	
3	Grading	Grading	5/11/2017	9/4/2017	5	83	
4	Building Construction	Building Construction	9/5/2017	5/15/2019	5	442	
5	Architectural Coating	Architectural Coating	9/5/2017	5/15/2019	5	442	
6	Paving	Paving	5/16/2019	7/3/2019	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 608,168; Residential Outdoor: 202,723; Non-Residential Indoor: 315,353; Non-Residential Outdoor: 105,118 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Demolition	Excavators	3	8.00	162	0.38
Grading	Excavators	1	8.00	162	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	409.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,778.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	379.00	79.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	76.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0547	0.0000	1.0547	0.1597	0.0000	0.1597			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**1.0547**	**2.1252**	**3.1799**	**0.1597**	**1.9797**	**2.1394**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1160	1.3275	1.4198	3.6500e-003	0.0848	0.0168	0.1016	0.0232	0.0154	0.0386		361.4435	361.4435	2.6500e-003		361.4991
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		129.7647	129.7647	6.8500e-003		129.9085
Total	**0.1702**	**1.4083**	**2.1571**	**5.2600e-003**	**0.2263**	**0.0178**	**0.2441**	**0.0608**	**0.0164**	**0.0772**		**491.2081**	**491.2081**	**9.5000e-003**		**491.4076**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4746	0.0000	0.4746	0.0719	0.0000	0.0719			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**0.4746**	**2.1252**	**2.5998**	**0.0719**	**1.9797**	**2.0516**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1160	1.3275	1.4198	3.6500e-003	0.0848	0.0168	0.1016	0.0232	0.0154	0.0386		361.4435	361.4435	2.6500e-003		361.4991
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		129.7647	129.7647	6.8500e-003		129.9085
Total	**0.1702**	**1.4083**	**2.1571**	**5.2600e-003**	**0.2263**	**0.0178**	**0.2441**	**0.0608**	**0.0164**	**0.0772**		**491.2081**	**491.2081**	**9.5000e-003**		**491.4076**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					10.0368	0.0000	10.0368	5.5171	0.0000	5.5171			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**10.0368**	**2.7542**	**12.7910**	**5.5171**	**2.5339**	**8.0509**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0650	0.0969	0.8848	1.9300e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462		155.7176	155.7176	8.2200e-003		155.8902
Total	**0.0650**	**0.0969**	**0.8848**	**1.9300e-003**	**0.1698**	**1.3000e-003**	**0.1711**	**0.0450**	**1.2000e-003**	**0.0462**		**155.7176**	**155.7176**	**8.2200e-003**		**155.8902**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5166	0.0000	4.5166	2.4827	0.0000	2.4827			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**4.5166**	**2.7542**	**7.2708**	**2.4827**	**2.5339**	**5.0166**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0650	0.0969	0.8848	1.9300e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462		155.7176	155.7176	8.2200e-003		155.8902
Total	**0.0650**	**0.0969**	**0.8848**	**1.9300e-003**	**0.1698**	**1.3000e-003**	**0.1711**	**0.0450**	**1.2000e-003**	**0.0462**		**155.7176**	**155.7176**	**8.2200e-003**		**155.8902**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6732	0.0000	0.6732	0.3309	0.0000	0.3309			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757		3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**0.6732**	**2.0388**	**2.7120**	**0.3309**	**1.8757**	**2.2066**		**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7975	9.1254	9.7595	0.0251	0.5832	0.1152	0.6984	0.1597	0.1059	0.2656		2,484.5657	2,484.5657	0.0182		2,484.9486
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		129.7647	129.7647	6.8500e-003		129.9085
Total	**0.8516**	**9.2062**	**10.4968**	**0.0267**	**0.7246**	**0.1163**	**0.8409**	**0.1972**	**0.1069**	**0.3041**		**2,614.3303**	**2,614.3303**	**0.0251**		**2,614.8570**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3029	0.0000	0.3029	0.1489	0.0000	0.1489			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**0.3029**	**2.0388**	**2.3417**	**0.1489**	**1.8757**	**2.0246**	**0.0000**	**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7975	9.1254	9.7595	0.0251	0.5832	0.1152	0.6984	0.1597	0.1059	0.2656		2,484.5657	2,484.5657	0.0182		2,484.9486
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		129.7647	129.7647	6.8500e-003		129.9085
Total	**0.8516**	**9.2062**	**10.4968**	**0.0267**	**0.7246**	**0.1163**	**0.8409**	**0.1972**	**0.1069**	**0.3041**		**2,614.3303**	**2,614.3303**	**0.0251**		**2,614.8570**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0228	7.1826	13.4250	0.0188	0.5252	0.1028	0.6280	0.1500	0.0945	0.2444		1,843.1942	1,843.1942	0.0146		1,843.5001
Worker	1.3681	2.0396	18.6295	0.0406	3.5741	0.0274	3.6015	0.9479	0.0252	0.9732		3,278.7204	3,278.7204	0.1730		3,282.3543
Total	**2.3909**	**9.2222**	**32.0545**	**0.0593**	**4.0993**	**0.1301**	**4.2294**	**1.0979**	**0.1197**	**1.2176**		**5,121.9146**	**5,121.9146**	**0.1876**		**5,125.8544**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0228	7.1826	13.4250	0.0188	0.5252	0.1028	0.6280	0.1500	0.0945	0.2444		1,843.1942	1,843.1942	0.0146		1,843.5001
Worker	1.3681	2.0396	18.6295	0.0406	3.5741	0.0274	3.6015	0.9479	0.0252	0.9732		3,278.7204	3,278.7204	0.1730		3,282.3543
Total	**2.3909**	**9.2222**	**32.0545**	**0.0593**	**4.0993**	**0.1301**	**4.2294**	**1.0979**	**0.1197**	**1.2176**		**5,121.9146**	**5,121.9146**	**0.1876**		**5,125.8544**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9001	6.5048	12.6305	0.0187	0.5251	0.0951	0.6203	0.1499	0.0875	0.2374		1,810.7827	1,810.7827	0.0143		1,811.0834
Worker	1.2174	1.8369	16.5966	0.0405	3.5741	0.0265	3.6005	0.9479	0.0245	0.9724		3,157.0484	3,157.0484	0.1591		3,160.3901
Total	**2.1175**	**8.3417**	**29.2271**	**0.0592**	**4.0992**	**0.1216**	**4.2208**	**1.0979**	**0.1119**	**1.2098**		**4,967.8311**	**4,967.8311**	**0.1735**		**4,971.4735**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9001	6.5048	12.6305	0.0187	0.5251	0.0951	0.6203	0.1499	0.0875	0.2374		1,810.7827	1,810.7827	0.0143		1,811.0834
Worker	1.2174	1.8369	16.5966	0.0405	3.5741	0.0265	3.6005	0.9479	0.0245	0.9724		3,157.0484	3,157.0484	0.1591		3,160.3901
Total	**2.1175**	**8.3417**	**29.2271**	**0.0592**	**4.0992**	**0.1216**	**4.2208**	**1.0979**	**0.1119**	**1.2098**		**4,967.8311**	**4,967.8311**	**0.1735**		**4,971.4735**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8272	5.9381	12.1075	0.0187	0.5251	0.0884	0.6135	0.1499	0.0813	0.2312		1,779.6141	1,779.6141	0.0140		1,779.9080
Worker	1.1070	1.6737	15.0204	0.0405	3.5741	0.0259	3.6000	0.9479	0.0240	0.9719		3,043.5065	3,043.5065	0.1480		3,046.6146
Total	**1.9342**	**7.6118**	**27.1279**	**0.0592**	**4.0992**	**0.1143**	**4.2135**	**1.0978**	**0.1053**	**1.2031**		**4,823.1206**	**4,823.1206**	**0.1620**		**4,826.5226**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8272	5.9381	12.1075	0.0187	0.5251	0.0884	0.6135	0.1499	0.0813	0.2312		1,779.6141	1,779.6141	0.0140		1,779.9080
Worker	1.1070	1.6737	15.0204	0.0405	3.5741	0.0259	3.6000	0.9479	0.0240	0.9719		3,043.5065	3,043.5065	0.1480		3,046.6146
Total	**1.9342**	**7.6118**	**27.1279**	**0.0592**	**4.0992**	**0.1143**	**4.2135**	**1.0978**	**0.1053**	**1.2031**		**4,823.1206**	**4,823.1206**	**0.1620**		**4,826.5226**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.5267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**14.8590**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2744	0.4090	3.7357	8.1300e-003	0.7167	5.4900e-003	0.7222	0.1901	5.0600e-003	0.1952		657.4743	657.4743	0.0347		658.2030
Total	**0.2744**	**0.4090**	**3.7357**	**8.1300e-003**	**0.7167**	**5.4900e-003**	**0.7222**	**0.1901**	**5.0600e-003**	**0.1952**		**657.4743**	**657.4743**	**0.0347**		**658.2030**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.5267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**14.8590**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2744	0.4090	3.7357	8.1300e-003	0.7167	5.4900e-003	0.7222	0.1901	5.0600e-003	0.1952		657.4743	657.4743	0.0347		658.2030
Total	**0.2744**	**0.4090**	**3.7357**	**8.1300e-003**	**0.7167**	**5.4900e-003**	**0.7222**	**0.1901**	**5.0600e-003**	**0.1952**		**657.4743**	**657.4743**	**0.0347**		**658.2030**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.5267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**14.8253**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2441	0.3684	3.3281	8.1300e-003	0.7167	5.3000e-003	0.7220	0.1901	4.9000e-003	0.1950		633.0757	633.0757	0.0319		633.7458
Total	**0.2441**	**0.3684**	**3.3281**	**8.1300e-003**	**0.7167**	**5.3000e-003**	**0.7220**	**0.1901**	**4.9000e-003**	**0.1950**		**633.0757**	**633.0757**	**0.0319**		**633.7458**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.5267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**14.8253**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2441	0.3684	3.3281	8.1300e-003	0.7167	5.3000e-003	0.7220	0.1901	4.9000e-003	0.1950		633.0757	633.0757	0.0319		633.7458
Total	**0.2441**	**0.3684**	**3.3281**	**8.1300e-003**	**0.7167**	**5.3000e-003**	**0.7220**	**0.1901**	**4.9000e-003**	**0.1950**		**633.0757**	**633.0757**	**0.0319**		**633.7458**

3.6 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.5267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		281.9473
Total	**14.7931**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**281.9473**

3.6 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2220	0.3356	3.0120	8.1300e-003	0.7167	5.1900e-003	0.7219	0.1901	4.8100e-003	0.1949		610.3074	610.3074	0.0297		610.9306
Total	**0.2220**	**0.3356**	**3.0120**	**8.1300e-003**	**0.7167**	**5.1900e-003**	**0.7219**	**0.1901**	**4.8100e-003**	**0.1949**		**610.3074**	**610.3074**	**0.0297**		**610.9306**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.5267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		281.9473
Total	**14.7931**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**281.9473**

3.6 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2220	0.3356	3.0120	8.1300e-003	0.7167	5.1900e-003	0.7219	0.1901	4.8100e-003	0.1949		610.3074	610.3074	0.0297		610.9306
Total	**0.2220**	**0.3356**	**3.0120**	**8.1300e-003**	**0.7167**	**5.1900e-003**	**0.7219**	**0.1901**	**4.8100e-003**	**0.1949**		**610.3074**	**610.3074**	**0.0297**		**610.9306**

3.7 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2520	12.5889	12.1441	0.0187		0.7111	0.7111		0.6560	0.6560		1,816.2490	1,816.2490	0.5585		1,827.9782
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2520**	**12.5889**	**12.1441**	**0.0187**		**0.7111**	**0.7111**		**0.6560**	**0.6560**		**1,816.2490**	**1,816.2490**	**0.5585**		**1,827.9782**

3.7 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0883	0.7926	2.1400e-003	0.1886	1.3700e-003	0.1900	0.0500	1.2700e-003	0.0513		160.6072	160.6072	7.8100e-003		160.7712
Total	**0.0584**	**0.0883**	**0.7926**	**2.1400e-003**	**0.1886**	**1.3700e-003**	**0.1900**	**0.0500**	**1.2700e-003**	**0.0513**		**160.6072**	**160.6072**	**7.8100e-003**		**160.7712**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2520	12.5889	12.1441	0.0187		0.7111	0.7111		0.6560	0.6560	0.0000	1,816.2490	1,816.2490	0.5585		1,827.9782
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2520**	**12.5889**	**12.1441**	**0.0187**		**0.7111**	**0.7111**		**0.6560**	**0.6560**	**0.0000**	**1,816.2490**	**1,816.2490**	**0.5585**		**1,827.9782**

3.7 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0883	0.7926	2.1400e-003	0.1886	1.3700e-003	0.1900	0.0500	1.2700e-003	0.0513		160.6072	160.6072	7.8100e-003		160.7712
Total	**0.0584**	**0.0883**	**0.7926**	**2.1400e-003**	**0.1886**	**1.3700e-003**	**0.1900**	**0.0500**	**1.2700e-003**	**0.0513**		**160.6072**	**160.6072**	**7.8100e-003**		**160.7712**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	21.6261	46.6487	215.9693	0.2886	21.0068	0.6470	21.6538	5.6191	0.5935	6.2126		26,643.3740	26,643.3740	1.3644		26,672.0254
Unmitigated	21.6261	46.6487	215.9693	0.2886	21.0068	0.6470	21.6538	5.6191	0.5935	6.2126		26,643.3740	26,643.3740	1.3644		26,672.0254

Webster & 12th Construction - 30 Months

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	58.38	1000sqft	1.34	58,385.00	0
Enclosed Parking with Elevator	317.00	Space	0.00	126,800.00	0
Apartments Mid Rise	416.00	Dwelling Unit	1.72	300,330.00	1190
Strip Mall	25.05	1000sqft	0.00	25,050.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Specifications

Construction Phase - Custom 30.0 Month Schedule

Demolition -

Grading - Project Specifications

Architectural Coating - Corrects known error where parking lot is treated as Non-Residential space coated at twice the floor area. Parking lot coating reduced to 6% of area per Appendix E, or 9,999 sq. ft.

Construction Off-road Equipment Mitigation - From SCAQMD Mitigation Measures and Control Efficiencies, Fugitive Dust Table XI-C, value for "Local streets" implementing a street sweeping program with Rule 1186 compliant PM10 efficient vacuum units (14-day frequency).

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	16
tblConstructionPhase	NumDays	18.00	442.00
tblConstructionPhase	NumDays	230.00	442.00
tblConstructionPhase	NumDays	20.00	84.00
tblConstructionPhase	NumDays	8.00	83.00
tblConstructionPhase	NumDays	18.00	35.00
tblConstructionPhase	NumDays	5.00	9.00
tblConstructionPhase	PhaseEndDate	1/22/2021	5/15/2019
tblConstructionPhase	PhaseStartDate	5/16/2019	9/5/2017
tblGrading	MaterialExported	0.00	22,222.00
tblGrading	MaterialImported	0.00	8,333.00
tblLandUse	LandUseSquareFeet	58,380.00	58,385.00
tblLandUse	LandUseSquareFeet	416,000.00	300,330.00
tblLandUse	LotAcreage	2.85	0.00
tblLandUse	LotAcreage	10.95	1.72
tblLandUse	LotAcreage	0.58	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,778.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	1.2314	5.5466	5.3145	8.5300e-003	0.3510	0.2796	0.6306	0.1081	0.2603	0.3684	0.0000	735.9132	735.9132	0.1180	0.0000	738.3910
2018	2.5667	4.3990	6.3778	0.0127	0.6050	0.2311	0.8361	0.1623	0.2182	0.3805	0.0000	1,010.3785	1,010.3785	0.1031	0.0000	1,012.5429
2019	0.9509	1.7012	2.4662	5.1000e-003	0.2280	0.0868	0.3148	0.0612	0.0817	0.1428	0.0000	398.2019	398.2019	0.0461	0.0000	399.1697
Total	**4.7491**	**11.6467**	**14.1585**	**0.0264**	**1.1840**	**0.5976**	**1.7816**	**0.3316**	**0.5601**	**0.8917**	**0.0000**	**2,144.4936**	**2,144.4936**	**0.2672**	**0.0000**	**2,150.1037**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	1.2314	5.5466	5.3145	8.5300e-003	0.2865	0.2796	0.5661	0.0832	0.2603	0.3435	0.0000	735.9128	735.9128	0.1180	0.0000	738.3906
2018	2.5667	4.3990	6.3778	0.0127	0.6050	0.2311	0.8361	0.1623	0.2182	0.3805	0.0000	1,010.3781	1,010.3781	0.1031	0.0000	1,012.5425
2019	0.9509	1.7011	2.4662	5.1000e-003	0.2280	0.0868	0.3148	0.0612	0.0817	0.1428	0.0000	398.2017	398.2017	0.0461	0.0000	399.1695
Total	**4.7491**	**11.6467**	**14.1585**	**0.0264**	**1.1194**	**0.5976**	**1.7170**	**0.3067**	**0.5601**	**0.8668**	**0.0000**	**2,144.4926**	**2,144.4926**	**0.2672**	**0.0000**	**2,150.1026**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	5.45	0.00	3.62	7.51	0.00	2.79	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.7815	0.0490	3.9950	1.7500e-003		0.1436	0.1436		0.1436	0.1436	14.7866	16.0524	30.8390	0.0553	5.7000e-004	32.1771
Energy	0.0269	0.2337	0.1260	1.4700e-003		0.0186	0.0186		0.0186	0.0186	0.0000	1,272.6834	1,272.6834	0.0506	0.0143	1,278.1780
Mobile	3.2417	7.2958	32.0696	0.0473	3.2935	0.1047	3.3982	0.8838	0.0961	0.9799	0.0000	3,962.6211	3,962.6211	0.2014	0.0000	3,966.8501
Waste						0.0000	0.0000		0.0000	0.0000	55.2034	0.0000	55.2034	3.2624	0.0000	123.7144
Water						0.0000	0.0000		0.0000	0.0000	12.4794	86.9505	99.4299	1.2857	0.0311	136.0636
Total	**6.0500**	**7.5785**	**36.1906**	**0.0505**	**3.2935**	**0.2669**	**3.5603**	**0.8838**	**0.2582**	**1.1420**	**82.4694**	**5,338.3074**	**5,420.7768**	**4.8555**	**0.0460**	**5,536.9831**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.7815	0.0490	3.9950	1.7500e-003		0.1436	0.1436		0.1436	0.1436	14.7866	16.0524	30.8390	0.0553	5.7000e-004	32.1771
Energy	0.0269	0.2337	0.1260	1.4700e-003		0.0186	0.0186		0.0186	0.0186	0.0000	1,272.6834	1,272.6834	0.0506	0.0143	1,278.1780
Mobile	3.2417	7.2958	32.0696	0.0473	3.2935	0.1047	3.3982	0.8838	0.0961	0.9799	0.0000	3,962.6211	3,962.6211	0.2014	0.0000	3,966.8501
Waste						0.0000	0.0000		0.0000	0.0000	55.2034	0.0000	55.2034	3.2624	0.0000	123.7144
Water						0.0000	0.0000		0.0000	0.0000	12.4794	86.9505	99.4299	1.2855	0.0310	136.0437
Total	**6.0500**	**7.5785**	**36.1906**	**0.0505**	**3.2935**	**0.2669**	**3.5603**	**0.8838**	**0.2582**	**1.1420**	**82.4694**	**5,338.3074**	**5,420.7768**	**4.8552**	**0.0459**	**5,536.9632**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	4/27/2017	5	84	
2	Site Preparation	Site Preparation	4/28/2017	5/10/2017	5	9	
3	Grading	Grading	5/11/2017	9/4/2017	5	83	
4	Building Construction	Building Construction	9/5/2017	5/15/2019	5	442	
5	Architectural Coating	Architectural Coating	9/5/2017	5/15/2019	5	442	
6	Paving	Paving	5/16/2019	7/3/2019	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 608,168; Residential Outdoor: 202,723; Non-Residential Indoor: 315,353; Non-Residential Outdoor: 105,118 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Demolition	Excavators	3	8.00	162	0.38
Grading	Excavators	1	8.00	162	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	409.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,778.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	379.00	79.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	76.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0443	0.0000	0.0443	6.7100e-003	0.0000	6.7100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1700	1.7933	1.4235	1.6800e-003		0.0893	0.0893		0.0832	0.0832	0.0000	153.7965	153.7965	0.0422	0.0000	154.6825
Total	**0.1700**	**1.7933**	**1.4235**	**1.6800e-003**	**0.0443**	**0.0893**	**0.1336**	**6.7100e-003**	**0.0832**	**0.0899**	**0.0000**	**153.7965**	**153.7965**	**0.0422**	**0.0000**	**154.6825**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4700e-003	0.0549	0.0502	1.5000e-004	3.4400e-003	7.0000e-004	4.1500e-003	9.5000e-004	6.5000e-004	1.5900e-003	0.0000	13.7904	13.7904	1.0000e-004	0.0000	13.7925
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1200e-003	3.1000e-003	0.0298	7.0000e-005	5.7100e-003	5.0000e-005	5.7600e-003	1.5200e-003	4.0000e-005	1.5600e-003	0.0000	4.9886	4.9886	2.6000e-004	0.0000	4.9941
Total	**6.5900e-003**	**0.0580**	**0.0801**	**2.2000e-004**	**9.1500e-003**	**7.5000e-004**	**9.9100e-003**	**2.4700e-003**	**6.9000e-004**	**3.1500e-003**	**0.0000**	**18.7790**	**18.7790**	**3.6000e-004**	**0.0000**	**18.7866**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0199	0.0000	0.0199	3.0200e-003	0.0000	3.0200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1700	1.7933	1.4235	1.6800e-003		0.0893	0.0893		0.0832	0.0832	0.0000	153.7963	153.7963	0.0422	0.0000	154.6823
Total	**0.1700**	**1.7933**	**1.4235**	**1.6800e-003**	**0.0199**	**0.0893**	**0.1092**	**3.0200e-003**	**0.0832**	**0.0862**	**0.0000**	**153.7963**	**153.7963**	**0.0422**	**0.0000**	**154.6823**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4700e-003	0.0549	0.0502	1.5000e-004	3.4400e-003	7.0000e-004	4.1500e-003	9.5000e-004	6.5000e-004	1.5900e-003	0.0000	13.7904	13.7904	1.0000e-004	0.0000	13.7925
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1200e-003	3.1000e-003	0.0298	7.0000e-005	5.7100e-003	5.0000e-005	5.7600e-003	1.5200e-003	4.0000e-005	1.5600e-003	0.0000	4.9886	4.9886	2.6000e-004	0.0000	4.9941
Total	**6.5900e-003**	**0.0580**	**0.0801**	**2.2000e-004**	**9.1500e-003**	**7.5000e-004**	**9.9100e-003**	**2.4700e-003**	**6.9000e-004**	**3.1500e-003**	**0.0000**	**18.7790**	**18.7790**	**3.6000e-004**	**0.0000**	**18.7866**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0218	0.2329	0.1773	1.8000e-004		0.0124	0.0124		0.0114	0.0114	0.0000	16.3419	16.3419	5.0100e-003	0.0000	16.4471
Total	**0.0218**	**0.2329**	**0.1773**	**1.8000e-004**	**0.0452**	**0.0124**	**0.0576**	**0.0248**	**0.0114**	**0.0362**	**0.0000**	**16.3419**	**16.3419**	**5.0100e-003**	**0.0000**	**16.4471**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	4.0000e-004	3.8300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	2.0000e-004	1.0000e-005	2.0000e-004	0.0000	0.6414	0.6414	3.0000e-005	0.0000	0.6421
Total	**2.7000e-004**	**4.0000e-004**	**3.8300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6414**	**0.6414**	**3.0000e-005**	**0.0000**	**0.6421**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0203	0.0000	0.0203	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0218	0.2329	0.1773	1.8000e-004		0.0124	0.0124		0.0114	0.0114	0.0000	16.3419	16.3419	5.0100e-003	0.0000	16.4471
Total	**0.0218**	**0.2329**	**0.1773**	**1.8000e-004**	**0.0203**	**0.0124**	**0.0327**	**0.0112**	**0.0114**	**0.0226**	**0.0000**	**16.3419**	**16.3419**	**5.0100e-003**	**0.0000**	**16.4471**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	4.0000e-004	3.8300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	2.0000e-004	1.0000e-005	2.0000e-004	0.0000	0.6414	0.6414	3.0000e-005	0.0000	0.6421
Total	**2.7000e-004**	**4.0000e-004**	**3.8300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6414**	**0.6414**	**3.0000e-005**	**0.0000**	**0.6421**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0279	0.0000	0.0279	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1434	1.4933	1.0533	1.2300e-003		0.0846	0.0846		0.0778	0.0778	0.0000	114.5885	114.5885	0.0351	0.0000	115.3258
Total	**0.1434**	**1.4933**	**1.0533**	**1.2300e-003**	**0.0279**	**0.0846**	**0.1126**	**0.0137**	**0.0778**	**0.0916**	**0.0000**	**114.5885**	**114.5885**	**0.0351**	**0.0000**	**115.3258**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0303	0.3729	0.3411	1.0400e-003	0.0234	4.7700e-003	0.0282	6.4300e-003	4.3900e-003	0.0108	0.0000	93.6665	93.6665	6.8000e-004	0.0000	93.6808
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0900e-003	3.0600e-003	0.0295	7.0000e-005	5.6500e-003	4.0000e-005	5.6900e-003	1.5000e-003	4.0000e-005	1.5400e-003	0.0000	4.9292	4.9292	2.6000e-004	0.0000	4.9347
Total	**0.0324**	**0.3759**	**0.3706**	**1.1100e-003**	**0.0291**	**4.8100e-003**	**0.0339**	**7.9300e-003**	**4.4300e-003**	**0.0124**	**0.0000**	**98.5957**	**98.5957**	**9.4000e-004**	**0.0000**	**98.6155**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0126	0.0000	0.0126	6.1800e-003	0.0000	6.1800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1434	1.4933	1.0533	1.2300e-003		0.0846	0.0846		0.0778	0.0778	0.0000	114.5883	114.5883	0.0351	0.0000	115.3256
Total	**0.1434**	**1.4933**	**1.0533**	**1.2300e-003**	**0.0126**	**0.0846**	**0.0972**	**6.1800e-003**	**0.0778**	**0.0840**	**0.0000**	**114.5883**	**114.5883**	**0.0351**	**0.0000**	**115.3256**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0303	0.3729	0.3411	1.0400e-003	0.0234	4.7700e-003	0.0282	6.4300e-003	4.3900e-003	0.0108	0.0000	93.6665	93.6665	6.8000e-004	0.0000	93.6808
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0900e-003	3.0600e-003	0.0295	7.0000e-005	5.6500e-003	4.0000e-005	5.6900e-003	1.5000e-003	4.0000e-005	1.5400e-003	0.0000	4.9292	4.9292	2.6000e-004	0.0000	4.9347
Total	**0.0324**	**0.3759**	**0.3706**	**1.1100e-003**	**0.0291**	**4.8100e-003**	**0.0339**	**7.9300e-003**	**4.4300e-003**	**0.0124**	**0.0000**	**98.5957**	**98.5957**	**9.4000e-004**	**0.0000**	**98.6155**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1303	1.1090	0.7614	1.1300e-003		0.0748	0.0748		0.0703	0.0703	0.0000	100.5812	100.5812	0.0248	0.0000	101.1011
Total	**0.1303**	**1.1090**	**0.7614**	**1.1300e-003**		**0.0748**	**0.0748**		**0.0703**	**0.0703**	**0.0000**	**100.5812**	**100.5812**	**0.0248**	**0.0000**	**101.1011**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0383	0.2980	0.4613	7.9000e-004	0.0214	4.2900e-003	0.0257	6.1300e-003	3.9400e-003	0.0101	0.0000	70.5438	70.5438	5.5000e-004	0.0000	70.5553
Worker	0.0536	0.0783	0.7536	1.7200e-003	0.1444	1.1500e-003	0.1455	0.0384	1.0600e-003	0.0395	0.0000	126.0458	126.0458	6.5900e-003	0.0000	126.1843
Total	**0.0918**	**0.3763**	**1.2149**	**2.5100e-003**	**0.1658**	**5.4400e-003**	**0.1712**	**0.0445**	**5.0000e-003**	**0.0495**	**0.0000**	**196.5897**	**196.5897**	**7.1400e-003**	**0.0000**	**196.7396**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1303	1.1090	0.7614	1.1300e-003		0.0748	0.0748		0.0703	0.0703	0.0000	100.5811	100.5811	0.0248	0.0000	101.1010
Total	**0.1303**	**1.1090**	**0.7614**	**1.1300e-003**		**0.0748**	**0.0748**		**0.0703**	**0.0703**	**0.0000**	**100.5811**	**100.5811**	**0.0248**	**0.0000**	**101.1010**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0383	0.2980	0.4613	7.9000e-004	0.0214	4.2900e-003	0.0257	6.1300e-003	3.9400e-003	0.0101	0.0000	70.5438	70.5438	5.5000e-004	0.0000	70.5553
Worker	0.0536	0.0783	0.7536	1.7200e-003	0.1444	1.1500e-003	0.1455	0.0384	1.0600e-003	0.0395	0.0000	126.0458	126.0458	6.5900e-003	0.0000	126.1843
Total	**0.0918**	**0.3763**	**1.2149**	**2.5100e-003**	**0.1658**	**5.4400e-003**	**0.1712**	**0.0445**	**5.0000e-003**	**0.0495**	**0.0000**	**196.5897**	**196.5897**	**7.1400e-003**	**0.0000**	**196.7396**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
Total	**0.3483**	**3.0355**	**2.2880**	**3.5000e-003**		**0.1950**	**0.1950**		**0.1833**	**0.1833**	**0.0000**	**308.9844**	**308.9844**	**0.0756**	**0.0000**	**310.5723**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1056	0.8387	1.3341	2.4500e-003	0.0664	0.0123	0.0787	0.0190	0.0114	0.0304	0.0000	215.3382	215.3382	1.6700e-003	0.0000	215.3732
Worker	0.1484	0.2190	2.0939	5.3400e-003	0.4487	3.4500e-003	0.4521	0.1193	3.1900e-003	0.1225	0.0000	377.1141	377.1141	0.0188	0.0000	377.5097
Total	**0.2540**	**1.0578**	**3.4280**	**7.7900e-003**	**0.5150**	**0.0158**	**0.5308**	**0.1384**	**0.0145**	**0.1529**	**0.0000**	**592.4523**	**592.4523**	**0.0205**	**0.0000**	**592.8829**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
Total	**0.3483**	**3.0355**	**2.2880**	**3.5000e-003**		**0.1950**	**0.1950**		**0.1833**	**0.1833**	**0.0000**	**308.9841**	**308.9841**	**0.0756**	**0.0000**	**310.5720**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1056	0.8387	1.3341	2.4500e-003	0.0664	0.0123	0.0787	0.0190	0.0114	0.0304	0.0000	215.3382	215.3382	1.6700e-003	0.0000	215.3732
Worker	0.1484	0.2190	2.0939	5.3400e-003	0.4487	3.4500e-003	0.4521	0.1193	3.1900e-003	0.1225	0.0000	377.1141	377.1141	0.0188	0.0000	377.5097
Total	**0.2540**	**1.0578**	**3.4280**	**7.7900e-003**	**0.5150**	**0.0158**	**0.5308**	**0.1384**	**0.0145**	**0.1529**	**0.0000**	**592.4523**	**592.4523**	**0.0205**	**0.0000**	**592.8829**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1141	1.0168	0.8303	1.3000e-003		0.0623	0.0623		0.0586	0.0586	0.0000	113.5495	113.5495	0.0276	0.0000	114.1297
Total	**0.1141**	**1.0168**	**0.8303**	**1.3000e-003**		**0.0623**	**0.0623**		**0.0586**	**0.0586**	**0.0000**	**113.5495**	**113.5495**	**0.0276**	**0.0000**	**114.1297**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0363	0.2846	0.4726	9.1000e-004	0.0247	4.2600e-003	0.0289	7.0700e-003	3.9200e-003	0.0110	0.0000	78.6532	78.6532	6.1000e-004	0.0000	78.6659
Worker	0.0502	0.0741	0.7064	1.9800e-003	0.1667	1.2600e-003	0.1680	0.0444	1.1600e-003	0.0455	0.0000	135.1147	135.1147	6.5100e-003	0.0000	135.2514
Total	**0.0865**	**0.3587**	**1.1789**	**2.8900e-003**	**0.1914**	**5.5200e-003**	**0.1969**	**0.0514**	**5.0800e-003**	**0.0565**	**0.0000**	**213.7678**	**213.7678**	**7.1200e-003**	**0.0000**	**213.9173**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1141	1.0168	0.8303	1.3000e-003		0.0623	0.0623		0.0586	0.0586	0.0000	113.5494	113.5494	0.0276	0.0000	114.1296
Total	**0.1141**	**1.0168**	**0.8303**	**1.3000e-003**		**0.0623**	**0.0623**		**0.0586**	**0.0586**	**0.0000**	**113.5494**	**113.5494**	**0.0276**	**0.0000**	**114.1296**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0363	0.2846	0.4726	9.1000e-004	0.0247	4.2600e-003	0.0289	7.0700e-003	3.9200e-003	0.0110	0.0000	78.6532	78.6532	6.1000e-004	0.0000	78.6659
Worker	0.0502	0.0741	0.7064	1.9800e-003	0.1667	1.2600e-003	0.1680	0.0444	1.1600e-003	0.0455	0.0000	135.1147	135.1147	6.5100e-003	0.0000	135.2514
Total	**0.0865**	**0.3587**	**1.1789**	**2.8900e-003**	**0.1914**	**5.5200e-003**	**0.1969**	**0.0514**	**5.0800e-003**	**0.0565**	**0.0000**	**213.7678**	**213.7678**	**7.1200e-003**	**0.0000**	**213.9173**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.0918	0.0785	1.2000e-004		7.2800e-003	7.2800e-003		7.2800e-003	7.2800e-003	0.0000	10.7237	10.7237	1.1300e-003	0.0000	10.7474
Total	**0.6241**	**0.0918**	**0.0785**	**1.2000e-004**		**7.2800e-003**	**7.2800e-003**		**7.2800e-003**	**7.2800e-003**	**0.0000**	**10.7237**	**10.7237**	**1.1300e-003**	**0.0000**	**10.7474**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0107	0.0157	0.1511	3.4000e-004	0.0290	2.3000e-004	0.0292	7.7000e-003	2.1000e-004	7.9100e-003	0.0000	25.2757	25.2757	1.3200e-003	0.0000	25.3035
Total	**0.0107**	**0.0157**	**0.1511**	**3.4000e-004**	**0.0290**	**2.3000e-004**	**0.0292**	**7.7000e-003**	**2.1000e-004**	**7.9100e-003**	**0.0000**	**25.2757**	**25.2757**	**1.3200e-003**	**0.0000**	**25.3035**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.0918	0.0785	1.2000e-004		7.2800e-003	7.2800e-003		7.2800e-003	7.2800e-003	0.0000	10.7237	10.7237	1.1300e-003	0.0000	10.7474
Total	**0.6241**	**0.0918**	**0.0785**	**1.2000e-004**		**7.2800e-003**	**7.2800e-003**		**7.2800e-003**	**7.2800e-003**	**0.0000**	**10.7237**	**10.7237**	**1.1300e-003**	**0.0000**	**10.7474**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0107	0.0157	0.1511	3.4000e-004	0.0290	2.3000e-004	0.0292	7.7000e-003	2.1000e-004	7.9100e-003	0.0000	25.2757	25.2757	1.3200e-003	0.0000	25.3035
Total	**0.0107**	**0.0157**	**0.1511**	**3.4000e-004**	**0.0290**	**2.3000e-004**	**0.0292**	**7.7000e-003**	**2.1000e-004**	**7.9100e-003**	**0.0000**	**25.2757**	**25.2757**	**1.3200e-003**	**0.0000**	**25.3035**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8957					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0390	0.2618	0.2420	3.9000e-004		0.0197	0.0197		0.0197	0.0197	0.0000	33.3200	33.3200	3.1700e-003	0.0000	33.3865
Total	**1.9347**	**0.2618**	**0.2420**	**3.9000e-004**		**0.0197**	**0.0197**		**0.0197**	**0.0197**	**0.0000**	**33.3200**	**33.3200**	**3.1700e-003**	**0.0000**	**33.3865**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0298	0.0439	0.4199	1.0700e-003	0.0900	6.9000e-004	0.0907	0.0239	6.4000e-004	0.0246	0.0000	75.6218	75.6218	3.7800e-003	0.0000	75.7012
Total	**0.0298**	**0.0439**	**0.4199**	**1.0700e-003**	**0.0900**	**6.9000e-004**	**0.0907**	**0.0239**	**6.4000e-004**	**0.0246**	**0.0000**	**75.6218**	**75.6218**	**3.7800e-003**	**0.0000**	**75.7012**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8957					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0390	0.2618	0.2420	3.9000e-004		0.0197	0.0197		0.0197	0.0197	0.0000	33.3200	33.3200	3.1700e-003	0.0000	33.3865
Total	**1.9347**	**0.2618**	**0.2420**	**3.9000e-004**		**0.0197**	**0.0197**		**0.0197**	**0.0197**	**0.0000**	**33.3200**	**33.3200**	**3.1700e-003**	**0.0000**	**33.3865**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0298	0.0439	0.4199	1.0700e-003	0.0900	6.9000e-004	0.0907	0.0239	6.4000e-004	0.0246	0.0000	75.6218	75.6218	3.7800e-003	0.0000	75.7012
Total	**0.0298**	**0.0439**	**0.4199**	**1.0700e-003**	**0.0900**	**6.9000e-004**	**0.0907**	**0.0239**	**6.4000e-004**	**0.0246**	**0.0000**	**75.6218**	**75.6218**	**3.7800e-003**	**0.0000**	**75.7012**

3.6 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7045					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.0890	0.0893	1.4000e-004		6.2500e-003	6.2500e-003		6.2500e-003	6.2500e-003	0.0000	12.3833	12.3833	1.0500e-003	0.0000	12.4053
Total	**0.7175**	**0.0890**	**0.0893**	**1.4000e-004**		**6.2500e-003**	**6.2500e-003**		**6.2500e-003**	**6.2500e-003**	**0.0000**	**12.3833**	**12.3833**	**1.0500e-003**	**0.0000**	**12.4053**

3.6 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	0.0149	0.1417	4.0000e-004	0.0334	2.5000e-004	0.0337	8.8900e-003	2.3000e-004	9.1300e-003	0.0000	27.0942	27.0942	1.3100e-003	0.0000	27.1217
Total	**0.0101**	**0.0149**	**0.1417**	**4.0000e-004**	**0.0334**	**2.5000e-004**	**0.0337**	**8.8900e-003**	**2.3000e-004**	**9.1300e-003**	**0.0000**	**27.0942**	**27.0942**	**1.3100e-003**	**0.0000**	**27.1217**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7045					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.0890	0.0893	1.4000e-004		6.2500e-003	6.2500e-003		6.2500e-003	6.2500e-003	0.0000	12.3833	12.3833	1.0500e-003	0.0000	12.4052
Total	**0.7175**	**0.0890**	**0.0893**	**1.4000e-004**		**6.2500e-003**	**6.2500e-003**		**6.2500e-003**	**6.2500e-003**	**0.0000**	**12.3833**	**12.3833**	**1.0500e-003**	**0.0000**	**12.4052**

3.6 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	0.0149	0.1417	4.0000e-004	0.0334	2.5000e-004	0.0337	8.8900e-003	2.3000e-004	9.1300e-003	0.0000	27.0942	27.0942	1.3100e-003	0.0000	27.1217
Total	**0.0101**	**0.0149**	**0.1417**	**4.0000e-004**	**0.0334**	**2.5000e-004**	**0.0337**	**8.8900e-003**	**2.3000e-004**	**9.1300e-003**	**0.0000**	**27.0942**	**27.0942**	**1.3100e-003**	**0.0000**	**27.1217**

3.7 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0219	0.2203	0.2125	3.3000e-004		0.0124	0.0124		0.0115	0.0115	0.0000	28.8343	28.8343	8.8700e-003	0.0000	29.0205
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0219**	**0.2203**	**0.2125**	**3.3000e-004**		**0.0124**	**0.0124**		**0.0115**	**0.0115**	**0.0000**	**28.8343**	**28.8343**	**8.8700e-003**	**0.0000**	**29.0205**

3.7 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6000e-004	1.4100e-003	0.0135	4.0000e-005	3.1700e-003	2.0000e-005	3.2000e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	2.5727	2.5727	1.2000e-004	0.0000	2.5753
Total	**9.6000e-004**	**1.4100e-003**	**0.0135**	**4.0000e-005**	**3.1700e-003**	**2.0000e-005**	**3.2000e-003**	**8.4000e-004**	**2.0000e-005**	**8.7000e-004**	**0.0000**	**2.5727**	**2.5727**	**1.2000e-004**	**0.0000**	**2.5753**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0219	0.2203	0.2125	3.3000e-004		0.0124	0.0124		0.0115	0.0115	0.0000	28.8343	28.8343	8.8700e-003	0.0000	29.0205
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0219**	**0.2203**	**0.2125**	**3.3000e-004**		**0.0124**	**0.0124**		**0.0115**	**0.0115**	**0.0000**	**28.8343**	**28.8343**	**8.8700e-003**	**0.0000**	**29.0205**

3.7 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6000e-004	1.4100e-003	0.0135	4.0000e-005	3.1700e-003	2.0000e-005	3.2000e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	2.5727	2.5727	1.2000e-004	0.0000	2.5753
Total	**9.6000e-004**	**1.4100e-003**	**0.0135**	**4.0000e-005**	**3.1700e-003**	**2.0000e-005**	**3.2000e-003**	**8.4000e-004**	**2.0000e-005**	**8.7000e-004**	**0.0000**	**2.5727**	**2.5727**	**1.2000e-004**	**0.0000**	**2.5753**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.2417	7.2958	32.0696	0.0473	3.2935	0.1047	3.3982	0.8838	0.0961	0.9799	0.0000	3,962.6211	3,962.6211	0.2014	0.0000	3,966.8501
Unmitigated	3.2417	7.2958	32.0696	0.0473	3.2935	0.1047	3.3982	0.8838	0.0961	0.9799	0.0000	3,962.6211	3,962.6211	0.2014	0.0000	3,966.8501

EXHIBIT E

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
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August 25, 2016

Laura E. Horton
Adams Broadwell Joseph & Cardozo
601 Gateway Blvd., Suite 1000
South San Francisco, CA 94080

Subject: Response to Comments on the W12 Mixed-Use Project

Dear Ms. Horton:

We have reviewed the August 12, 2016 W12 Response to Comment Letters from Adams and Broadwell Joseph & Cardozo Memorandum from ESA Community Development ("Memorandum"), which addressed comments we made on the W12 Mixed-Use Project CEQA Analysis ("CEQA Analysis"), CalEEMod output files, and associated attachments/appendices for the proposed mixed-use development project ("Project") located in Oakland, California. We previously sent letters on August 2, 2016 and August 3, 2016 addressing the inadequacies of the Project's air quality analysis. Specifically, we found that the CEQA Analysis failed to adequately estimate the Project's air quality emissions and failed to evaluate, whatsoever, the health risk impact posed to nearby sensitive receptors as a result of Project construction. The Memorandum also addresses comments we made in letters sent on August 2, 2016 and August 3, 2016 on hazards from trichloroethylene (TCE) that has been documented to exist in groundwater, soil, soil vapor, and indoor air at the Project site. We also find that the Memorandum fails to adequately disclose and evaluate TCE contamination and fails to identify the characterizations and cleanup activities that would be required under DTSC and to demonstrate that a cleanup agreement between DTSC and the City and/or Developer is in place. After our review of the Memorandum, we maintain that the CEQA Analysis falls well short in describing and mitigating the Project's Air Quality and Hazard and Hazardous Waste impacts.

Hazards and Hazardous Waste

In evaluating Hazards and Hazardous Materials, the July 15, 2016 CEQA Analysis only referenced a July 15, 2016 Phase 1 Environmental Site Assessment (ESA) that was prepared for the Project site (CEQA Analysis, p. 57). The CEQA Analysis failed to cite to a July 14, 2016 Subsurface Investigation Report

prepared for the 301 and 285 12th Street properties as available on Envirostor.[1] The analytical results for soil, soil vapor and groundwater in this report are only tangentially referenced in the Memorandum without direct reference to the July 14, 2016 Subsurface Investigation Report.

The July 14, 2016 Subsurface Investigation Report documents concentrations of groundwater, soil, soil gas well in excess of the 2016 San Francisco Bay Environmental Screening Levels. The following maximum concentrations for TCE obtained from the July 14, 2016 Subsurface Investigation Report (as compared to the ESLs included in that report) were not disclosed in the CEQA Analysis:

- Deep Soil: 780 ug/kg (Residential ESL: 460 ug/kg)
- Soil Vapor: 1,620,000 ug/m3 (Residential ESL: 240 ug/m3)
- Groundwater: 1,800 ug/L (Residential groundwater ESL for vapor intrusion: 3.7 ug/L)

The soil and groundwater data, which was not disclosed in the CEQA Analysis and only indirectly referenced in the Memorandum, documents a highly contaminated Project site. The maximum TCE detection in soil vapor, 1,620,000 ug/m3, has not been disclosed to the public in the CEQA Analysis or in the Memorandum, as required under CEQA.

According to a personal communication from the Project Manager at the California Department of Toxics Substances Control[2], no agreement to clean up contaminants at the site currently exists. However, the Project Manager communicated that a draft plan is being prepared, although not available to the public, and future CEQA review would be conducted in connection with cleanup plans. Future CEQA evaluation related to the site is also referenced on Envirostor. Long-term options to address the contaminants at the site, according to DTSC, include soil removal, long term groundwater monitoring and groundwater extraction. However, site contamination and clean up measures must be analyzed in a full Draft Environmental Impact Report ("DEIR") *prior* to Project approval, not at a later date after a Project has been approved.

Neither the CEQA Analysis nor the Memorandum report any plans that would assess and clean up the site for the intended uses for the Project, including residential. Given contaminant concentrations documented at the site, and given the lengthy history of assessment and cleanup at DTSC-lead sites where TCE and other chlorinated solvents have been found[3], the public has no way of knowing how and when the site will be cleaned up to support the intended land use.

Disclosure of the contaminants at the Project site is necessary so the public can understand the potential impacts of the contamination on the proposed land uses. Assessment and cleanup plans also

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[1] http://www.envirostor.dtsc.ca.gov/public/community_involvement/3655578434/20160715%20--%20W12%20PES%20Soil%20Investigation%20%28Phase%20II%29.pdf

[2] Personal communication, Bud Duke, DTSC, August 23, 2016.

[3] For example, the Technichem site in Emeryville where assessment of tetrachloroethylene began in 1993 and where assessment and cleanup is ongoing.
http://www.envirostor.dtsc.ca.gov/public/hwmp_profile_report.asp?global_id=CAD981375983

need to be disclosed so impacts, including construction emissions associated with soil removal and disposal, can be analyzed and mitigated under CEQA. Prior to Project approval, given the high degree of their involvement, DTSC should publicly disclose the details of site cleanup, including a site cleanup agreement. Furthermore, analysis of those clean up plans and mitigation, along with analysis of impacts associated with clean up of the site, must be disclosed in a full DEIR prior to the City's approval of the Project. The DEIR should identify any additional mitigation that may be required by DTSC in addition to those measures included in SCA HAZ-1 and SCA HAZ-2.

CEQA does not allow for Project approval to take place prior to disclosure, analysis, and mitigation of all Project impacts including site contamination. Our analysis demonstrates that the Project site is highly contaminated and therefore the Project may pose a significant risk to workers, residents, and other members of the public, which was not disclosed in the CEQA Analysis. Therefore, a DEIR must be prepared to adequately evaluate the Project's impacts related to site contamination, including disclosing and analyzing cleanup plans and any impacts resulting from those plans.

Air Quality

In our August 3 letter, we concluded that the Project's CEQA Analysis failed to adequately evaluate the Project's Air Quality impacts because the CEQA Analysis failed to prepare a construction health risk assessment. We still maintain that the Memorandum fails to address our concern regarding the construction health risk posed by the proposed Project.

Failure to Quantify Health Risk or Level of Mitigation

Our August 3 letter found that the CEQA Analysis fails to evaluate the health risk posed to nearby sensitive receptors from exposure to diesel particulate matter (DPM) emissions released during Project construction. The Memorandum attempts to address our concerns on this matter, stating:

> "Construction associated with the Project (and other projects in the LMSAP area) would not result in a more severe impact than what was previously disclosed in the LMSAP EIR. Further, as discussed below, there is no evidence that the Project would have peculiar or unusual impacts or impacts that are new or more significant than previously analyzed in the LMSAP EIR. Consequently, the construction health risk has been adequately addressed by the planning-level review and the Project's conditions of approval. Furthermore, there is nothing in the LMSAP EIR indicating that a stand-alone HRA for construction-related impacts is required on a project-by-project basis. In fact, preparation of a construction-related HRA would result in unnecessary and duplicative studies that would ultimately reach the same conclusions and control measures already established in the LMSAP EIR.
>
> For example, as noted on page 3.3-39 of the LMSAP EIR, construction health risks would be minimized to less than significant through application of SCA A (W12 SCA AIR-1), which indicates that diesel emissions would be minimized through the application of various measures. Specifically, subsections (g) and (h) of SCA AIR A (W12 SCA AIR-1) minimize idling; subsection (i) ensures that construction equipment is running in proper condition; subsection (j) specifies that

> portable equipment would be powered by electricity if available; subsection (u) requires that equipment meet emissions and performance requirements; subsection (v) requires the use of low volatile organic compound coatings; subsection (w) requires that equipment and diesel trucks be equipped with Best Available Control Technology; and subsection (x) requires that off-road heavy diesel engines meet the California Air Resources Board's most recent certification standard.
>
> The Project sponsor would be obligated to use construction equipment that meets Tier 4 emissions standards and utilize high performance renewable diesel (diesel HPR) in order to comply with subsections (w) and (x). Tier 4 engines and diesel HPR are considered the best available technology and are readily available in the marketplace" (p. 7-8).

This justification, however, is inadequate. Although the Project would implement W12 SCA AIR-1 to minimize the Project's health risks, without quantification of this risk, it is unclear how much the risk will be minimized, and is unclear if this risk will be reduced to a less-than-significant level once these mitigation measures are implemented. As a result, the risk should still be quantified to determine which measures must be applied to reduce the Project's construction-related DPM emissions and if the measures proposed under W12 SCA AIR-1 will reduce emissions to levels that will not cause a significant impact. Both the CEQA Analysis and the Memorandum fail to actually evaluate the adequacy of the mitigation measures listed under W12 SCA AIR-1. As a result, the Project's health risk assessment is incomplete, and should not be relied upon to determine Project significance.

Additionally, the measures proposed under W12 SCA AIR-1 of the CEQA Analysis are presented in an exhaustive list and use ambiguous language stating that "the project applicant shall implement all of the following applicable air pollution control measures during construction..." (pp. 99). There is no guarantee that all of the measures listed under W12 SCA AIR-1 will be "applicable" to the proposed Project, as the CEQA Analysis fails to actually assess the feasibility of the measures proposed. As a result, the feasibility of each measure also needs to be assessed, and the health risk needs to still be quantified in order to determine what applicable measures can be implemented to reduce the construction health risk to a less than significant level and whether additional measures will be needed.

In fact, the statement that "The Project sponsor would be obligated to use construction equipment that meets Tier 4 emissions standards and utilize high performance renewable diesel (diesel HPR) in order to comply with subsections (w) and (x)" is questionable as the feasibility of using all Tier 4 equipment is unclear (Memorandum, p. 8). The Project Applicant makes no effort to actually demonstrate the feasibility of implementing this measure once the Project is approved.

The California Air Resources Board does not require that off-road construction fleets be comprised solely of Tier 4 Final engines. Furthermore, even just based on availability, the City has failed to demonstrate that all of the construction equipment utilized for the Project will have Tier 4 engines and the mitigation measure does not specifically require all Tier 4 equipment during construction. Unlike SCA AIR-1, SCA AIR-2 specifically calls for Tier 4 to reduce operational impacts, but even then the measure merely requires Tier 4 "if feasible" (p. A-6 of the CEQA Analysis). The United States

Environmental Protection Agency's (USEPA) 1998 nonroad engine emission standards were structured as a three-tiered progression. Tier 1 standards were phased-in from 1996 to 2000 and Tier 2 emission standards were phased in from 2001 to 2006. Tier 3 standards, which applied to engines from 37-560 kilowatts (kW) only, were phased in from 2006 to 2008. The Tier 4 emission standards were introduced in 2004, and were phased in from 2008 – 2015.[4] These tiered emission standards, however, are only applicable to newly manufactured nonroad equipment. According to the United States Environmental Protection Agency (USEPA) "if products were built before EPA emission standards started to apply, they are generally not affected by the standards or other regulatory requirements."[5] Therefore, pieces of equipment manufactured prior to 2000 are not required to adhere to Tier 2 emission standards, and pieces of equipment manufactured prior to 2008 are not required to adhere to Tier 4 emission standards. Construction equipment often lasts more than 30 years; as a result, Tier 1 equipment and non-certified equipment are currently still in use.[6] It is estimated that of the two million diesel engines currently used in construction, 31 percent were manufactured before the introduction of emissions regulations.[7]

Furthermore, in a 2010 white paper, the California Industry Air Quality Coalition estimated that approximately 7% and less than 1% of all off-road heavy duty diesel equipment in California was equipped with Tier 2 and Tier 3 engines, respectively.[8] It goes on to explain that "cleaner burning Tier 4 engines...are not expected to come online in significant numbers until 2014." Given that significant production activities have only just begun within the last couple of years, it can be presumed that there is limited availability of Tier 4 equipment. Furthermore, due to the complexity of Tier 4 engines, it is very difficult if not nearly impossible, to retrofit older model machinery with this technology.[9] Therefore, available off-road machinery equipped with Tier 4 engines are most likely new.

It should be noted that the California Air Resources Board (CARB) currently enforces regulations with regards to construction fleets. According to CARB, large and medium fleets (fleets with over 2,500 horse power) will not be allowed to add a vehicle with a Tier 1 engine to its fleet starting on January 1, 2014. The engine tier must be Tier 2 or higher.[10] Therefore, construction equipment fleets typically include a mix of Tier 2, 3, and 4 engines, rather than Tier 4 Final equipment exclusively. Without a

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[4] Emission Standards, Nonroad Diesel Engines, *available at:* https://www.dieselnet.com/standards/us/nonroad.php#tier3

[5] "Frequently Asked Questions from Owners and Operators of Nonroad Engines, Vehicles, and Equipment Certified to EPA Standards." United States Environmental Protection Agency, August 2012. *Available at:* http://www.epa.gov/oms/highway-diesel/regs/420f12053.pdf

[6] "Best Practices for Clean Diesel Construction." Northeast Diesel Collaborative, August 2012. *Available at:* http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf

[7] Northeast Diesel Collaborative Clean Construction Workgroup, *available at:* http://northeastdiesel.org/construction.html

[8] "White Paper: An Industry Perspective on the California Air Resources Board Proposed Off-Road Diesel Regulations."Construction Industry Air Quality Coalition, *available at:* http://www.agc-ca.org/uploadedFiles/Member_Services/Regulatory-Advocacy-Page-PDFs/White. Paper_CARB_OffRoad.pdf

[9] "Tier 4- How it will affect your equipment, your business and your environment."Milton CAT, *available at:* http://www.miltoncat.com/News/Documents/Articles/For%20the%20Trenches%20-%20Tier%204.pdf

[10] "Enforcement of the In-Use Off-Road Vehicle Regulations."California Air Resources Board, February 2014, *available at:* http://www.arb.ca.gov/msprog/mailouts/msc1401/msc1401.pdf

condition specifically requiring all Tier 4 engines and a detailed analysis regarding the feasibility of such a measure, the City has failed to adequately demonstrate that all of the Project's construction equipment would meet Tier 4 standards. As a result, this measure should not be relied upon to reduce the Project's construction health risk to below levels of significance.

Updated Health Risk Assessment Demonstrates Significant Impact

The Project Applicant prepared an updated construction CalEEMod model ("Updated Model") to estimate the Project's criteria air pollutant emissions. Using this updated exhaust PM10 emissions from this model, we prepared a simple screening-level health risk assessment using AERSCREEN.

As of 2011, the EPA recommends AERSCREEN as the leading air dispersion model, due to improvements in simulating local meteorological conditions based on simple input parameters.[11] The Memorandum attempts to diminish our previous health risk assessment stating, "SWAPE's analysis used a highly conservative screening model (aerscreen) which overestimates health risk. Aermod is the analysis tool that is the industry standard for conducting HRA's because it allows a much more refined analysis" (p. 8). However, as previously stated in our August 3 letter, AERSCREEN is included in OEHHA[12] and CAPCOA[13] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project. Therefore, the use of AERSCREEN is appropriate to prepare a screening level analysis, as was done in our August 3 letter and which will be done below. If the results of the screening level analysis indicate that there is an unacceptable health risk, the City must prepare a refined health risk assessment in a DEIR, such as AERMOD, as was suggested in the Memorandum. However, the City has failed to prepare any level of health risk assessment.

We prepared a preliminary health risk screening assessment of the Project's mitigated construction emissions using the total exhaust PM_{10} emissions from the Project Applicant's Updated Construction Model's CalEEMod output files. We utilized the CalEEMod model that assumed a 30-month construction schedule to provide the most conservative analysis, as is required by CEQA. It should be noted that Tier 4 mitigation was not included in the model. Due to the infeasibility of acquiring a construction fleet composed entirely of Tier 4 off-road equipment, as explained above, it would not be appropriate to assess the construction health risk assuming this mitigation measure was in place.

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[11] "AERSCREEN Released as the EPA Recommended Screening Model," USEPA, April 11, 2011, *available at:* http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf

[12] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf

[13] "Health Risk Assessments for Proposed Land Use Projects," CAPCOA, July 2009, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf

The output file indicates that construction activities will generate approximately 1,195.2 pounds of DPM over a 913-day construction period. The AERSCREEN model relies on a continuous average emissions rate to simulate maximum downwind concentrations from point, area, and volume emissions sources. To account for the variability in construction equipment usage over the six phases of Project construction, we calculated an average DPM emission rate by the following equation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{1{,}195.2\ lbs}{913\ days} \times \frac{453.6\ grams}{lb} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} \approx \mathbf{0.0069}\ {}^{g}/_{s}$$

Construction activity was simulated as a 1.72 acre rectangular area source in AERSCREEN, with dimensions of 140 meters by 50 meters. A release height of three meters was selected to represent the height of exhaust stacks on construction equipment, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generated maximum reasonable estimates of single hour downwind DPM concentrations from the Project site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant may be estimated by multiplying the single-hour concentration by 10%.[14] The maximum single-hour downwind concentration in the AERSCREEN output was approximately 21.21 $\mu g/m^3$ DPM 25 meters downwind, a distance that is most representative of sensitive receptor locations adjacent to the Project site. The annualized average concentration for the sensitive receptors was estimated to be 2.121 $\mu g/m^3$.

We calculated the excess cancer risk for each sensitive receptor location, for adults, children, and/or infant receptors using applicable HRA methodologies prescribed by OEHHA. OEHHA recommends the use of Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution.[15] According to the revised guidance, quantified cancer risk should be multiplied by a factor of ten during the first two years of life (infant), and by a factor of three for the subsequent fourteen years of life (child aged two until sixteen). Furthermore, in accordance with guidance set forth by the BAAQMD, we used 95th percentile breathing rates for infants and children and 80th percentile breathing rates for adults.[16] We used a cancer potency factor of 1.1 $(mg/kg\text{-}day)^{-1}$ and an averaging time of 25,550 days. The results of our calculations are shown below.

[14] http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf

[15] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf

[16] "Air Toxics NSR Program Health Risk Screening Analysis (HRSA) Guidelines," BAAQMD, January 2010, *available at:* http://www.baaqmd.gov/~/media/Files/Engineering/Air%20Toxics%20Programs/hrsa_guidelines.ashx, p. 2-3

Parameter	Description	Units	Adult	Child	Infant
C_{air}	Concentration	$\mu g/m^3$	2.121	2.121	2.121
DBR	Daily breathing rate	L/kg-day	302	581	581
EF	Exposure Frequency	days/year	350	350	350
ED	Exposure Duration	years	2.5	2.5	2
AT	Averaging Time	days	25550	25550	25550
	Inhaled Dose	(mg/kg-day)	2.2E-05	4.2E-05	3.4E-05
CPF	Cancer Potency Factor	1/(mg/kg-day)	1.1	1.1	1.1
ASF	Age Sensitivity Factor	-	1	3	10
	Cancer Risk		**2.41E-05**	**1.39E-04**	**3.71E-04**

The excess cancer risk to adults, children, and infants during Project construction for the sensitive receptors located 25 meters away are 24.1, 139, and 371 in one million, respectively. Consistent with OEHHA guidance, exposure was assumed to begin in the infantile stage of life to provide the most conservative estimates of air quality hazards. The adult, child, and infantile exposure for the sensitive receptors all far exceed the BAAQMD threshold of 10 in one million. As a result, a refined health risk assessment must be prepared and included in a DEIR to examine air quality impacts generated by Project construction using site-specific meteorology and specific equipment usage schedules.

Our analysis demonstrates that the Project poses a significant health risk as a result of exposure to DPM emissions. Therefore, a revised DEIR must be prepared to adequately evaluate the Project's health risk impact. Furthermore, the feasibility of Tier 4 mitigation should be analyzed and reductions from proposed mitigation measures should be quantified to determine if the impact can be reduced to a less than significant impact.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Jessie Jaeger

EXHIBIT F

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

PES Environmental, Inc.
Engineering & Environmental Services

A Report Prepared for:

The Martin Group
44 Montgomery Street, Suite 4050
San Francisco, California 94104

Attention: Mr. Justin Osler

SUBSURFACE INVESTIGATION REPORT
301 AND 285 12TH STREET AND VICINITY
OAKLAND, CALIFORNIA

JULY 14, 2016

By:

Gary Thomas
Associate Geologist, PG

Carl J. Michelsen, PG, CHG
Principal Geochemist

1498.001.01.002

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1.0 INTRODUCTION

This report has been prepared by PES Environmental, Inc. (PES) on behalf of The Martin Group to document the results of a subsurface investigation conducted on the properties located at 301 and 285 12th Street and vicinity in Oakland, California (the site or subject property; Plates 1 and 2). The investigation activities were conducted in February, May, and June 2016 and included the collection of soil gas, groundwater and soil samples. The 301 12th Street property encompasses the city block bounded by 12th Street to the north, Harrison Street to the east, 11th Street to the south, and Webster Street to the west. The entire block is occupied by one building that currently houses three tenants: a public parking garage located in approximately the southwestern third of the building, the Oakland Charter High School in the northern third of the building and the Downtown Charter Academy (a middle school) in approximately the eastern third of the building. The property located at 285 12th Street is asphalt paved and serves as a play area for the schools. It is PES' understanding that an affiliate of The Martin Group is considering purchasing and redeveloping these properties and has requested this investigation as part of due diligence.

This report supplements an October 29, 2015 draft *Phase II Environmental Site Assessment* report prepared by Langan Treadwell Rollo (Langan)[1]. Pertinent data from the Langan report is included in Appendix A. The Langan report documented the presence of elevated concentrations of volatile organic compounds (VOCs) in soil gas and groundwater, total petroleum hydrocarbons (TPH) as gasoline (TPHg) and diesel (TPHd) in groundwater, and lead in soil. In addition, water levels measured at three on-site groundwater wells installed by Langan indicated an approximate easterly direction of groundwater flow. The discussions and plates presented in Sections 5 (Magnitude and Extent of TCE in Soil Gas and Groundwater) and 6 (Preliminary Conceptual Site Model) of this report incorporate data from Langan's report.

The following sections of this report present: (1) a brief summary of investigation activities that were performed by PES in February, May, and June 2016; (2) the methods and procedures for the soil gas, soil, grab groundwater, monitoring well sampling activities, and water level measurement activities conducted during the subsurface investigation; (3) the results of the subsurface investigation; (4) a discussion of the magnitude and extent of trichloroethene (TCE) in soil gas and groundwater; and (5) a discussion of the preliminary conceptual site model for the distribution of TCE in soil gas and groundwater.

2.0 SUBSURFACE INVESTIGATION ACTIVITIES

The following sections describe the field activities, sampling and laboratory analytical methods, and testing results for the investigation. Investigation activities were performed in February, May, and June 2016 to: (1) better understand the on-site and off-site distribution, and lateral and vertical extent of VOCs in soil gas and groundwater and TPH in groundwater;

[1] Langan Treadwell Rollo, 2015. *Draft Phase II Environmental Site Assessment, 301 and 285 12 Street, Oakland, California.* October 29.

(2) further characterize the extent of soil contamination in the vicinity of site features such as the former hydraulic lift, former gasoline and waste oil underground storage tank (UST) areas, and areas in the vicinity of floor drains; and (3) better understand the distribution of lead in the shallow fill materials beneath the building. A summary of investigation activities completed during each phase of work is presented below. The sample locations discussed below are shown on Plate 2.

February 2016 Investigation

The purpose of the February 2016 investigation was to: (1) further characterize the on-site lateral and vertical extent of VOCs in soil gas and groundwater within the footprint of the public garage area; and (2) further characterize soil conditions.

The February investigation included:

- Collecting soil gas samples from six on-site temporary nested soil gas locations (i.e., locations SG1 through SG6). Soil gas samples were collected from two or more depth intervals (i.e., 5, 10, and 20 feet below ground surface [bgs]) at each location;
- Collecting shallow grab groundwater samples at five on-site locations (i.e., locations GB1 through GB5) and a deeper grab groundwater sample at one on-site location (location GB6); and
- Collecting shallow and deeper soil samples from six of the locations discussed above (i.e., locations SG1 through SG5, and GB2).

May 2016 Investigation

The purpose of the May 2016 investigation was to: (1) investigate whether VOCs and TPH compounds were present in shallow and deep groundwater immediately surrounding the site; and (2) investigate deeper groundwater conditions within the garage area, generally beneath the area wherein high VOC concentrations were identified in soil gas samples collected in February 2016. Because of the easterly groundwater flow direction identified by Langan in 2015, a greater number of groundwater samples were collected to the east of the site.

The May investigation included:

- Collecting shallow grab groundwater samples at eight off-site locations (i.e., GB7 through GB14);
- Collecting deeper grab groundwater samples at three off-site locations (i.e., GB11,GB12, and GB13); and
- Collecting a deeper grab groundwater sample at one on-site location (GB15).

June 2016 Investigation

The purpose of the June 2016 investigation was to: (1) further assess the current groundwater flow direction; (2) further assess the lateral extent of TCE and other VOCs in shallow groundwater; and (3) investigate the potential presence of VOCs in soil gas north of the site.

The June investigation included:

- Collecting soil gas samples from six off-site temporary shallow soil gas locations (i.e., locations SG7 through SG10, and SG12, and SG13). The soil gas samples were collected at 5 feet bgs at each location;
- Collecting soil gas samples from one off-site temporary nested soil gas locations (i.e., location SG11). Soil gas samples were collected from depths of 5 and 19 feet bgs at this location;
- Collecting shallow grab groundwater at six off-site locations (i.e., GB16 through GB21); and
- Collecting depth-to-groundwater measurements and groundwater samples from on-site wells GW-1 through GW-3. Depth-to-groundwater measurements were also collected at off-site grab groundwater locations GB16 and GB17 (located to the north on 13th Street) so that a shallow water-bearing zone groundwater elevation contour map for the site and site vicinity could be prepared. As discussed in Section 2.5, the top-of-casing elevations at grab groundwater locations GB16 and GB17 were surveyed.

2.1 Field Preparation Activities

During each phase of investigation, drilling permits were obtained from the Alameda County Public Works Agency, Water Resources Section (ACPWA) prior to commencing field work. Copies of the drilling permits are included in Appendix B. Also, encroachment permits were obtained from the City of Oakland for sample locations advanced in the public right-of-way during off-site investigation activities conducted in May and June 2016.

Underground Service Alert was contacted at least 48 hours prior to the start of each phase of drilling activities and C. Cruz Sub-Surface Locators, Inc. (C. Cruz) of Milpitas, California, a private utility locating company, was retained to clear the sample locations for subsurface utilities or other features. Environmental Control Associates, Inc. (ECA) of Aptos, California, was retained to perform the drilling services during February and June investigation activities, and Cascade Drilling LLC (Cascade) of Richmond, California, was retained to perform the drilling services during the May investigation activities. Both drilling subcontractors possess a valid C-57 California water well contractor's license. In addition, a site-specific Health and Safety Plan (HASP) was prepared in accordance with applicable State and Federal Occupational Safety and Health Administration (OSHA) regulations for use during field work to address potential chemical and physical hazards associated with the subsurface investigation.

2.2 Active Soil Gas Survey Sampling Methods and Analysis

ECA and Cascade utilized track- or truck-mounted direct-push drilling rigs to advance the on-site and off-site soil gas locations discussed above (Plate 2). Continuous soil cores were collected and logged from each on-site nested soil gas location (i.e., locations SG1 through SG6). PES observed the borehole drilling and prepared lithologic logs of the borings using the Unified Soil Classification System (USCS). The lithologic logs are included in Appendix C. The sampling was conducted under the supervision of a California-registered geologist or engineer. The soil cores were screened for volatile organics using a photoionization detector (PID) and recorded on the lithologic log. The boreholes for the off-site soil gas locations were co-located with grab groundwater sample locations. Therefore, the lithology encountered at these locations can be found on the lithologic log for the adjacent grab groundwater location (see Appendix C).

The soil gas survey followed the procedures outlined in the *Advisory – Active Soil Gas Investigations* (ASGI) (DTSC, 2015)[2]. Temporary shallow soil gas probes were constructed by advancing a 2-inch outside diameter sampling rod to a depth of 5.5 feet bgs. Once the target depth was reached, 1/4-inch outside diameter Teflon® tubing equipped with a filter cartridge was extended to a depth of approximately 6-inches above the bottom of the rod and a 1-foot thick sand pack was placed around it as the rod was slowly raised. One-foot of dry granular bentonite was placed above the sand pack, followed by a hydrated bentonite seal to the surface.

The nested soil gas probes were also constructed by advancing 2-inch outside diameter sampling rod to the target depth interval. The on-site nested soil gas probes were advanced to 20.5 feet bgs and the off-site soil gas probe SB11 was advanced to 19.5 feet bgs. Once the target depth was reached, 1/4-inch outside diameter Teflon® tubing equipped with a filter cartridge was extended to a depth of approximately 6-inches above the bottom of the rod and a 1-foot thick sand pack was placed around it as the rod was slowly raised. This procedure was repeated for each probe sample interval. One foot of dry granular bentonite was placed on top of each sand pack, followed by hydrated bentonite in the interval between the probe tips and above the upper dry bentonite seal to the surface.

Prior to conducting the leak test testing, purging, and sampling procedures discussed below, the soil gas probes were allow to equilibrate for at least two hours following probe installation. Prior to purging and the collection of soil gas samples, shut-in leak testing was performed. The shut-in test consisted of assembling the above-ground sampling apparatus (e.g., valves, lines and fittings downstream from the top of the probe), and evacuating the lines to a measured vacuum of approximately 100 inches of water column (in-H_2O), then shutting the vacuum in with closed valves on opposite ends of the sampling train. A vacuum gauge was then used to assess if there was any observable loss of vacuum (for a period of at least one minute) prior to purging and the collection of soil gas samples. If observable vacuum loss was

[2] DTSC, 2015. *Advisory - Active Soil Gas Investigations*. Jointly developed by the California Environmental Protection Agency Department of Toxic Substances Control (DTSC), and the California Regional Water Quality Control Board – Los Angeles Region (LARWQCB) and RWQCB - San Francisco Region (SFRWQCB). July.

noted, then the sample train was re-assembled and the shut-in test was repeated. This process was repeated as necessary until a successful shut-in test had been performed.

A default of three purge volumes was purged prior to collection of each soil gas sample. The purge volume was calculated using the volumes of: (1) the internal volume of the tubing; (2) the void space of the sand pack around the probe tip; and (3) the void space of the dry bentonite in the annular space. The stagnant air was purged with a six-liter Summa canister. A 1-liter Summa canister that was batch-certified clean by a California-certified analytical laboratory was utilized to collect the soil gas samples and shroud samples discussed below.

Following completion of the shut-in leak test and purging, sample train leak testing was performed using 1,1-difluoroethane (1,1-DFA) as a propellant tracer in combination with a shroud box. The tracer shroud box consisted of a polycarbonate box equipped with a sampling port. The bottom of the shroud box was positioned over the probe with the sample collection tubing passing through the bottom. Once in position, the sample train was connected to the Summa canister and a second Summa canister was set up to sample air within the shroud box; the shroud box was placed over the entire sample train. The shroud box was equipped with an access port to allow charging of the box with the propellant tracer 1,1-DFA. Prior to opening the Summa canisters, the shroud box was charged by spraying 1,1-DFA propellant into the shroud box. The shroud box was allowed to remain in place for the duration of sampling. After sampling, the Summa canisters were transported to K-Prime Inc. (K-Prime), of Santa Rosa, California, under chain-of-custody protocol. The soil gas samples were analyzed for: (1) VOCs by U.S. Environmental Protection Agency (U.S. EPA) Method TO-15; and (2) 1,1-DFA by U.S. EPA Method TO-3. The shroud samples were analyzed for 1,1-DFA by U.S. EPA Method TO-3.

Field quality assurance/quality control (QA/QC) samples for the soil gas survey consisted of a field duplicate sample at locations SG1 (20 feet bgs sample interval) and SG11 (5 feet bgs sample interval). The field duplicate sample was analyzed for VOCs and 1,1-DFA using the test methods indicated above.

To reduce the potential for cross-contamination between sampling locations, downhole drilling and sampling equipment were thoroughly cleaned prior to initiating work and between sampling locations. Upon completion of sampling activities, the borehole was grouted to the surface with neat cement in accordance with ACPWA requirements. As required by the City of Oakland, off-site locations on asphalt were patched by an asphalt patching subcontractor. Soil cuttings generated during sampling activities were contained in 55-gallon drums and disposed off-site as non-hazardous waste.

2.3 Grab Groundwater Sampling and Analytical Methods and Procedures

ECA and Cascade utilized track- or truck-mounted direct-push drilling rigs to advance the on-site and off-site grab groundwater sample locations discussed above (Plate 2). Continuous soil cores were collected and logged at on-site locations GB2 and GB6 (to 32 feet bgs, not logged below this depth due to the presence of flowing sands), and off-site locations GB7

through GB14 and GB16 through GB21 following the procedures described in Section 2.2. PES observed the borehole drilling and prepared a lithologic log of the boring using the USCS. The lithologic log is included in Appendix C. The boreholes for on-site grab groundwater locations GB1, GB3, GB4, and GB5 were co-located with nested soil gas probes. Therefore, the lithology encountered at these locations can be found on the lithologic logs for the adjacent nested soil gas probe location (see Appendix C).

During the February 2016 investigation, ECA utilized a hydropunch sampler to facilitate the collected of the grab groundwater samples. For the shallow groundwater samples, the hydropunch sampler was advanced to approximately 30 feet bgs (i.e., approximately 5 feet below first encountered wet soil) and then the sampler was opened to expose an approximate 5 feet interval to saturated soil. A grab groundwater sample was collected from inside the hydropunch rods using a peristaltic pump for the non-volatile constituents (i.e., TPHd and TPH motor oil [TPHmo]) and a small diameter disposable polyethylene bailer or stainless steel bailer for the volatile constituents (i.e., VOCs and TPHg). The groundwater was immediately decanted from the bailer into appropriate laboratory-supplied sample bottles, which were slowly filled in a manner to minimize sample disturbance and potential headspace or air bubbles in the sample bottle. The samples were labeled to indicate project location, job number, boring number, sample number, and time and date collected and then immediately placed in a thermally-insulated cooler containing ice.

As discussed above, continuous soil cores were collected and logged from on-site locations GB2 and GB6; location GB6 was not logged below 32 feet bgs, due to the presence of flowing sands. Therefore, ECA utilized a hydropunch sampler to facilitate collection of the grab groundwater sample from boring GB6. The hydropunch sampler was advanced through the same borehole to a depth of approximately 50 feet bgs and then the sampler was opened to expose an approximate 5 feet interval to saturated soil. To facilitate groundwater sampling at location GB2, 5 feet of nominal 0.75-inch diameter PVC well screen attached to nominal 0.75-inch diameter PVC blank casing were placed inside the borehole. The groundwater samples at locations GB2 and GB6 were collected following the sampling procedures discussed above.

The samples collected during the February 2016 investigation were delivered under chain-of-custody protocol to Curtis & Tompkins, Ltd. (C&T), a state-certified laboratory located in Berkeley, California, for the following analyses:

- VOCs by U.S. EPA Method 8260B;
- TPHg by U.S. EPA Method 8015B; and
- TPHd/mo by U.S. EPA Method 8015B (including a silica gel cleanup).

During the May and June 2016 investigations, the shallow grab groundwater samples were collected using PVC well screen attached to blank casing following the procedures discussed above. However, filter socks were placed over the PVC well screen intervals to facilitate

filtering out fines material from the formation. A hydropunch sampler was used to collect the deeper groundwater samples during May and June investigations. The hydropunch sampler was pushed from the ground surface to the target depth interval, and then the sample was collected following the procedures discussed above. Prior to collecting the grab groundwater samples during the May and June investigations, the borings were purged with a Waterra or peristaltic pump and indicator parameters were measured. During the May investigation, the suite of parameters measured included temperature, pH, electrical conductivity, and turbidity. During the June investigation, these parameters plus oxidation-reduction potential (ORP) and dissolved oxygen (DO) were measured. The parameter data is presented on Table 1. The grab groundwater samples collected in May and June 2016 were analyzed for VOCs only, using U.S. EPA Method 8260B.

Field QA/QC samples consisting of trip blanks, a hydropunch equipment blank, and stainless steel bailer equipment blank were prepared and submitted to the project laboratory for chemical analysis. The trip blanks were prepared by the laboratory using deionized, organic-free water included with the shipment of samples to the laboratory. The equipment blanks were poured using deionized, organic-free water provided by the laboratory. Trip blanks and equipment blanks were analyzed for VOCs only using U.S. EPA Method 8260B.

Upon completion of sampling activities, the boreholes were grouted to the surface with neat cement in accordance with ACPWA requirements. As required by the City of Oakland, off-site locations on asphalt were patched by an asphalt patching subcontractor. Soil cuttings generated during sampling activities were contained in 55-gallon drums and disposed off-site as non-hazardous waste.

2.4 Soil Sampling and Analytical Methods and Procedures

As discussed above, shallow and deeper soil samples were collected during the February 2016 investigation from locations SG1 through SG5, and GB2. Samples for TPHd/mo and/or lead analysis were collected from the soil cores using pre-cleaned disposable scoops and placed in laboratory-supplied glass sample containers. Soil samples for VOCs and TPHg analysis were collected using Terra Core samplers in accordance with U.S. EPA sampling method 5035A. The soil samples were labeled to indicate project location, job number, boring number, sample number, and time and date collected and then immediately placed in a thermally-insulated cooler containing ice. The samples were delivered under chain-of-custody protocol to C&T for the following organic analyses:

- VOCs by U.S. EPA Method 8260B;
- TPHg by U.S. EPA Method 8015B; and
- TPHd/mo by U.S. EPA Method 8015B; a silica gel cleanup was included with this analysis.

In addition, the shallow soil samples from each boring were analyzed for lead by U.S. EPA Method 6010B. Additionally, selected soil samples were analyzed for soluble lead using: (1) the California Waste Extraction Test (WET) analysis, with extracts digested using U.S. EPA Method 3010A and then analyzed for lead by U.S. EPA Method 6010B; and (2) the Toxicity Characteristic Leaching Procedure (TCLP) analysis, with extracts digested using U.S. EPA Method 3010A and then analyzed for lead by U.S. EPA Method 6010B.

2.5 Top-of-Casing Surveying, Water Level Measurements, and Monitoring Well Groundwater Sampling Analytical Methods and Procedures

2.5.1 Top-of-Casing Surveying and Water Level Measurements

On June 10, 2016, the elevations of the top of casings (TOC) for grab groundwater borings GB16 and GB17 were surveyed by CSS Environmental Services (CSS) of Novato, California, a California registered land surveyor, to obtain reference elevations according to the North American Vertical Datum of 1988 (NAVD88). The survey results are presented in Appendix D and Table 2.

On June 10 and 11, 2016, PES collected groundwater-level measurements from off-site grab groundwater borings GB16 and GB17 and on-site monitoring wells GW-1, GW-2, and GW-3. The groundwater-level measurements were recorded to the nearest 0.01-foot using an electronic sounding probe. Depth to water measurements and groundwater elevations are presented in Table 2.

2.5.2 Monitoring Well Groundwater Sampling and Analytical Methods and Procedures

On June 13, 2016, Blaine Tech Services, Inc. (Blaine Tech) of San Jose, California, collected groundwater samples from the on-site monitoring wells GW-1, GW-2, and GW-3. The samples were collected using "low-flow" purging/sampling techniques as specified in U.S. EPA technical guidance document *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* (Puls and Barcelona, 1996)[3]. A Waterra pump equipped with a low-flow foot valve (attached to 1/4-inch outside diameter high density polyethylene tubing) was placed at the approximate mid-point of the saturated portion of the well screen (wells screened for 22 to 32 feet bgs). The sampling protocol included: (1) purging the well at a flow rate of approximately 100 to 150 milliliters per minute (mL/min); (2) measuring water quality parameters including temperature, pH, electrical conductivity, ORP, DO, and turbidity; and (3) collecting groundwater samples after water quality parameters had stabilized to within approximately 10% of the prior reading. Water quality measurements were recorded by Blaine Tech. The parameter data is presented on Table 2. After purging of the well, groundwater samples were collected from the discharge tubing into clean, laboratory-supplied sample containers.

[3] Puls and Barcelona, 1996. *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures, EPA/540/S-95/504*. April.

Field QA/QC samples, consisting of a trip blank and duplicate sample from well GW-3, were prepared and submitted to the project laboratory for chemical analysis. The trip blank was prepared by the laboratory using deionized, organic-free water and was included with the shipment of samples to the laboratory.

The groundwater samples and field QA/QC samples were stored in a chilled, thermally insulated cooler and transported by laboratory courier under chain-of-custody to C&T for analysis of VOCs using U.S. EPA Test Method 8260B.

3.0 INVESTIGATION RESULTS

3.1 Lithology and Hydrogeology Conditions

Observations of subsurface conditions indicate that the concrete-paved surface at the site is generally underlain by silty and poorly-graded sands with occasional interbeds of clayey sand and silt. Similar materials are found offsite, however baserock is often found below the concrete- or asphalt-paved surfaces and may extend up to approximately 1.5 ft bgs. Flowing sands were generally encountered below 30 feet bgs. Wet soil was encountered at the following depth ranges during the three phases of investigation:

- February 2016: At a depth of 24.5 feet bgs in borings GB2 and GB6;
- May 2016: At depths ranging between 21 and 22 feet bgs; and
- June 2016: At depths ranging between 20 and 21.5 feet bgs.

As indicated in Table 2, the depth to groundwater in the shallow water-bearing zone that was measured at grab groundwater borings GB16 and GB17 and shallow monitoring wells GW-1 through GW-3 ranged from 22.23 feet below top of casing (bTOC) at boring GB17 to 23.73 feet bTOC at well GW-2. Groundwater-level elevations in the shallow wells ranged from 18.32 feet MSL (GB17) to 18.99 feet MSL (GW-1).

As shown on Plate 3, the generalized direction of groundwater flow as measured in the shallow wells was calculated to be north/northeast at an approximate horizontal hydraulic gradient of 0.0015-foot/foot (ft/ft).

3.2 Analytical Results

Analytical results for the soil gas, soil, and grab groundwater are summarized in Tables 3, 4, and 5, respectively. Laboratory analytical reports and chain-of-custody forms are presented in Appendices E, F, and G for soil gas, soil, and grab groundwater results, respectively.

The soil gas, soil, and groundwater results presented on tables and discussed below are compared to:

- Regulatory screening levels developed by the RWQCB[4]; and
- DTSC's recommended residential and commercial/industrial soil, tap water, and air screening levels provided in Tables 1,2, and 3, respectively, of *HERO HHRA Note Number: 3* (DTSC, 2016)[5]. These screening levels are herein referred to as DTSC-SLs. If values were not available on these tables then the values presented on the U.S. EPA May 2016 Regional Screening Level (RSL) tables for residential and commercial/industrial land use were used;
- TCE trigger levels for soil gas[6] and groundwater[7] developed by the RWQCB; and
- DTSC's health-based indoor air screening criteria for trichloroethylene (TCE) provided in *HERO HHRA Note Number: 5* (DTSC, 2014)[8].

3.2.1 Soil Gas Analytical Results

Soil gas screening levels were derived from indoor air screening levels using the methodology recommended in DTSC, 2016 and DTSC's October 2011 Guidance for Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance [VIG]; DTSC, 2011)[9]. DTSC's residential and commercial/industrial indoor air screening levels provided in Table 3 of *HERO HHRA Note Number: 3* and the U.S. EPA May 2016 RSL table for residential and commercial/industrial air were divided by an attenuation factor to calculate soil gas screening levels. Attenuation factors of 0.001 for a future residential building or 0.0005 for a future commercial building were used, as recommended in Table 2 of the VIG.

Only the compounds detected in soil gas samples are summarized on Table 3; results equal to or exceeding residential derived DTSC-SLs for soil gas are shaded. The laboratory analytical reports for the soil gas and shroud samples are presented in Appendix E.

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[4] RWQCB, 2016. *February 2016 Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) Environmental Screening Levels (ESLs)*. Table SG-1 Sub-Slab/Soil Gas Vapor Intrusion: Human Health Risk Levels, Residential and Commercial/Industrial Land Use, deep groundwater/sand scenario.

[5] DTSC, 2016. DTSC Human and Ecological Risk Office (HERO), Human Health Risk Assessment (HHRA) Note, HERO HHRA Note Number 3, DTSC-modified Screening Levels (DTSC-SLs). Release Date: June 2016.

[6] RWQCB, 2014. October 2014 *Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) Interim Framework for Assessment of Vapor Intrusion at TCE-Contaminated Sites in the San Francisco Bay Region, Table 5 TCE ESLs and Trigger Levels for Indoor Air Sampling, Residential and Commercial/Industrial Land Use.*

[7] February 2016 RWQCB ESLs, TCE Trigger Level (Table TS-1), Residential and Commercial/Industrial Land Use; deep groundwater/sand scenario.

[8] DTSC, 2014. DTSC Human and Ecological Risk Office (HERO), Human Health Risk Assessment (HHRA) Note, HERO HHRA Note Number 5, Health-based Indoor Air Screening Criteria for Trichloroethylene (TCE). Release Date: August 23, 2014.

[9] DTSC, 2011. *Final, Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance)*. October 2011.

3.2.1.1 Leak Detection Compound and Shroud Sample Analytical Results

As indicated on Table 3, the leak check compound (1,1-DFA) was detected at a concentration of 1,100 parts per million by volume (ppmV) in the primary sample collected at 20 feet bgs from location SG1 and at a concentration of 20.0 ppmV in the sample collected at 10 feet from location SG5.

Based on the concentration of 1,1-DFA concentrations in the shroud sample at locations SG1 and SG5 (35,300 ppmV and 25,300 ppmV, respectively), the percent ambient air leak at these locations was 3.1 percent and 0.1 percent, respectively, which is below the 5 percent maximum acceptable amount according to the ASGI previously referenced. The leak detection compound analytical results indicate that an adequate seal was established in the soil gas sampling trains.

3.2.1.2 Soil Gas Sample Analytical Results

As shown on Table 3, VOCs were detected at each of the soil gas locations sampled. In all, thirteen different VOCs were detected in the soil gas samples. However, only cis-1,2-dichloroethene (cis-1,2-DCE), tetrachloroethene (PCE), TCE, and chloroform were detected at concentrations equal to or exceeding their respective residential-derived DTSC-SLs. The soil gas results for cis-1,2-DCE, PCE, TCE, and chloroform are summarized below:

- Cis-1,2-DCE was detected in 12 of 26 samples (including duplicate samples) at concentrations ranging from 205 micrograms per cubic meter ($\mu g/m^3$; 5 feet bgs sample at location SG3) to 241,000 $\mu g/m^3$ (20 feet bgs primary sample at location SG1). The concentrations detected in five samples (including duplicate samples) are above the residential-derived DTSC-SLs of 8,300 $\mu g/m^3$;

- PCE was detected in 12 of 26 samples (including duplicate samples) at concentrations ranging from 34.7 $\mu g/m^3$ (5 feet bgs sample at location SG7) to 248,000 $\mu g/m^3$ (20 feet bgs primary sample at location SG1). The concentrations detected in eight samples (including duplicate samples) are above the residential-derived DTSC-SLs of 480 $\mu g/m^3$;

- Chloroform was detected in 4 of 26 samples (including the duplicate sample) at concentrations ranging from 6.79 $\mu g/m^3$ (5 feet bgs primary sample at location SG11) to 472 $\mu g/m^3$ (5 feet bgs sample at location SG5). The concentration of 472 $\mu g/m^3$ is above the residential-derived DTSC-SLs of 120 $\mu g/m^3$;

- TCE was detected in 20 of 26 samples (including duplicate samples) at concentrations ranging from 6.50 $\mu g/m^3$ (5 feet bgs primary sample at location SG11) to 1,620,000 $\mu g/m^3$ (20 feet bgs sample at location SG4). The concentrations detected in seventeen samples (including duplicate samples) are above the residential-derived DTSC-SLs of 480 $\mu g/m^3$ and the residential TCE soil gas trigger level of 1,000 $\mu g/m^3$; and

- TCE isoconcentration contour maps for the 5 feet bgs, 10 feet bgs, and 20 feet bgs depth intervals are presented on Plates 4 through 6, respectively. These maps are discussed further in Section 4.0.

3.2.1.3 Soil Gas QA/QC Results

Data quality for the soil gas samples was assessed by implementing appropriate QA/QC procedures and through review of analytical data, including analysis of field duplicate and laboratory QA/QC data. The following is a summary of the data quality review:

- All samples were analyzed within the required holding times for the requested analyses;
- The method blanks did not contain VOCs at or above the laboratory reporting limits;
- The results of the laboratory control and laboratory control duplicate samples were within acceptable ranges; and
- Results for the field duplicate samples from location SG1 (at 20 feet bgs) and SG11 (at 5 feet bgs) generally agreed with respect to quantity (within acceptable precision limits) and to detection of target compounds. Higher precision was observed for the low concentration sample (SG11) compared to the high concentration sample (SG1).

3.2.2 Soil Analytical Results

Only the compounds detected in the soil samples are summarized on Table 4. The laboratory analytical reports for the soil samples are presented in Appendix F.

3.2.2.1 Total and Soluble Lead

Lead was detected in all seven shallow soil samples analyzed for this constituent. Lead was detected at concentrations ranging from 1.9 milligrams per kilogram (mg/kg; 1.5 to 2 feet bgs sample at location SG3) to 110 mg/kg (1 to 1.5 feet bgs sample at location GB2). The concentrations detected in two of the samples are above the residential soil DTSC-SL of 80 mg/kg.

To evaluate soluble metal characteristics for potential future excavation and disposal during redevelopment, the California WET extraction method was performed on soil samples with lead concentrations that were at least 10 times greater than their respective Title 22 CCR soluble threshold limit concentration (STLC) limits. As indicated on Table 4, 1 of the 2 samples analyzed for lead by California WET extraction method exceeded the STLC for lead. TCLP analysis was performed to further assess soluble lead on the sample that had a WET lead concentration exceeding the STLC limit. The soluble lead concentration was below the TCLP limit of 5 milligrams per liter (mg/L, Table 4).

3.2.2.2 TPH and VOCs

Organic constituents detected in the soil samples included TPHg, TPHd, TPHmo, and the VOCs cis-1,2-DCE, TCE, and PCE (Table 4). None of the detected concentrations were above their respective residential soil DTSC-SLs, RSLs, or ESLs (for TPH because DTSC-SLs or RSLs have not been established for TPH). The TCE, PCE, and cis-1,2-DCE results are summarized below:

- TCE was detected in all seven samples at concentrations ranging from 5.2 micrograms per kilogram (µg/kg; location GB2 at 12.5 to 13 feet bgs) to 780 µg/kg (location SG2 at 18 to 18.5 feet bgs);
- PCE was detected at a concentration of 45 µg/kg in the sample collected at 18 to 18.5 feet bgs from location SG2; and
- Cis-1,2-DCE was detected in 2 of 7 samples at concentrations of 5.5 µg/kg (location SG3 at 16.5 to 17 feet bgs) and 59 µg/kg (location SG2 at 18 to 18.5 feet bgs).

3.2.2.3 Quality Assurance/Quality Control Assessment for Soil

Analysis for soil samples was performed by C&T Laboratory, a California-accredited environmental laboratories for the analyses performed. The samples were received cold and intact, and were analyzed within acceptable U.S. EPA holding times. The quality of the chemical data reported by C&T was assessed from the results of internal laboratory QA/QC.

High or low recoveries or surrogate recoveries were observed for some VOC samples or in the matrix spike/matrix spike duplicate (MS/MSD); however, typically the blank spike/blank spike duplicate (BS/BSD) was within limits and the associated relative percent difference (RPD) was within limits. Often, the parent sample was not a project sample. The data from C&T are considered to be representative and of good quality. Details regarding QA/QC are provided in the analytical laboratory reports (Appendix F).

3.2.3 Groundwater Analytical Results

The groundwater analytical results are presented on Table 5 and the results for the TCE in shallow groundwater are posted on Plate 7. The laboratory analytical reports for the groundwater samples are presented in Appendix G.

3.2.3.1 Grab Groundwater Results

3.2.3.1.1 Volatile Organic Compounds

As indicated on Table 5, ten different VOCs were detected in the grab groundwater samples. VOCs detected at concentrations equal to or exceeding their respective residential DTSC-SLs included TCE, PCE, cis-1,2-DCE, vinyl chloride, 1,2-dichloroethane (1,2-DCA), and chloroform. The grab groundwater results for these constituents are summarized below:

- TCE was detected in 19 of 24 samples at concentrations ranging from 0.6 micrograms per liter (µg/L, location GB8) to 1,800 µg/L (location GB20). The concentrations detected in all nineteen samples are above the tap water RSL of 0.49 µg/L and 12 results are above the residential TCE groundwater trigger level of 21 µg/L;

- PCE was detected in 5 of 24 samples at concentrations ranging from 0.6 µg/L (location GB15) to 6.1 µg/L (location GB2). The concentrations detected in all five samples are above the tap water DTSC-SL of 0.083 µg/L;

- Cis-1,2-DCE was detected in 12 of 24 samples at concentrations ranging from 0.6 µg/L (location GB9) to 47 µg/L (shallow sample at location GB12). The concentrations detected in six of the samples are above the tap water DTSC-SL of 12 µg/L;

- Vinyl chloride was detected at a concentration of 0.5 µg/L in the sample collected at location GB3. This concentration is above the tap water RSL of 0.019 µg/L;

- 1,2-DCA was detected in 5 of 24 samples at concentrations ranging from 0.7 µg/L (location GB17) to 2.8 µg/L (location GB13). The concentrations detected in all five samples are above the tap water RSL of 0.17 µg/L; and

- Chloroform was detected in 3 of 24 samples at concentrations ranging from 0.6 µg/L (location GB3) to 19 µg/L (location GB5). The concentrations detected in all three samples are above the tap water RSL of 0.22 µg/L.

3.2.3.1.2 Total Petroleum Hydrocarbons

TPHg and TPHd were detected in the grab groundwater samples; TPHmo was not detected at concentrations above the laboratory reporting limits. As summarized below, both of these constituents were detected at concentrations above their respective Tier 1 ESLs (compared to ESLs because DTSC-SLs or RSLs have not been established for TPH):

- TPHg was detected in 7 of 14 samples at concentrations ranging from 54 µg/L (location GB6) to 770 µg/L (shallow sample at location GB12). The concentrations detected in four of the samples are above the Tier 1 ESL of 100 µg/L; and

- TPHd was detected at a concentration of 160 µg/L in the sample collected at location GB7. This concentration is above the Tier 1 ESL of 100 µg/L.

3.2.3.2 Monitoring Well Results

As indicated on Table 5, five different VOCs including TCE, PCE, cis-1,2-DCE, 1,2-DCA, and chloroform were detected in the samples collected from monitoring wells GW-1, GW-2, and GW-3. The results for these constituents are summarized below (including the duplicate sample):

- TCE was detected in all four samples at concentrations ranging from 59 μg/L (well GW-1) to 700 μg/L (duplicate sample for well GW-3). The concentrations detected in all four samples are above the tap water RSL of 0.49 μg/L and the residential TCE groundwater trigger level of 21 μg/L;

- PCE was detected in 3 of 4 samples at concentrations ranging from 2.5 μg/L (well GW-1) to 30 μg/L (duplicate sample for well GW-3). The concentrations detected in all three of the samples are above the tap water DTSC-SL of 0.083 μg/L;

- Cis-1,2-DCE was detected in all four samples at concentrations ranging from 1.1 μg/L (well GW-1) to 710 μg/L (duplicate sample for well GW-3). The concentrations detected in two of the samples are above the tap water DTSC-SL of 12 μg/L;

- 1,2-DCA was detected in 3 of 4 samples at concentrations ranging from 0.6 μg/L (well GW-1) to 5.5 μg/L (duplicate sample for well GW-3). The concentrations detected in three of the samples are above the tap water RSL of 0.17 μg/L; and

- Chloroform was detected at a concentration of 3.5 μg/L in the sample collected from well GW-2. This concentration is above the tap water RSL of 0.22 μg/L.

3.2.3.3 Quality Assurance/Quality Control Assessment for Groundwater

Analysis for groundwater samples was performed by C&T Laboratory, a California–accredited environmental laboratories for the analyses performed. The samples were received cold and intact, and were analyzed within acceptable U.S. EPA holding times. The quality of the chemical data reported by C&T was assessed from the results of internal laboratory QA/QC.

The following is a summary of the data quality review for the groundwater samples:

- All samples were analyzed within the required holding times for the requested analyses;

- Method blanks analyzed for each analytical method by C&T did not indicate the presence of contaminants;

- No VOCs were detected in the trip blank or equipment blank samples at concentrations exceeding the laboratory's reporting limits;

- Results of analysis of the field duplicate samples from well GW-3 generally agreed with respect to quantity (within acceptable precision limits) and to detection of target compounds. The duplicate results indicate acceptable quality of the data set;

- Results of blank spikes, MS and MSDs were within acceptable ranges indicating acceptable quality of the analytical results; and

- The results of surrogate analyses were within acceptable ranges.

Based on the results discussed above, the data from C&T are considered to be representative and of good quality. Details regarding QA/QC are provided in the analytical laboratory reports (Appendix G).

4.0 MAGNITUDE AND EXTENT OF TCE IN SOIL GAS AND GROUNDWATER

The magnitude and extent of TCE, which is the main constituent of concern at the site, in groundwater and soil gas as identified from various investigations are summarized below.

4.1 Magnitude and Extent of TCE in Soil Gas

The posted shallow TCE soil gas data on Plates 4, 5, and 6 are results from: (1) the Phase II investigation conducted by Langan Treadwell Rollo July 2015; and (2) the investigations conducted by PES in February and June 2016. The TCE soil gas data on these plates are for the following depths:

- Plate 4: Samples collected at approximately 5 feet bgs;
- Plate 5: Samples collected at approximately 10 feet bgs; and
- Plate 6: Samples collected at approximately 20 feet bgs.

As shown on these plates, the highest TCE soil gas concentrations for all depth intervals were detected beneath the southern portion of the subject property building. The only areas where concentrations were detected above the TCE residential-derived DTSC-SLs of 480 $\mu g/m^3$ are beneath the footprint of the building. The highest TCE concentrations in each depth interval were found in the vicinity of the following sample locations:

- **5 feet bgs Depth Interval**: The maximum TCE concentrations were detected in the vicinity of locations SG2 (at 541,000 $\mu g/m^3$), location B-4 (670,000 $\mu g/m^3$), and location SG4 (955,000 $\mu g/m^3$);
- **10 feet bgs Depth Interval**: The maximum TCE concentrations were detected in the vicinity of locations SG4 (495,000 $\mu g/m^3$), SG2 (at 591,000 $\mu g/m^3$), location SG5 (600,000 $\mu g/m^3$), and location SG1 (647,000 $\mu g/m^3$); and
- **20 feet bgs Depth Interval**: The maximum TCE concentrations were detected in the vicinity of locations SG5 (792,000 $\mu g/m^3$), SG1 (1,430,000 $\mu g/m^3$), and SG4 (at 1,620,000 $\mu g/m^3$).

The TCE concentrations in shallow soil gas (i.e., 5 feet bgs depth interval) decrease significantly at the off-site sample locations. As shown on Plate 4, TCE was detected at only 3 of the 9 off-site sample locations. These include location B-6 (at 43 $\mu g/m^3$) to the east, and locations SG11 (at 6.50 $\mu g/m^3$) and SG12 (at 8.01 $\mu g/m^3$) along 12th Street to the north.

A deeper off-site soil gas sample was collected at depth of 19 feet bgs from location SG11 which is adjacent to GB12, located to the north along 12th Street. As indicated on Plate 6 and Table 3, despite the elevated concentration of TCE in groundwater at this location (1,300 TCE µg/L), TCE was not detected at a concentration above the laboratory report limit of 5.37 $\mu g/m^3$ in this deep soil gas sample.

Based on the TCE concentrations detected in shallow and deeper on-site and off-site soil gas locations, it appears that concentrations above the residential TCE soil gas trigger level of 1,000 $\mu g/m^3$ are generally confined to the footprint of the building.

4.2 Magnitude and Extent of TCE in Groundwater

The posted shallow TCE groundwater data on Plate 7 are results from: (1) the Phase II investigation conducted by Langan Treadwell Rollo July 2015; (2) the investigations conducted by PES in February, May, and June 2016; and (3) the most recent groundwater sampling event for on-site wells GW-1, GW-2, and GW-3, which was conducted by PES in June 2016.

Shallow groundwater at the site and site vicinity is primarily affected by TCE. The distribution of TCE in shallow groundwater is shown on Plate 7. As shown on this plate, concentrations of TCE greater than or equal to the residential TCE trigger level of 21 µg/L extends from the southeast portion of the subject property building toward the north. The estimated northern extent of the 21 µg/L contour (the residential TCE trigger level) does not extend to 13th Street and TCE concentrations rapidly decline under the block between 12th Street and 13th Street.

The highest detected TCE concentrations in shallow groundwater are located on 12th Street in the vicinity of borings B-1 (at 670 µg/L), GB12 (at 1,300 µg/L), and GB20 (at 1,800 µg/L). The highest TCE concentrations beneath the subject property building were found in well GW-3 (at 660 µg/L), boring GB2 (at 590 µg/L), and boring B-1 (at 670 µg/L).

As shown on Plate 7, the shallow TCE groundwater plume is bounded to the:

- West (along Webster Street) by concentrations of 48 µg/L (boring GB10), 8.9 µg/L (boring GB9), and less than 0.5 µg/L (boring GB18);
- North (along 13th Street) by concentrations 10 µg/L (boring GB16) and 2.6 µg/L (boring GB17);
- East by concentrations of 0.6 µg/L (boring GB8), less than 0.5 µg/L (borings GB7, GB13, and B-6), and 0.9 µg/L (boring GB11); and
- South (along 11th Street) by a concentration of 3.5 µg/L (boring GB14).

The highest TCE concentrations in deeper groundwater (i.e., the deeper samples were collected approximately 10 to 15 feet below the shallow samples) were detected beneath the subject property building. As indicated on Table 5, TCE was detected at concentrations of 26 µg/L (boring GB15) and 22 µg/L (boring GB6) in deeper groundwater beneath the building.

TCE was not detected in deeper groundwater in off-site borings GB11 and GB13, which are located toward the east and northeast, respectively. TCE was detected at a concentration of 4.5 μg/L in the deeper sample collected from boring GB12, which is located just north of the subject property building along 12th Street.

5.0 SUMMARY OF FINDINGS AND PRELIMINARY CONCEPTUAL SITE MODEL

Plate 8 presents a preliminary conceptual site model (cross section) of the distribution of TCE in soil gas and groundwater. The cross section location is shown on Plate 7. Key findings from the investigations conducted to date include:

- TCE and other VOCs are present in soil gas beneath the subject property building at concentrations in excess of human health based standards and regulatory trigger levels for indoor air sampling. The highest concentrations are located generally near site features such as floor drains and hydraulic lifts that were formerly used when the site was an active auto dealership and maintenance/repair facility. These features, along with general auto maintenance and repair operations, are suspected, though not confirmed, sources of the VOCs in soil gas and groundwater;

- Indoor air sampling conducted by Langan and Terraphase (in preparation and not discussed herein) has confirmed that vapor intrusion at both the high school and middle school locations is taking place. Although a limited number of soil gas samples have been collected within the school footprints, the presence of TCE and other VOCs in indoor air samples at multiple locations within the schools is indirect evidence of the presence of VOCs in underlying soil gas;

- Indoor air samples have not been collected within the public garage located in the southern third of the building. Because the locus of soil gas contamination is within the garage area, vapor intrusion is anticipated at this area, but may not impact indoor air quality because of the likely significant air flow resulting from numerous open garage doors at the parking lot;

- Elevated concentrations of TCE and other VOCs are present in groundwater beneath the buildings at the subject property (i.e., the city block bounded by 11th, 12th, Webster and Harrison Streets);

- The inferred groundwater flow direction measured in June 2016 is generally to the north of the site (i.e., across 12th Street in the direction of 13th Street) based on water levels measured in three on-site monitoring wells and two offsite temporary borings. However, the apparent groundwater gradient was easterly when measured in the summer of 2015;

- TCE and other VOCs have been detected in off-site groundwater to the north of the subject property, but not as far north as 13th Street. TCE contamination exceeding the residential TCE trigger level (21 μg/L) does not extend to 13th Street and TCE concentrations rapidly decline under the block between 12th Street and 13th Street;

- The highest concentrations of TCE in groundwater were measured in borings GB12 and GB20, located along 12th Street. Because the TCE concentration increases from south (the building footprint) to north (12th Street), a source of TCE may potentially be present north of the building footprint. A former waste oil tank was reportedly present within the sidewalk on the north side of the site and is considered a possible source of the elevated TCE in groundwater. As noted in the RWQCB's Interim Framework for Assessment of Vapor Intrusion at TCE-Contaminated Sites in the San Francisco Bay Region, significant releases of TCE to the environment are associated with the historic use of TCE in metal parts cleaner (e.g., auto repair facilities with waste oil tanks); and

- In contrast to TCE concentrations in soil gas samples beneath the subject property, which were found in July 2015 and February 2016 at multiple orders of magnitude higher than the regulatory trigger level for conducting indoor air sampling at the subject property, TCE concentrations in off-site soil gas samples are below the trigger level for conducting indoor air sampling at offsite buildings.

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

EXHIBIT G

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

301 12TH STREET
OAKLAND, CA 94607
ALAMEDA COUNTY
SITE TYPE: VOLUNTARY CLEANUP

PROJECT MANAGER: HAROLD (BUD) DUKE
SUPERVISOR: JOSE SALCEDO
OFFICE: NORTHERN CALIFORNIA SCHOOLS & SANTA SUSANA
PUBLIC PARTICIPATION SPECIALIST: VERONICA LOPEZ-VILLASENOR
PRESS CONTACT: JORGE MORENO

CLEANUP STATUS
ACTIVE AS OF 5/24/2016

SITE TYPE: VOLUNTARY CLEANUP
NATIONAL PRIORITIES LIST: NO
ACRES: 1.72 ACRES
APN: NONE SPECIFIED
CLEANUP OVERSIGHT AGENCIES:
DTSC - SITE CLEANUP PROGRAM - LEAD

ENVIROSTOR ID: 60002362
SITE CODE: 202101
SPECIAL PROGRAM: VOLUNTARY CLEANUP PROGRAM
FUNDING: SITE PROPONENT
ASSEMBLY DISTRICT: , 18
SENATE DISTRICT: , 09

PAST USE(S) THAT CAUSED CONTAMINATION
UNDERGROUND STORAGE TANKS, VEHICLE MAINTENANCE

POTENTIAL CONTAMINANTS OF CONCERN
PETROLEUM
TOXAPHENE
UNDER INVESTIGATION
VOLATILE ORGANICS (8260B VOCS)

POTENTIAL MEDIA AFFECTED
INDOOR AIR, OTHER GROUNDWATER AFFECTED (USES OTHER THAN DRINKING WATER), SOIL, SOIL VAPOR, UNDER INVESTIGATION

This EnviroStor project has two site codes. One site code (202101) for the buyer, and one site code (202097) for the seller.

The AMethod Public Schools Oakland Charter High School (high school) and Downtown Charter Academy (middle school) is located at 345 12th Street and 301 12th Street, respectively, in the city of Oakland, Alameda County (Site). The high school and middle school occupy conjoined 1-to 2-story buildings on the Site which are in the process of being sold for redevelopment.

In mid-May 2016, the Site was transferred from the Regional Water Quality Control Board to DTSC.

Initial draft reports identify that the location was a former automobile dealership and repair center. The property is currently owned by a trust (Richard S. Cochran and Susan L. Cochran Family Trust, et al.) and a cleanup agreement is pending. The property is being purchased by a developer (The Martin Group) who is expected to take ownership by July 2017. The buyer will enter into a California Land Reuse and Revitalization Act (CLRRA) clean-up agreement with DTSC separate from the clean-up agreement between DTSC and the seller.

As part of the due diligence process for the property purchase, the potential buyer collected soil, soil gas and groundwater samples from beneath the Site. Sample results showed elevated concentrations of trichloroethylene (TCE), along with other chlorinated solvents and petroleum hydrocarbons, and samples of indoor air were subsequently collected from the high school and middle school. Sampling results provided in May 2016 identified indoor air TCE concentrations in various rooms in the middle school ranged from 10 to 200 µg/m3, exceeding USEPA Region 9's Accelerated Response Action Level (ARAL) for residential direct exposure (2 µg/m3). Interim indoor air mitigation systems (recirculating air pump and granular activated carbon filters) were installed in the classrooms on May 18, 2016 and operated during off-hours. Confirmation indoor air samples were collected on May 24, 2016 and results indicated concentrations of TCE in indoor air had been reduced to less than the ARAL. DTSC on May 26, 2016 directed the school that the students and staff could return to the building as indoor air levels of TCE were reduced to below the ARAL for residential direct exposure.

Indoor air samples were collected from the high school and middle school on June 14, 2016. Sample results are expected to be received by DTSC the week of June 20th, 2016. Additional indoor air samples are planned to be collected the last week in June, and again in mid to late August of 2016 prior to start of the 2016/2017 school year.

The 2015/2016 school year was completed on June 10th, 2016. Summer school for the two campuses is scheduled for June 20th through July 8th, 2016. The 2016/2017 school year is scheduled to begin on August 24th, 2016.

DOCUMENT TYPE	DUE DATE	REVISED DATE
Fact Sheets	10/7/2016	
Community Profile	12/1/2016	
Site Screening	12/20/2016	
AB 389 Response Plan	2/12/2017	
Site Characterization Report	2/14/2017	
CEQA - Initial Study/ Environmental Impact Report	4/20/2017	

	DOCUMENT TYPE	DATE COMPLETED	COMMENTS
[VIEW DOCS]	Technical Workplan	6/23/2016	

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EXHIBIT H

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

APR 1 1 2011

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: AERSCREEN Released as the EPA Recommended Screening Model

FROM: Tyler Fox, Leader
Air Quality Modeling Group, C439-01

TO: EPA Regional Modeling Contacts

INTRODUCTION

In August 2010, EPA released a beta version of AERSCREEN with draft user's guide and test cases, taking public comment until September 30, 2010. These comments ranged from "bug" fixes to suggested AERSCREEN enhancements. After incorporating "bug" fixes and user comments, EPA released version 11060 of AERSCREEN on March 11, 2010 with a subsequent update, version 11076, on March 17, 2010. Version 11076 corrected an error found in version 11060. The release package includes AERSCREEN (Fortran source code and executable), a User's Guide, the MAKEMET meteorological data generator, and AERSCREEN test cases. AERSCREEN uses the AERMOD executable, ensuring consistency with the refined model, and also utilizes the BPIPPRM building processor and AERMAP terrain preprocessor as needed to account for building downwash and terrain effects. AERSCREEN can be found on the Support Center for Regulatory Atmospheric Modeling (SCRAM) website:
http://www.epa.gov/ttn/scram/dispersion_screening.htm#aerscreen

RECOMMENDATION OF AERSCREEN AS SCREENING MODEL

The recommended simple terrain screening model in *The Guideline on Air Quality Models* (*Guideline*, published as Appendix W to 40 CFR Part 51) has been SCREEN3. However, AERSCREEN (the single source screening version of AERMOD) is now available as a full release or non-beta version. This memorandum clarifies the replacement of SCREEN3 with AERSCREEN as the recommended screening model.

With respect to AERSCREEN replacing SCREEN3, the preamble of the 2005 rule promulgating AERMOD as the preferred *Guideline* model for a wide range of regulatory applications in all types of terrain states (See 70 FR at 68221):

> "With respect to a screening version of AERMOD, a tool called AERSCREEN is being developed with a beta version expected to be publicly available in Fall 2005. SCREEN3 is the current screening model in the *Guideline,* and since SCREEN3 has been successfully applied for a number of years, we believe that SCREEN3 produces an acceptable degree of conservatism for regulatory applications and may be used until AERSCREEN or a similar technique becomes available and tested for general application."

This language clearly implies that AERSCREEN will become the recommended screening model once it is released. In addition, since AERSCREEN is the screening version of AERMOD, EPA's preferred model for near-field dispersion, it follows that AERSCREEN would become the recommended screening model once available. The SCREEN3 model is essentially a screening version of the ISCST3 model, which was replaced by AERMOD, and is subject to the same limitations as ISCST3.

Similar to SCREEN3, AERSCREEN allows for user entry of emission inputs, source coordinates, building information (for downwash), receptor information, and meteorological information in a quick and easy fashion, either through an input file, or interactive prompts. However, AERSCREEN incorporates several enhancements relative to the SCREEN3 model. For example, AERSCREEN generates application-specific worst-case meteorology, via MAKEMET, that takes full advantage of the boundary layer scaling algorithms implemented in the AERMET meteorological processor using representative minimum and maximum ambient air temperatures, and site-specific surface characteristics (albedo, Bowen ratio, and surface roughness). AERSCREEN incorporates the PRIME downwash algorithms that are part of the AERMOD refined model and utilizes the BPIPPRIM tool to provide a detailed analysis of downwash influences on a direction-specific basis. AERSCREEN also incorporates AERMOD's complex terrain algorithms and utilizes the AERMAP terrain processor to account for the actual terrain in the vicinity of the source on a direction-specific basis.

The question has also arisen about the role of screening modeling and refined dispersion modeling under Appendix W. Section 2.2 of the *Guideline*, explains that:

> "[t]he purpose of such [screening] techniques is to eliminate the need of more detailed modeling for those sources that clearly will not cause or contribute to ambient concentrations in excess of either the National Ambient Air Quality Standards (NAAQS) or the allowable prevention of significant deterioration (PSD) concentration increments. If a screening technique indicates that the concentration contributed by the source exceeds the PSD increment or the increment remaining to just meet the NAAQS, then the second level of more sophisticated models should be applied."

In recent years, the use of screening models has been largely replaced with refined dispersion modeling because of advancements in computing power and the wider availability of

representative meteorological data that are needed to apply refined models. In this context, the primary regulatory purpose for application of a screening model would be to determine whether site-specific meteorological data would be required for a proposed source if no other representative meteorological data are readily available. However, a screening model such as AERSCREEN can also be a useful tool to estimate potential impacts during the design and planning stages of a project.

SUMMARY

In summary,

- AERSCREEN has been released and is available on the SCRAM web site.
- AERSCREEN is based on AERMOD, EPA's preferred near-field dispersion model, and replaces SCREEN3 as the recommended screening model based on the *Guideline on Air Quality Models*.

If there are any questions regarding AERSCREEN, please contact James Thurman of EPA's Air Quality Modeling Group at (919) 541-2703 or thurman.james@epa.gov.

cc: Richard Wayland, C304-02
Scott Mathias, C504-01
Raj Rao, C504-01
Dan deRoeck, C504-03
Elliot Zenick, OGC
Brian Doster, OGC
George Bridgers, C439-01
Roger Brode, C439-01
James Thurman, C439-01
Air Division Directors
Air Program Managers

Attachment B - August 26, 2016 Appeal by Oakland Residents for Responsible Development

CITY OF OAKLAND
APPEAL FORM
FOR DECISION TO PLANNING COMMISSION, CITY COUNCIL OR HEARING OFFICER

PROJECT INFORMATION

Case No. of Appealed Project: PLN16-133

Project Address of Appealed Project: 285 & 301 12th street

Assigned Case Planner/City Staff: Christina Ferracane

APPELLANT INFORMATION:

Printed Name: Alvina Wong Phone Number:

Mailing Address: 1200 Harrison St Alternate Contact Number:

City/Zip Code Oakland, 94612 Representing: W12 Community Benefits Coalition

Email:

An appeal is hereby submitted on:

☐ **AN ADMINISTRATIVE DECISION (APPEALABLE TO THE CITY PLANNING COMMISSION OR HEARING OFFICER)**

YOU MUST INDICATE ALL THAT APPLY:

- ☐ Approving an application on an Administrative Decision
- ☐ Denying an application for an Administrative Decision
- ☐ Administrative Determination or Interpretation by the Zoning Administrator
- ☐ Other (please specify) _____

Please identify the specific Administrative Decision/Determination Upon Which Your Appeal is Based Pursuant to the Oakland Municipal and Planning Codes listed below:

- ☐ Administrative Determination or Interpretation (OPC Sec. 17.132.020)
- ☐ Determination of General Plan Conformity (OPC Sec. 17.01.080)
- ☐ Design Review (OPC Sec. 17.136.080)
- ☐ Small Project Design Review (OPC Sec. 17.136.130)
- ☐ Minor Conditional Use Permit (OPC Sec. 17.134.060)
- ☐ Minor Variance (OPC Sec. 17.148.060)
- ☐ Tentative Parcel Map (OMC Section 16.304.100)
- ☐ Certain Environmental Determinations (OPC Sec. 17.158.220)
- ☐ Creek Protection Permit (OMC Sec. 13.16.450)
- ☐ Creek Determination (OMC Sec. 13.16.460)
- ☐ City Planner's determination regarding a revocation hearing (OPC Sec. 17.152.080)
- ☐ Hearing Officer's revocation/impose or amend conditions (OPC Sec. 17.152.150 &/or 17.156.160)
- ☐ Other (please specify) _____

(Continued on reverse)

(Continued)

☒ **A DECISION OF THE CITY PLANNING COMMISSION (APPEALABLE TO THE CITY COUNCIL)** ☐ Granting an application to: **OR** ☐ Denying an application to:

YOU MUST INDICATE ALL THAT APPLY:

Pursuant to the Oakland Municipal and Planning Codes listed below:

- ☒ Major Conditional Use Permit (OPC Sec. 17.134.070)
- ☐ Major Variance (OPC Sec. 17.148.070)
- ☐ Design Review (OPC Sec. 17.136.090)
- ☐ Tentative Map (OMC Sec. 16.32.090)
- ☐ Planned Unit Development (OPC Sec. 17.140.070)
- ☐ Environmental Impact Report Certification (OPC Sec. 17.158.220F)
- ☐ Rezoning, Landmark Designation, Development Control Map, Law Change (OPC Sec. 17.144.070)
- ☐ Revocation/impose or amend conditions (OPC Sec. 17.152.160)
- ☐ Revocation of Deemed Approved Status (OPC Sec. 17.156.170)
- ☐ Other (please specify) _____

FOR ANY APPEAL: An appeal in accordance with the sections of the Oakland Municipal and Planning Codes listed above shall state specifically wherein it is claimed there was an error or abuse of discretion by the Zoning Administrator, other administrative decisionmaker or Commission (Advisory Agency) or wherein their/its decision is not supported by substantial evidence in the record, or in the case of Rezoning, Landmark Designation, Development Control Map, or Law Change by the Commission, shall state specifically wherein it is claimed the Commission erred in its decision. The appeal must be accompanied by the required fee pursuant to the City's Master Fee Schedule.

You must raise each and every issue you wish to appeal on this Appeal Form (or attached additional sheets). Failure to raise each and every issue you wish to challenge/appeal on this Appeal Form (or attached additional sheets), and provide supporting documentation along with this Appeal Form, may preclude you from raising such issues during your appeal and/or in court. However, the appeal will be limited to issues and/or evidence presented to the decision-maker prior to the close of the public hearing/comment period on the matter.

The appeal is based on the following: *(Attach additional sheets as needed.)*

Please see attached document.

Supporting Evidence or Documents Attached. *(The appellant must submit all supporting evidence along with this Appeal Form;* however, the appeal will be limited evidence presented to the decision-maker prior to the close of the public hearing/comment period on the matter.

(Continued on reverse)

Community Coalition Appeal to the Oakland City Council

Project: W12, 285 & 301 12th Street, The Martin Group, Justin Osler, Principal

Appealed & Prepared by: A Coalition of Neighborhood Stakeholders from the Chinatown Neighborhood, and Hundreds of Residents Across Oakland

Date: August 29, 2016

Dear Oakland City Council, Mayor Libby Schaaf and City Administrator Sabrina Landreth,

On behalf of hundreds of residents and community organizations of Oakland concerned about the proposed development at 285 & 301 12th Street by The Martin Group, we urge you to take into consideration and correct the following violations based on the Lake Merritt Station Area Plan (LMSAP) regulations, LMSAP District Zone Regulations, Conditional Use Permit requirements, Regional Housing Needs Allocation (RHNA) from the Association of Bay Area Governments (ABAG), Planning Department's Mission Statement, Fair Housing Act, and Oakland's Analysis of Impediments to Fair Housing. Proper public process is required to ensure that sufficient community needs are met for the long-term health of Chinatown, this neighborhood, and our city. We request that the City, The Martin Group, the Community Coalition enter into a Memorandum of Understanding (MOU) based on the following requests:

Brief Summary

This 416 unit all market-rate luxury housing development is planned to sit in the middle of Oakland Chinatown, without equitable access secured for long-time existing residents and small businesses who are currently being displaced from their homes in Oakland at alarming rates, with disparate impact on low-income people of color and families with children. This large project requiring a Major Conditional Use permit has had insufficient community engagement for a development that will occupy an entire 1.25 blocks in a highly visible location in the middle of our historic neighborhood. This process was not conducted with *appropriate community involvement* as stated in the Planning Department's Official Goals, and in fact, was conducted with errors to the public and planning process. In this historic district, the planning process has not sufficiently involved the Chinatown community in this major development or acknowledged the significant impact that this project will have on a minority community extremely vulnerable to displacement.

Timeline of Events and Violations

1. **Insufficient Neighborhood Outreach, and Violation of Public Process and Trust by Planning Commission to Approve Project without Sufficient Anti-Displacement and Anti-Discrimination Mitigations in place.**

For a project of significant size, insignificant neighborhood outreach was conducted by either the Planning Department or The Martin Group to mitigate negative environmental and functional impacts to residents and small businesses in the area. The Martin Group did not reach out to most Chinatown organizations and community members until only a few months before Planning Commission review, giving the Chinatown community insufficient time to discuss and analyze the impacts on the transformation of their neighborhood, and give the public sufficient time to work with the developer, the Planning Department, and the Planning Commission on addressing the impacts and the appropriate community benefits to mitigate those impacts. At these meetings with The Martin Group, Justin Osler did not bring the designs of the project for feedback, and in fact these meetings were rather surface and feedback was not heard seriously.

Particularly disconcerting is the lack of public notice for the Special Planning Commission meeting on August 17th, where the Planning Department failed to place the required yellow notice on the project site giving the public proper notice of the meeting date and time where an approval decision was being considered. There was no translation into Chinese for a predominantly monolingual population, raising serious access and equity concerns.

On August 3rd, the Planning Commission only gave the Chinatown community 9 business days to resolve issues. Even though over 25 community stakeholders, mostly low-income people of color, spoke at the August 17th Special Planning Commission meeting stating that 9 business days was not sufficient enough time for many of the Chinatown stakeholders to meet with their community boards, membership, and amongst each other to complete a thoughtful analysis of the impacts and work with The Martin Group, the Planning Department and the Planning Commission recommended to approve the project without a thoughtful Community Benefits Agreement with Chinatown stakeholders in place. This demonstrates disregard for Oakland residents in the development, planning and decisionmaking process, and is a violation of public trust.

2. **Chinatown Coalition member comments not acknowledged by the Design Review Committee of the Planning Commission.**

At the June 22nd Design Review Committee meeting, concerns raised by members of the Chinatown Coalition were completely ignored by Planning Commissioners. These included concerns about affordable housing goals in the Lake Merritt Station Area Plan, the lack of open

public space as designated by the Area Plan that this be an opportunity site for contribution, and serious safety issues regarding curb cuts and traffic as related to the Lincoln Recreation Center which serves thousands of youth and seniors adjacent to the proposed site. There has been no study and consideration of mitigations for the safety of these residents with up to 1,000 new residents living, driving, and parking at this site.

3. **Notice Requirements under Major Conditional Use Permits, Section 17.134.040A of the Oakland Planning Code were not followed.**

Notification procedures per Section 17.134.040 require that "An application for a major conditional use permit shall be considered by the City Planning Commission which shall hold a public hearing on the application. Notice of the hearing shall be given by posting an enlarged notice on the premises of the subject property involved in the application. All such notices shall be given not less than seventeen (17) days prior to the date set for the hearing."

The August 17th Special Planning Commission meeting where the development was approved was not properly noticed to the neighborhood and stakeholders in the area. As of August 17th, there was no yellow notice placed on the site to notify the public and neighborhood of the review, opportunity for public comment, and decision of approval on this project [*Exhibit A*]. Furthermore, there has been no translation of the notices into Chinese, in a neighborhood where a large percent of the population is monolingual.

4. **The current proposal does not conform to the Lake Merritt Station Area Plan, nor does it "embrace equity to residents" or "promote quality affordable housing citywide" as stated in the City of Oakland Planning Department's Mission Statement.**

As the current Planning Department process does not allow for sufficient community engagement, we rely on the extensive 6-year public process conducted by Planning Staff from 2009 to 2014 to create the Lake Merritt Station Area Plan, which did engage multiple stakeholders in this area to determine appropriate zoning and community needs to prevent displacement of low-income families.

The August 3rd staff report states that the developer's proposal is "consistent with" and "conforms" to the Lake Merritt Station Area Plan (LMSAP) multiple times. However, there are numerous ways that the proposed development *in fact and evidence does not conform* to the Lake Merritt Station Area Plan:

The Martin Group's proposed project site was specifically mentioned in the City of Oakland's Lake Merritt Specific Area Plan as one of two locations that could contribute to the plan's goals

of increasing open public space, with guidelines adopted by the City Council in December 2014. However, this was not even a consideration in the design of the project, showing that the LMSAP in fact did not guide the development.

The Lake Merritt Station Area Plan denotes numerous strategies for meeting the affordable housing crisis in this area [Section 4.5]: "*Affordable housing is a critical component of a sustainable neighborhood and is needed in the Planning Area.* As of 2009, median household income for the average 1.94 person household in the one-half mile radius of the Lake Merritt BART Station was $27,786 compared with the citywide median income (AMI) of $49,481. In Planning Area census tracts, 45 percent of residents are cost burdened and may have trouble affording basic necessities after paying rent. *Therefore, it is imperative that a strategy is in place to ensure affordable housing is available to all existing and future residents,* especially since having affordable rents targeted to 30 percent of household income both stabilizes low income residents and provides these households with expendable income for other living and recreating expenses. *Affordable housing is needed in the Planning Area to ensure that the area's unique character, which includes a range of income levels accommodating people of color, recent immigrants, young professionals, families and socially connected seniors, is preserved and enhanced.* Approximately 32.5 percent of the one-half mile radius population has a median household income of less than $15,000. *The market will continue producing housing that is well beyond the financial capacity of current area residents, demonstrating a strong need for affordable housing in the Planning Area.*

In addition, although the majority of households in the one-half mile radius are single-person households, 21.8 percent of the households are three-person or more households. *This indicates that housing units in the Planning Area will have to accommodate a variety of household types including single-person, families with children and multi-generational households.*" The proposed 6 out of 416 units with 3 bedrooms hardly meets the need of the surrounding area as clearly defined by the LMSAP, and does not provide equitable fair housing access for families with children or multi-generational households, or the disproportionate numbers of people of color who are low-income and are currently being uprooted from their long-time neighborhoods and communities. The lack of affordable family housing is hurting our public schools, precluding families with children from sending their kids to Oakland public schools, which perpetuates a cycle of disparate impact and discrimination for low-income communities of color who have suffered centuries of inequitable public investment from public schools, which leads to economic inequality defined largely by race. Providing equitable access to affordable housing for families with children and people of color is one goal of the Affirmatively Furthering Fair Housing Rule released in 2015 (Title VIII of the Civil Rights Act of 1968, 42 U.S.C. 3608 and Executive Order 12892).

5. **The City of Oakland is mandated to plan 14,765 new housing units under RHNA and State Law.**

The LMSAP states [4-20]: "California Department of Housing and Community Development determines the amount of housing needed for income groups in each region based on existing housing need and expected population growth. Each city's share of the regional housing demand is prepared by the Association of Bay Area Governments (ABAG) through the Regional Housing Needs Allocation (RHNA) process. During the planning period 2014-2022, the City of Oakland must plan for 14,765 new housing units (28 percent of these units are designated to be affordable to very low- and low-income households, 19 percent affordable to moderate income and 53 percent above moderate income). The City's responsibility under state law in accommodating its regional housing need is to identify sites adequately zoned (at least 30 units per acre) with appropriate infrastructure to support the development of housing. In addition to **state law mandating** that the City identify sites to accommodate its RHNA, state Redevelopment Law requires that 15 percent of new units built in a project area be made affordable to low and moderate income households. Despite the uncertainty surrounding Redevelopment Law affordable housing mandates, the Planning Area will target 15 percent of new units built in the Planning Area for low and moderate income households." The added value from the large size of this project and reducing parking ratios through Major Conditional Use Permit can help subsidize and finance the target affordable housing units as called for as a critical need in the LMSAP.

6. **The Affordable and Family Housing Goals in the LMSAP were not encouraged by Staff Planners or the Planning Department with the Developer.**

The LMSAP reiterates the Affordable Housing Goals, including [4-22]: "Encourage between 15 percent to 28 percent of all new housing units in the Planning Area to be affordable including *both units in mixed income developments* and units in 100 percent affordable housing developments." And "Encourage development of *family housing* (i.e., larger than 2 bedroom units)." There are multiple strategies laid out in the LMSAP to encourage and incentivize developers to include affordable housing in their projects to meet the city's affordability and inclusivity goals. Neither of these goals or strategies were encouraged by staff planners or the Planning Department to attempt to meet the LMSAP's goals, in violation of the LMSAP. This does not constitute proactive attempts to prevent housing segregation and mitigate disproportionate rates of displacement.

7. **The Staff Planner and Developer did not follow the LMSAP guideline to include publicly accessible open space in any development larger than half a block as designated by the Lake Merritt Station Area Plan Section 5-12. In fact, this very site was identified as an opportunity site for open space contribution, and yet the Developer was not aware of this**

guideline, in violation of Section 1.2 of the Lake Merritt Station Area Plan that requires all new development to follow the guidelines set forth in the plan.

The LMSAP Section 5-12 states explicitly:

The Station Area Plan recommends that all new development over half a block in size provide on-site, publicly accessible open space amounting to 10 percent of the total site area. These sites are shown in Figure 5.2. This could apply to all types of development, not only residential... This would help achieve OSCAR Policy OS-11.2 to "create new civic open spaces at BART stations ... and in other areas where high intensity redevelopment is proposed."

Figure 5.2 shows this site as one of the few prime locations for public open space contribution, and yet there was no mention of it in the development process, in violation of the LMSAP:

The Martin Group proposal is designed to exclude public access to open space provided in an interior courtyard and luxury rooftop deck. There is inadequate space and contributions to existing parks as is recommended in the LMSAP to include publicly accessible open space in any development over half a block. The Martin Group has refused to make these spaces available to the community even on a limited basis and is resistant to make an in-lieu contribution to public open space in the neighborhood as mitigation comparable to the size and vicinity of their project.

8. **The LMSAP did not guide this development, project review, or decision-making by policymakers such as the Planning Commission as required by Section 1.2 of the Lake Merritt Station Area Plan.**

We believe the staff planner "cherry-picked" 3 elements by which the proposal conformed to the LMSAP, but did not reveal the elements by which the proposal *did not* conform to the LMSAP, which we believe is a deception to the public, constituting in an error and indiscretion based upon the value that city staff should be factual, honest, comprehensive and balanced in their reviews, reports and assessments without omitting important information for public review. This is also a violation of public process and trust, as multiple years, many hours, and much energy was exerted by the community to provide input for the development of the LMSAP, which is clearly not being used to guide development in the plan area as required by the LMSAP.

Section 1.2 of the LMSAP states: "These documents establish the basis for development project review and other decision-making by policymakers, such as the Planning Commission and the City Council... The Plan will guide all new development in the Planning Area, which will be **required** to follow the policies, programs and guidelines set forth in this Plan and related documents." Based upon the points made above, and the fact that staff did not raise the above

concerns in *any* staff report, it is clear that the LMSAP *did not* guide staff's official review of this development proposal as required by the LMSAP, nor does this development follow the guidelines set forth in the plan as required.

9. **The Development is Inconsistent with Conditional Use Permit, therefore major CUP should be denied until harms are mitigated.**

The August 3rd staff report states that the development is consistent with Conditional Use Permit requirements, but the surrounding community clearly raised concerns regarding the following requirements reviewed in the staff report:

CUP Requirement: "That the location, size, design, and operating characteristics of the proposed development will be compatible with, and will not adversely affect, the livability or appropriate development of abutting properties and the surrounding neighborhood, with consideration to be given to harmony in scale, bulk, coverage and density, to the availability of civic facilities and utilities; to harmful effect, if any upon desirable neighborhood character; to the generation of traffic and the capacity of surrounding streets; and to any other relevant impact of the development." [Section 17.134.050]

Response: Staff believes that the project meets the criteria for granting a Conditional Use Permit, including the additional findings for the Lake Merritt Station Area Plan. The area surrounding the project includes numerous other buildings that rise to similar heights with bases that are over 85 feet in height or have no bases, including the EBMUD building at 383 11th Street, Hotel Travelers at 392 11th Street and the University of California building at 1111 Jackson Street.

CUP Requirement. "That the proposal conforms in all significant aspects with the Oakland General Plan and with any other applicable plan or development control map which has been adopted by the City Council."

Response: Since the proposal does not conform to the LMSAP's targets, goals and guidelines to prevent displacement, meet affordable housing goals, or include publicly accessible open space on any project over half a block, we believe a Major CUP should be denied until harms are mitigated.

Additionally, the Residential Design Review Criteria states [Section 17.136.050(A)] that "The proposed design will protect, preserve, or enhance desirable neighborhood characteristics." While the LMSAP recognizes the Chinatown neighborhood, the current proposal does not provide sufficient mitigation that will protect, preserve, or enhance the neighborhood.

10. **The City of Oakland may be in violation of the federal Fair Housing Act.**

The Fair Housing Act (Title VIII of the Civil Rights Act of 1968) prohibits practices that "actually or predictably result in a disparate impact on a group of persons or creates, increases, reinforces, or perpetuates segregated housing patterns...." California's Fair Employment and Housing Act (FEHA) also makes it "unlawful ... to discriminate through ***public or private*** land use practices, decisions, and authorizations" that have "the effect, regardless of intent, of unlawfully discriminating on the basis of [a protected class]." And, as an entitlement jurisdiction that receives federal housing funds from the U.S. Department of Housing and Urban Development, the City of Oakland is also required to take actions that eliminate identified impediments by "[p]romot[ing] opportunities for inclusive patterns of housing occupancy" and "eliminating racial and ethnic segregation." To this end, Oakland's Analysis of Impediments to Fair Housing identifies the "severe shortage of decent housing available and affordable to low income persons" as a "significant impediment to fair housing choice" because "minorities are far more likely than non-minorities to be low income."

Finally, state law also forbids local governments in "the enactment or administration of ordinances" from taking any action to prohibit any residential development because "of the method of financing" or because "the development ... is intended for occupancy by persons and families of very low, low, or moderate...." To the extent that the City discouraged affordable housing, prioritized or refused to consider affordable housing during its deposition process, it would be in violation of this requirement.

Furthermore, the Affirmatively Furthering Fair Housing Rule allows local municipalities to be legally held accountable for actively implementing planning, policies, and tangible outcomes that support fair housing access for low-income families, people of color, families with children, and other protected classes who are rent-burdened. The failure of the Planning Department and the Planning Commission to encourage and implement the LMSAP's goals for inclusive and equitable housing may be in violation of this new rule affirming the equity goals of the Federal Fair Housing Law to be the burden of local municipalities to actively implement.

11. The City of Oakland is not protecting Chinatown as an important historic and cultural district.

Other cities have enacted zoning and legal protections to prevent the displacement of historic Chinatowns that served as immigrant gateways and hubs for marginalized populations and people of color. The City of Oakland has not implemented protections that will prevent Chinatown's disappearance, and the displacement of disproportionate numbers of people of color and families. When the Lake Merritt Station Area Plan was adopted, height limits were set too high to prevent development that would be likely to displace, and no binding protections were

included to ensure the continuation of Chinatown as a cultural asset and resource for Oakland. This lack of proactive measures may be in violation of the federal Affirmatively Furthering Fair Housing Rule, which requires municipalities to take proactive measures to ensure that families and people of color are not disproportionately impacted, displaced, and discriminated against.

Conclusion and Request to Enter into a Memorandum of Understanding

This development as passed by the Planning Commission, without anti-displacement protections and community benefits ensured to make the Chinatown community resilient to development pressures, will have long-standing negative impact on the community. It's incredibly short-sighted and irresponsible for the Planning Commission to not allow additional time as short as three weeks until the next meeting for mediation with the community to mitigate these negative impacts. The City's tactics of consistently disregarding the public's expressed serious concerns should not be accepted by our elected officials, the City Council and Mayor, and indeed should be reprimanded.

We believe that the City of Oakland should actively move to protect Chinatown, with about 10 market-rate developments coming into this area. As Oakland taxpayers and voters, we believe that City staff and officials should move to protect the City's own interests based on the Lake Merritt Station Area Plan (LMSAP) by helping to negotiate mitigation for the following needs and concerns:

1) Chinatown small businesses are increasingly concerned about rising rental rates, as Uber and other tech companies begin to displace nonprofit organizations, community services, and mom and pop shops. We request a target of about 40% of the over 25,000 square feet of retail space as affordable retail space for Chinatown community and small business needs. That would equal about 8,370 square feet remaining to be designated in the 301 12th Street site. To provide coherence and flow with Lincoln Recreation Center and the EBALDC buildings, we request that one of the Harrison Street spaces in the 301 12th Street site be designated for affordable retail space for the creation of a collaborative cooperative small business incubation space that can be a launching pad and resource space for the future of Chinatown's small business economic life, and also provide high-traffic with the inclusion of a teahouse or similar gathering space for the community with included meeting space and gallery space for the Oakland Asian Cultural Center. In addition, this space can be used for a monthly or weekly night market for pop-up food purveyors, a long-time wish of the Chinatown community. We define affordable as not more than $1.50 per square foot per month or below for micro-businesses, all costs included with WIFI service, and request long-term leases and build-out. Extra parking spaces should be first offered to these small businesses.

2) The City has acknowledged the data-proven need for affordable housing in the Housing Equity Roadmap passed in 2015 by the City Council and the Lake Merritt Specific Plan. City staff and Commissioners should be encouraging all developers to use the Density Bonus Ordinance to include affordable housing, or to work with one of the many nonprofit affordable housing developers in the region to create inclusive and diverse win-win developments to meet goals for both affordable and market-rate new housing to ease displacement pressures. The Community Coalition has asked for 15-28% to be accessible to low-income families and for workforce housing per the Lake Merritt Station Area Plan goals, and for family units to be affordable enough to allow families to stay in Oakland and send their children to our public schools. The Martin Group has not yet guaranteed the quarter block designated for affordable housing, while they have only begun talks about this possibility. It is critical to secure this affordable housing to mitigate displacement of Chinatown families.

3) To mitigate the loss of the opportunity to create publicly accessible open space on this opportunity site as designated by the Lake Merritt Station Area Plan, we request a significant contribution to Lincoln Recreation and Madison Park to improve nearby public open space that is highly used and under-resourced.

4) National best practice includes as a key anti-displacement strategy the community benefits of financial contributions to surrounding neighborhood programs that can create resilience in low-income communities to withstand an influx of high-income residents, rising commercial rents, and increased push-out of tenants by landlords in a gentrifying neighborhood. The Community Coalition requested support for the Chinatown Improvement Initiative that can help small businesses succeed and stay in place while rents rise, and help to keep Chinatown clean so that the business district can thrive.

5) New development in Oakland should benefit economic justice for local residents equitably, including ensuring that communities of color and low-income communities are beneficiaries of the new influx of projects. The Community Coalition requested a workforce agreement that includes a target of local hire met by working with trade unions who can source qualified workers in the city and track goals, and hiring minority contractors, sub-contractors and staff, at living wages with apprenticeship pathways to meaningful and sustainable careers.

We believe these are reasonable requests as mitigation for the harm that would be caused by the proposed development, particularly given the approval of a Major CUP for the massive size of this project. We have made some headway with The Martin Group in mediation, but we believe there is a threshold for mitigating displacement impacts that major developments must meet, and we do not believe the current offerings are sufficient mitigation for this project's impacts.

The disappearance of important and historic cultural neighborhoods is an unacceptable by-product of the Planning Department and Mayor Schaaf's current rush to develop housing, and we cannot stand by and allow developer-oriented planning to destroy the places we have built and belonged for over a century.

Chinatown has been here since the 1870s, and we face a current crisis in the face of development pressures that threaten the history, culture and residents that have defined this area for over 140 years. While San Francisco Chinatown has zoning protections, Oakland Chinatown does not currently have protections to keep current properties from flipping to corporate development that could diminish and eventually erase our community.

Since we have seen other Chinatowns such as in DC disappear from the process of gentrification manifested through luxury housing and corporate retail development, we are concerned that this development could be the beginning of the end, increase other high-end development that could displace our small businesses, community organizations, and residents, and contribute to our neighborhood's demise if it does not sufficiently meet community concerns.

By fast-tracking this development while ignoring community concerns, and not allowing for sufficient mediation time, the Planning Commission is forcing the community to pay thousands of dollars for this appeal in order to allow time for mitigation. This is not good for the developer, or the neighborhood, or the thousands of people in Oakland who need immediate housing. Many of us are not against new development that provides housing and bring additional tax base for the city, but we are against development without mitigation for detrimental impacts. The Major Conditional Use Permit allowing for a large size development and reducing the percentage of parking allows the City leverage to ask for givebacks to mitigate those impacts, which is a common practice that the City has used previously, so it appears to be a breach of duty by City staff, whose salaries are funded by tax dollars, and Planning Commissioners, who are appointed by the Mayor to serve the public's interests, to not have asked the developer to mitigate these negative impacts and to forward the City's own established goals for inclusive, diverse and affordable housing.

We ask that every developer planning to develop in this area be required to thoroughly read the Area Plan and develop their proposals accordingly, and for every Specific Plan that engaged Oakland residents, and we ask you as city staff and representatives to advocate for the community needs identified in these plans, rather than continuing to fast-track gentrification without representing our needs or sufficiently involving the impacted communities in the process.

We believe that as a progressive Oakland City Council and government, you will not want to sit on the sidelines as the survival of our historic Chinatown is threatened, as this neighborhood's opportunity and quality of life deteriorates, and we hope that you will act to advance the interests of your constituents by actively requesting that The Martin Group sign an MOU with the above requested mitigations. Furthermore, as government institutions have helped to displace Chinatown over the last 140 years with the construction of the highway, BART station, and Peralta Colleges, we ask our local governments to remediate for these harms by implementing real protections for Chinatown.

We also hope that you will investigate the errors and insufficient public process of the Planning Department and Commission for significant reform and transformation to implement truly progressive planning processes that replicate proven successful models in cities like Seattle, Twin Cities, and Philadelphia. A progressive city like Oakland deserves a progressive Planning Department and Commission to prevent displacement, to stop the destruction of our city's history, and to make our city government more inclusive and effective for its residents.

We urge you, as representatives elected by the residents to protect and uphold the needs of our quality of life, to not approve the proposed development until the community's needs raised here and in the public process are sufficiently mitigated. As a community, we pledge to continue organizing and using whatever tools, strategies and tactics are available to us to prevent the current proposed development from moving forward until they are mitigated. We have nothing to lose, except for our neighborhoods, our culture, our businesses, and our homes.

Thank You for Your Earnest Consideration,

AYPAL: Building API Community Power

Asian Pacific Environmental Network (APEN)

Asian Pacific Islander Legal Outreach

Buddhist Church of Oakland

Robert Noguchi, Buddhist Church of Oakland Board President

Steve Terusaki, Buddhist Church of Oakland Board President Emeritus

Chinese American Citizens Alliance

Chinese Community United Methodist Church

Reverend Emily Lin, Lead Pastor, Chinese Community United Methodist Church

Richard Fong, Board Chair, Chinese Community United Methodist Church

Rebecca Wong, Lay Leader, Chinese Community United Methodist Church

Filipino Advocates for Justice

Friends of Lincoln Square

Oakland Block by Block Organizing Network

Oakland Residents for Responsible Development

Oakland Rising Coalition

People of Color Sustainable Housing Network

The Wa Sung Community Service Club

Wellstone Democratic Renewal Club

Alan Yee, Siegel & Yee Law Firm

Bruce Quan, Member of the Oakland Lodge of the Four Family Association

Corinne Jan

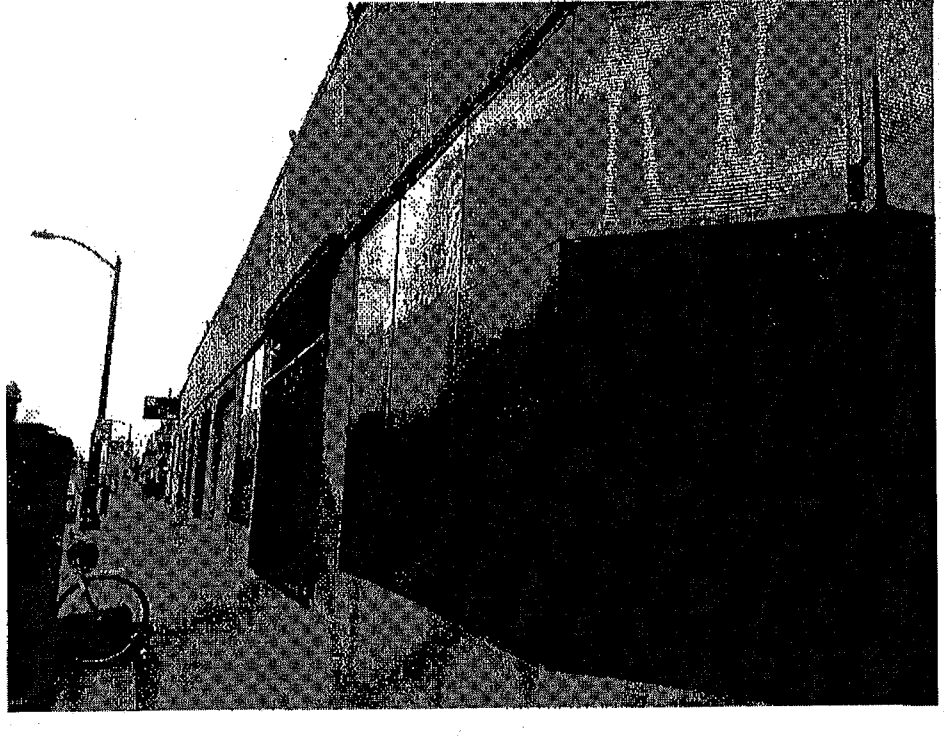
Eduardo Collaço 高華德, Long-Time Chinatown Safety Volunteer

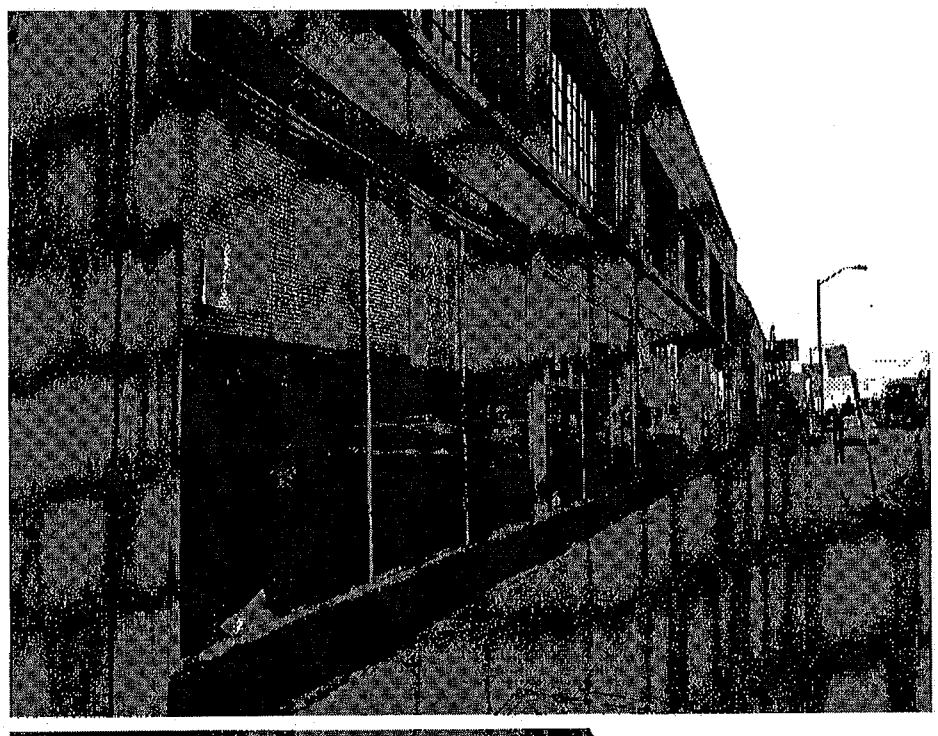
Lailan Sandra Huen, Block by Block Organizing Network

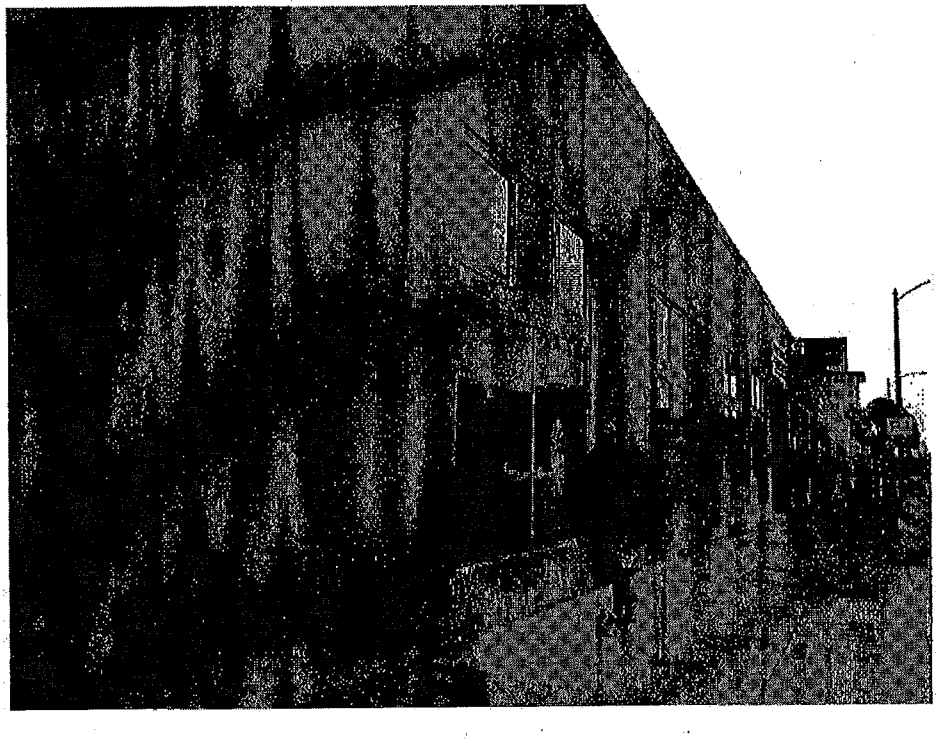
Hundreds of Oakland Residents via online petition

Exhibit A:

Photos of Site Without Any Public Notice on Decision Day, August 17, 2016







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memorandum

date November 7, 2016

to Christina Ferracane,
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from Elizabeth Kanner
Senior Managing Associate ESA
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subject **W12 Response to Appeal Letter from Adams and Broadwell Joseph & Cardozo August 26, 2016**

The CEQA Analysis for the W12 Mixed-Use Project (Project) was published on July 15, 2016. This memorandum provides a response to the appeal letter providing comments on the CEQA Analysis for the W12 Project (PLN16-133) prepared by Adams Broadwell Joseph & Cardozo dated August 26th, 2016, (hereafter, "Adams Broadwell Appeal"). Briefly, the Adams Broadwell Appeal raises no new information that shows the Project's CEQA Analysis failed to adequately analyze impacts in accordance with CEQA. Consequently, the preparation of an EIR is not warranted.

The responses are organized into the following topics, which correspond with the topics in the Adams Broadwell Appeal:

A) Consistency with the CEQA Addendum and Exemption Requirements

B) Adequacy of the On-Site Hazards Analysis and Mitigation

C) Adequacy of the Project-Specific Health Risk from Diesel Particulate Matter (DPM) Analysis and Mitigation

A. Response to Comment Regarding the Consistency with the CEQA Addendum and Exemption Requirements

The Adams Broadwell Appeal asserts that the City may not rely on previous environmental analysis for project approval. Specifically, the appeal letter asserts that the Project is not consistent with CEQA Addendum and Exemption requirements. Therefore, the Project allegedly would result in new or more severe significant impacts than were analyzed in the Lake Merritt Station Area Plan Environmental Impact Report (LMSAP EIR).[2]

Response:

This comment is not new information. Adams Broadwell made similar assertions in its letter dated August 2nd, 2016. The *Adams Broadwell Appeal* provides the same information and does not satisfy the standard of new information according to CEQA Guidelines Section 15162(a)(3).

Please see the City's response to this comment in its memorandum dated August 12th, 2016 (appended here), which was previously included as Attachment B to its Supplemental Memo for the August 17th Planning Commission meeting.

B. Response to Comment Regarding the Adequacy of the On-Site Hazards Analysis and Mitigation

The Adams Broadwell Appeal asserts that the CEQA Analysis did not adequately address on-site contamination analysis and mitigation.

Response:

This comment is not new information. Adams Broadwell made similar assertions in its letters dated August 2nd and August 3rd, 2016. The *Adams Broadwell Appeal* provides the same information and does not satisfy the standard of new information according to CEQA Guidelines Section 15162(a)(3).

Please see the City's response to this comment in its memorandum dated August 12th, 2016

(appended here), which was previously included in Attachment B to its Supplemental Memo for the August 17th Planning Commission meeting.

In addition, the commenter suggests that the Project would have a significant effect on the environment because existing contamination would threaten the health of the workers who construct the Project and future Project occupants. As noted in the above-referenced documents, the remediation of the site is being overseen by the Department of Toxic Substances Control (DTSC), which oversees cleanup of releases of hazardous substances pursuant to statutes, regulations and related programs of general application, including:

- California Health & Safety Code, Chapter 6.8 (the Hazardous Substance Account Act), which, among other things, calls for compliance with federal regulations set forth in Subpart E of the National Oil and Hazardous Substances Pollution Contingency Plan, (40 CFR 300.400 et seq.);

- California Health & Safety Code, Chapter 6.82 (the California Land Reuse and Revitalization Act of 2004)
- Programs managed by DTSC pursuant to its statutory authority, such as the Voluntary Cleanup Program.

Under these authorities, DTSC ensures that risks to human health and the environment, including potential risks cited by the commenter to the health of construction workers and future project occupants, is appropriately addressed.

In any event, the Court of Appeal disagreed with similar assertions made by Mr. Hagemann, whose opinion is relied upon by the commenter in its August 2, August 3, and August 26 letters for this project, in the context of a mixed-use commercial and residential project in the City of Berkeley that had been approved on the basis of an MND. In *Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal. App. 4th 768, the court stated that "it is far from clear that adverse effects confined only to the people who build or reside in a project can ever suffice to render significant the effects of a physical change. In general, CEQA does not regulate environmental changes that do not affect the public at large: 'the question is whether a project [would] affect the environment of persons in general, not whether a project [would] affect particular persons.'" Further, "a physical change caused by a project, even one affecting several hundred people, is not necessarily cognizable under CEQA when the people affected are part of the project." Like the City of Berkeley and the Court of Appeal in the *Parker Shattuck* case, the City disagrees with the suggestion that a Project's construction workers constitute the "public at large" for purposes of CEQA. To the extent Project-related soil excavation and dewatering could result in environmental impacts, the potential significance of such impacts has been addressed in the EIR, including responses to comments submitted about these actions.

The applicant is pursuing independent actions with DTSC (the "301 12th Street" cleanup project) and the City (the "285 and 301 12th Street" project or "W12" project). Pursuant to the authorities cited above, DTSC oversees cleanup of releases of hazardous substances, and is the agency with the subject matter expertise and the statutory mandate to compel cleanup of the existing contamination whether or not the W12 project proceeds as proposed. By comparison, the City is the agency charged with regulation of land use and planning within its jurisdictional boundaries consistent with the Charter of the City of Oakland. The lead agencies for the W12 project and the 301 12th Street cleanup project are distinct, and no evidence suggests that the two are cooperating to deny meaningful environmental review by segmenting analysis to minimize impacts. In addition to having different lead agencies, the two projects have distinct purposes and objectives. Further, the City retains unfettered discretion to approve, approve with conditions, or deny the W12 project regardless of the 301 12th Street cleanup project status. While it is reasonable to assume that some development would be proposed on the site, the W12 project would not be a direct consequence of the cleanup. No improper segmentation has occurred.

C. Response to Comment Regarding the Adequacy of the Project-Specific Health Risk from Diesel Particulate Matter (DPM) Analysis and Mitigation

The Adams Broadwell Appeal asserts that the CEQA Analysis fails to assess the health risk impacts from construction-related DPM emissions. The letter also states that the LMSAP EIR deferred the assessment of construction-related health risks to a stage where Project-specific impacts and mitigation measures could be determined.

Response:

This comment is not new information. Adams Broadwell made similar assertions in its letters dated August 2nd and August 3rd, 2016. The *Adams Broadwell Appeal* provides the same information and does not satisfy the standard of new information according to CEQA Guidelines Section 15162(a)(3).

Please see the City's response to this comment in its memorandum dated August 12th, 2016 (appended here), which was previously included as Attachment B to its Supplemental Memo for the August 17th Planning Commission meeting.

In addition, the City recognizes Adams Broadwell's disagreement with the methodology used to analyze emissions in the Lake Merritt Station Area Plan EIR (LMSAP EIR); however, disagreement with an EIR's conclusions does not establish that the analysis is deficient. *Marin Municipal Water District v. KG Land California Corporation* (1991) 235 Cal.App.3d 1652, 1663 ("Respondents' disagreement with the EIR's conclusions does not establish that the analysis which led to those conclusions was deficient"). The fact that using different methodologies could result in different results (e.g., relating to analysis of DPM emissions) does not affect the adequacy or accuracy of the analysis included in the LMSAP EIR.

Moreover, there is nothing in the LMSAP EIR indicating that a stand-alone HRA for construction-related impacts is required on a project-by-project basis. Likewise, the CEQA Guidelines do not mandate a lead agency prepare a HRA, nor do they identify methods or parameters for the analysis of receptor exposure to substantial pollutant concentrations. Preparing a construction-related HRA would result in unnecessary and duplicative studies that would ultimately reach the same conclusions and control measures established in the LMSAP EIR.[1] Here, the Project site's proximity to sensitive receptors is typical of other project sites in the LMSAP area and other urban areas. Therefore, there would be nothing unique or peculiar about the Project's proximity to sensitive receptors.

Nevertheless, it should be noted that other similarly situated applicants in the LMSAP area, as well as in the Broadway Valdez District Specific Plan area, have voluntarily prepared HRAs in the interest of being conservative. As expected, these HRAs have confirmed that this kind of infill construction would not result in cancer, non-cancer, or PM2.5 exhaust concentrations in excess of BAAQMD thresholds. Consequently, ESA believes it is reasonable to conclude that the analysis and conclusions of the LMSAP EIR also are valid for this Project.

Further, the commenter questions the feasibility of implementing W12 SCA AIR-1, subsection (w), requiring all off-road construction equipment to be equipped with Best Available Control Technology (BACT) for emission reductions of NOx and PM. Specifically, for the purposes of controlling PM, BACT represents either use of equipment with EPA-certified Tier 4 engines or Tier 2 engines with level 3 particulate filters. Regarding the

[1] As discussed in Attachment B of the CEQA Analysis prepared for the Project, the Project is consistent with the development density established by zoning, community plan, specific plan, or general plan policies. Contrary to appellant's assertion, construction associated with the Project (and other projects in the LMSAP area) would not result in a more severe impact than what was previously disclosed in the LMSAP EIR. Appellant offers no credible evidence that the Project would have peculiar or unusual impacts or impacts that are new or more significant than previously analyzed in the LMSAP EIR. Therefore, the Project is consistent with the applicable CEQA streamlining provisions (i.e., Public Resources Code Section 21083.3 and State CEQA Guidelines Section 15183, Public Resources Code Section 21094.5 and State CEQA Guidelines Section 15183.3, and Public Resources Code Section 21094.5 and State CEQA Guidelines Section 15183.3) and the CEQA Analysis is appropriately tiered from the LMSAP EIR and streamlined environmental review is allowed for the Project.

feasibility of obtaining Tier 2 and Tier 4 off-road construction equipment, the City notes that some jurisdictions have adopted Clean Construction Ordinances and implementation guidance, which is relevant to the implementation of W12 SCA AIR-1, subsection (w). The implementation guidance presents the results of a statewide data summary gathered by the California Air Resources Board as part of compliance with the In-Use Off-Road Diesel Regulation.[2] The data indicate the available construction equipment at various engine tier levels and indicate that, in 2014, approximately 59 percent of all off-road equipment in the state were operating with Tier 2 engines or better. Given that the majority of equipment statewide is capable of complying with the conditions of W12 SCA AIR-1, subsection (w), it is reasonable to conclude that the measure represents feasible mitigation. Moreover, we understand that the applicant has gotten a commitment from its General Contractor that Tier 4 equipment is readily available for the Project and will be utilized to satisfy W12 SCA AIR-1.

D. Conclusion

Based on the foregoing, as well as the memorandum dated August 12th, 2016 (appended here), the CEQA Analysis is adequate and, therefore, the preparation of an EIR is unnecessary.

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2 San Francisco Department of the Environment et.al., *San Francisco Clean Construction Ordinance Implementation Guide for San Francisco Public Projects*, Final August 2015 available online at https://www.sfdph.org/dph/EH/Air/CleanConstruction.asp. Accessed September 10, 2015.

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memorandum

DATE: August 12, 2016

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SUBJECT: **W12 Response to Comment Letters from Adams and Broadwell Joseph & Cardozo**

The CEQA Analysis for the W12 Mixed-Use Project (Project) was published on July 15, 2016. This memorandum provides responses to the letters providing comments on the CEQA Analysis for the W12 Project (PLN16-133) prepared by Adams Broadwell Joseph & Cardozo dated August 2nd and August 3rd, 2016 (hereafter, "Adams Broadwell letters"), as well as the technical comments prepared by SWAPE, which were attached to each letter (hereafter, "SWAPE letters"). The responses are organized into the following topics, which correspond with the topics in the Adams Broadwell letters:

A) Consistency with the CEQA Addendum and Exemption Requirements

B) Adequacy of the On-Site Hazards Analysis and Mitigation

C) Adequacy of the Project-Specific Health Risk from Diesel Particulate Matter (DPM) Analysis and Mitigation

D) Adequacy of the Project-Specific Construction Emissions Analysis and Mitigation[1]

[1] Section D in the Adams and Broadwell Letter dated 8/2 requested the CalEEMod files used to estimate the Project's construction emissions. This request was met and the Adams and Broadwell 8/3 letter comments on these files. Therefore, for ease of review, section D of this memorandum responds to the comments presented in the Adams and Broadwell 8/3 letter.

A. Response to Comment Regarding the Consistency with the CEQA Addendum and Exemption Requirements

Section II. A of the Adams Broadwell letter asserts that the City may not rely on previous environmental analysis for project approval. Specifically, the Adams Broadwell letter asserts that the Project is not consistent with CEQA Addendum and Exemption requirements. Therefore, the Project allegedly would result in new or more severe significant impacts than were analyzed in the Lake Merritt Station Area Plan Environmental Impact Report (LMSAP EIR).[2]

RESPONSE:

The LMSAP EIR analyzed the environmental impacts of the adoption and implementation of the LMSAP at full build out and provided project-level review for reasonably foreseeable development, such as the Project. The City Council certified the LMSAP EIR in accordance with CEQA in November 2014 and the analysis now is presumptively valid under California law. Since that certification, the City has created and relied upon a framework for analyzing projects within the LMSAP area called "CEQA Analysis," which separately and independently provides a basis for CEQA compliance. This framework relies on the applicable streamlining and tiering sections of CEQA: Community Plan Exemption, Qualified Infill Exemption and/or Addendum, as detailed in the CEQA section of the August 3, 2016 Planning Commission Report.

As outlined in exhausting detail, the assumptions and conclusions in the Project's CEQA Analysis are supported by substantial evidence in accordance with CEQA, while none of the assertions presented by Adams Broadwell provides credible, persuasive, or substantial evidence that the Project would result in a new, peculiar, significant environmental impact or a substantial increase in the severity of a significant environmental impact than determined in the LMSAP EIR. In fact, they make numerous misinterpretations of applicable CEQA thresholds for determining significance, and misrepresent many material facts about the Project to justify its conclusions.

Significant impacts also are not "peculiar" to a project or property where uniform policies or standards apply that would mitigate the impact. Site specific analysis is not required where, like here, Standard Conditions of Approval (SCA) apply to mitigate the impact identified and where, as indicated under Appendix M to the CEQA Guidelines, recommendations established by a qualified consultant are implemented. The Project will be required to comply with SCA HAZ-2, and condition of approval number 40, which requires compliance with all federal, state, regional and local law/codes, requirement, regulations and guidelines. In particular, as noted in the Phase I and recognized in the Adams Broadwell letters, the Site is being evaluated by the Department of Toxic Substances Control (DTSC) for additional investigation, mitigation, and remediation of contaminated media. Such actions will comply with these laws, codes, requirements, regulations and guidelines and will render the site

[2] The City of Oakland (City) certified an EIR for the LMSAP in November 2014, pursuant to CEQA. The LMSAP EIR can be obtained from the City of Oakland Bureau of Planning at 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, California 94612, and/or located at http://www2.oaklandnet.com/Government/o/PBN/OurServices/Application/DOWD009157.

impacts to a less than significant level. Impacts identified by Adams Broadwell are therefore not peculiar and the Community Plan and Qualified Infill Exemptions are appropriate.

Finally, contrary to Adams Broadwell's claim, the substantive nature of the CEQA Analysis prepared is not relevant to a determination of whether an Addendum is appropriate. An Addendum to previously certified EIRs is appropriate as long as the project changes, changed circumstances or new information does not require a subsequent EIR. CEQA makes clear that the only relevant test in whether to prepare an Addendum is whether the provision of CEQA Section 15162 can be satisfied. As the CEQA Analysis correctly concludes, none of these provisions requiring preparation of a supplemental or subsequent EIR applies to the Project. Therefore, an Addendum is appropriate.

Adams and Broadwell's comment regarding the substantive nature and length of the Addendum is irrelevant. (See *Fund for Envt'l Defense v County of Orange* (1988) 204 CA3d 1538 (where a lengthy and detailed addendum was prepared with comprehensive discussions and analysis).) Moreover, the discussions merely document the Project's consistency with the LMSAP and its EIR, and satisfy CEQA's primary function as a disclosure tool. The detail and scope of the analysis is a result of the various air quality, GHG and transportation model runs and should not be criticized for being overly informative.

Therefore, the conclusions in the CEQA Analysis are valid and preparation of an EIR is not warranted. The Planning staff can appropriately rely on the CEQA Analysis to support its recommended approval of the Project.

B. Response to Comment Regarding the Adequacy of the On-Site Hazards Analysis and Mitigation

Section II. B of the Adams Broadwell letter asserts that the CEQA Analysis did not adequately address on-site contamination analysis and mitigation.

RESPONSE: Substantial evidence supports the City's determination that the Project's impacts related to hazards will be equal or less severe compared to those identified in previous CEQA documents.

The CEQA Analysis discloses that the Phase I Environmental Site Assessment for the Project identified recognized environmental conditions (RECs) at the Project site. The LMSAP EIR fully analyzed the potential hazards impacts of such contaminated sites, and it determined that state regulatory programs and SCAs will reduce those impacts to a less than significant level. In particular, as detailed in the LMSAP, the applicant will need to comply with regulatory programs established by the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB), including by applying for permits, conducting further investigation, and performing cleanup and remediation actions, as dictated by the regulations and the agencies.

It is entirely appropriate for the City to rely on these regulatory standards as mitigation, and Adams Broadwell appears to ignore the long-standing case law precedent supporting this approach. (See *Perley v Board of Supervisors* (1982) 137 CA3d 424 (upholding reliance on compliance with environmental agency requirements as

mitigation); *Sundstrom v. County of Mendocino* (1988) 202 CA3d 296 (finding that the County's reliance on compliance with air and water quality standards to mitigate air and water quality impact was appropriate); *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 234 CA4th 214 (finding the Department of Fish and Wildlife's reliance on compliance with federal regulations for a hatchery genetic management plan was appropriate); and *Leonoff v Monterey County Bd. of Supervisors* (1990) 222 CA3d 1337 (finding that the County's reliance on compliance with environmental laws on registering hazardous materials and monitoring of underground tanks for leaks was appropriate).

Moreover, in *Oakland Heritage Alliance v. City of Oakland* (2011) 195 CA4th 884, 906, the Court of Appeals held that "a condition requiring compliance with regulations is a common and reasonable mitigation measure and may be proper where it is reasonable to expect compliance." (emphasis added). Because the City requires compliance with all applicable state, federal and regulatory requirements prior to commencing construction, as set forth under SCA HAZ-2 and condition of approval number 40, it is reasonable to expect compliance with the regulatory standards and requirements established for contaminant.

The City's standard conditions of approval (SCAs) will ensure that potential impacts are mitigated to a less than significant level. SCA HAZ-1 (*Hazardous Materials Related to Construction)* requires the use of best management practices and includes provisions in the event that soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities. And SCA-HAZ-2 *(Site Contamination)* requires the implementation of Phase I and II ESA recommendations and a Health and Safety Plan to protect workers during construction.[3] This SCA would require implementation of specific sampling and handling and transport procedures for reuse or disposal in accordance with applicable local, state, and federal requirements. The exact method employed or plan to be implemented will be identified in a Site Management Plan, which will be prepared by the Project sponsor and approved by DTSC and will require compliance with identified federal, state or local regulations or requirements and specific performance criteria. The Project sponsor is obligated to develop measures that comply with the requirements and criteria identified. The Health and Safety Plan would adequately protect workers consistent with applicable worker health and safety standards. SCA-HAZ-2 also requires the implementation of best management practices for the handling of contaminated soil and groundwater discovered during construction activities to ensure their proper storage, treatment, transport, and disposal. Specifically, SCA-HAZ-2 would require that all suspect soil be stockpiled on-site in a secure and safe manner and adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Likewise, groundwater encountered will be staged and sampled prior to discharge to the sewer under permit, or offsite disposal at an appropriate location

[3] In the case of this project, the "recommendations" to protect workers from site contamination will be encompassed within the Remedy to be prepared under and approved by DTSC. This is assured by Health & Safety Code Section 25356.1(d), which requires remedial action plans supervised by DTSC or the Regional Water Quality Control Boards to be based, in part, on Subpart E of the National Oil and Hazardous Substances Pollution Contingency Plan (40 C.F.R. 300.400 et seq.) (the "NCP"). Subpart E of the NCP contains detailed requirements for Hazardous Substance Response. The NCP further requires that all response actions under the NCP will comply with the provisions for worker safety and health in 29 C.F.R. 1910.120. 40 C.F.R. 300.150. 29 C.F.R. 1910.120 contains detailed requirements for worker health and safety during hazardous waste operations and emergency response.

CEQA and established case law also makes clear that the CEQA Analysis can wait to specify how the measures/conditions identified will be achieved, provided that a determination of impact has been made prior to approval and where known measures/conditions exist that are feasible for the impact identified. Here, the City has determined the impact of the Project will be less than significant. The City's determination was based on the detailed analysis regarding Hazards and Hazardous Materials prepared as part of the LMSAP EIR and the CEQA Analysis and technical studies prepared. The LMSAP EIR analysis included an overview of the regulatory scheme, evaluated potentially significant impacts associated with development in the LMSAP area, analyzed applicable state, federal and local regulatory schemes that would apply, summarized a listing of known contaminated sites in the area and determined that compliance with the SCAs and/or Mitigation Measures would reduce any hazardous impact, and any cumulative hazardous impact, to a less than significant level. The regulations or requirements identified include specific performance criteria that must be met before starting construction and the Project must comply with the mitigation measures and regulatory schemes that were identified to reduce the impacts as identified in the CEQA Analysis and the accompanying technical studies. Additionally, the Project sponsor has committed to devising measures to satisfy those requirements, but there is no requirement under CEQA to devise those measures now, where, as indicated in the LMSAP EIR and the CEQA Analysis, a reasonable basis exists to conclude the impact will be adequately mitigated. (See *Sacramento Old City Ass'n v City Council* (1991) 229 CA3d 1011; *Defend the Bay v City of Irvine* (2004) 119 CA 4th 1261).

The Adams Broadwell letter claims that recent sampling at the Downtown Oakland Charter School shows elevated concentrations of tricholorethylene, other chlorinated solvents, and petroleum hydrocarbons. This information, however, does not show a new or more severe hazards impact. To the contrary, the existing mitigations, SCAs, and regulatory requirements will ensure that any impacts related to these contaminants will be mitigated to a less than significant level. Indeed, the presence of these constituents was fully disclosed in the Phase I ESA and supporting documents that were utilized to prepare the CEQA Analysis. In particular, as noted in the CEQA Analysis, as a DTSC Cleanup Site, the regulatory framework within California requires remediation of soil, soil vapor, and groundwater and other measures, as needed, to render the site suitable for residential development and to protect construction workers during construction. Such actions would reduce the potential impacts from contaminants to a less than significant level.

The Adams Broadwell letter expresses specific concerns about vapor intrusion pathways, the potential presence of TCE dense nonaqueous phase liquid ("DNAPL") and the need to address this potential presence during construction. First, under the direction and oversight of DTSC and the BAAQMD, the vapor intrusion pathway into the existing building (which will be replaced by the new residential structure) has been addressed by the installation of a temporary sub-slab depressurization/soil vapor extraction system. This system removes and treats VOC vapors from the subsurface before they can accumulate in the indoor air at concentrations of concern, and demonstrates that even a temporary retrofitted vapor intrusion mitigation system can be effective to prevent VOC vapor intrusion at this site, and indeed can be effective even before the subsurface source of the VOCs has been remediated under DTSC supervision and pursuant to applicable standards. While the existing environmental conditions are not the result of the Project, the performance of mitigation measures to date indicates that the

Project will not result in or increase the risk of vapor intrusion, but instead that the Project will greatly reduce that risk.

Second, while it is true that TCE can at some sites be found in the form of a DNAPL, it is unlikely that TCE at the Project site has taken that form. The maximum concentration of TCE detected in soil samples is 780 micrograms per kilogram (µg/kg). This value, which is less than the residential soil Regional Screening Level (RSL) of 940 µg/kg but greater than the residential Environmental Screening Level (ESL), is not indicative of the presence of a DNAPL[4]. Likewise, the maximum concentration of TCE detected in groundwater is 1,800 micrograms per liter (µg/l), which is less than 1% of the solubility of TCE in water (14,720 µg/l). Typically, if a groundwater concentration is greater than 1% of the aqueous solubility, this may indicate the presence of a DNAPL[5]. Here, because the maximum concentration of TCE detected in groundwater is less than 1% of the aqueous solubility of TCE, the groundwater data do not support the conclusion that a DNAPL is present at the site. Furthermore, while TCE concentrations in vapor samples are high at the site, according to EPA "[b]ecause some DNAPLs can completely vaporize in relatively short time periods (yet the vapors will persist much longer), the presence of vapors and the mapping of a vapor-phase plume should generally not be used in isolation to conclude that DNAPL is present in the vadose zone, or to delineate the spatial extent of the DNAPL source."[6]. As such, the available data do not indicate that a DNAPL is present at the site.

Finally, given the above considerations, the concerns about the potential for encountering DNAPL during construction are exaggerated. Regardless, should DNAPLs be encountered they would be properly addressed under the construction worker health and safety component of the remedy to be developed under DTSC's guidance and oversight, in accordance with the SCAs.

Therefore, the conclusions in the CEQA Analysis are valid and preparation of an EIR is not warranted. The Planning staff can appropriately rely on the CEQA Analysis to support its recommended approval of the Project.

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4 The presence of DNAPLs has been inferred from soil chemical data where the concentration of DNAPL chemicals in soil are greater than one percent by mass, or 10,000 ppm (EPA, 1994. *DNAPL Site Characterization. OSWER Publication 9355.4-16FS*). 780 µg/kg is considerably less than 10,000 ppm, which is equivalent to 10,000,000 µg/kg.

5 EPA, 1992. *Estimating Potential for Occurrence of DNAPL at Superfund Sites.*. *OSWER Publication 9355.4-07FS.* January.

6 EPA, 2009. *Assessment and Delineation of DNAPL Source Zones at Hazardous Waste Sites.* EPA/600/R-09/119. September

C. Response to Comment Regarding the Adequacy of the Project-Specific Health Risk from Diesel Particulate Matter (DPM) Analysis and Mitigation

Section II. C of the Adams Broadwell letter asserts that the CEQA Analysis fails to assess the health risk impacts from construction-related DPM emissions. The letter also states that the LMSAP EIR deferred the assessment of construction-related health risks to a stage where project-specific impacts and mitigation measures could be determined.

SUMMARY RESPONSE: The following provides a response to SWAPE's comments regarding the need for a construction Health Risk Assessment (HRA):

- The LMSAP EIR disclosed that construction-related health risks would be less than significant with implementation of construction-related best management practices identified in SCA A of the LMSAP EIR. These measures are found in W12 SCA AIR-1 in Attachment A of the CEQA Analysis.
- Project construction would not result in a more severe impact than what was disclosed in the LMSAP EIR.
- The LMSAP EIR does not stipulate that a stand-alone HRA is necessary for construction-related impacts.
- Preparing an additional construction-related HRA would result in unnecessary and duplicative studies.

DETAILED RESPONSE: Impact AIR-3 (construction health risks) was determined to be less than significant in the LMSAP EIR with implementation of SCA A (referred to as SCA AIR-1 in the W12 CEQA Analysis). As stated on page 3.3-39 of the LMSAP EIR, "...SCA A would implement construction-related Best Management Practices to substantially reduce construction-related impacts to a less-than-significant level."

Construction associated with the Project (and other projects in the LMSAP area) would not result in a more severe impact than what was previously disclosed in the LMSAP EIR. Further, as discussed below, there is no evidence that the Project would have peculiar or unusual impacts or impacts that are new or more significant than previously analyzed in the LMSAP EIR. Consequently, the construction health risk has been adequately addressed by the planning-level review and the Project's conditions of approval. Furthermore, there is nothing in the LMSAP EIR indicating that a stand-alone HRA for construction-related impacts is required on a project-by-project basis. In fact, preparation of a construction-related HRA would result in unnecessary and duplicative studies that would ultimately reach the same conclusions and control measures already established in the LMSAP EIR.

For example, as noted on page 3.3-39 of the LMSAP EIR, construction health risks would be minimized to less than significant through application of SCA A (W12 SCA AIR-1), which indicates that diesel emissions would be minimized through the application of various measures. Specifically, subsections (g) and (h) of SCA AIR A (W12 SCA AIR-1) minimize idling; subsection (i) ensures that construction equipment is running in proper condition; subsection (j) specifies that portable equipment would be powered by electricity if available; subsection (u) requires that equipment meet emissions and performance requirements; subsection (v) requires the

use of low volatile organic compound coatings; subsection (w) requires that equipment and diesel trucks be equipped with Best Available Control Technology; and subsection (x) requires that off-road heavy diesel engines meet the California Air Resources Board's most recent certification standard.

The Project sponsor would be obligated to use construction equipment that meets Tier 4 emissions standards and utilize high performance renewable diesel (diesel HPR) in order to comply with subsections (w) and (x). Tier 4 engines and diesel HPR are considered the best available technology and are readily available in the marketplace. Use of Tier 4 engines would reduce total PM2.5 exhaust emissions from construction by approximately 75 percent and diesel HPR would reduce total PM2.5 exhaust emissions from construction by a further 34 percent, relative to unmitigated conditions.

Section II. C of the Adams Broadwell letter also asserts that the guidance set forth by the Office of Environmental Health Hazard Assessment (OEHHA), which recommends that all short term-projects lasting longer than two months be evaluated for cancer risks to nearby sensitive receptors, is applicable to the Project.

RESPONSE: The Adams Broadwell letter incorrectly suggests that OEHHA's recommended methodology is a formal part of the BAAQMD's applicable guidance. In fact, the OEHHA has no binding authority on the Project that would require a stand-alone construction HRA for the Project. BAAQMD has only adopted this methodology with respect to HRAs that are required pursuant to Regulation 2 Permits, Rule 1 General Requirements or Rule 5 New Source Review of Toxic Air Contaminants. BAAQMD has not formally adopted the methodology to sources outside of its permit authority, such as mobile construction equipment. Regardless of the use of OEHHA's recommended methodology, which describes how (and not when) an HRA should be conducted, a stand-alone construction HRA for the Project is not required for the aforementioned reasons.

Further, a cursory review of SWAPE's preliminary health risk screening assessment of the Project's construction emissions revealed that the analysis is overly conservative and, as a result, overstates the Project's construction emissions. SWAPE's analysis used a highly conservative screening model (aerscreen) which overestimates health risk. Aermod is the analysis tool that is the industry standard for conducting HRA's because it allows a much more refined analysis. In addition, SWAPE's analysis used unmitigated data that did not consider SCA AIR-1 which requires all construction equipment and generators shall be equipped with Best Available Control Technology (BACT) for emission reductions of PM which can reduce PM emissions by 75 to 85 percent.

Section II. C The Adams Broadwell letter, based on the list of mitigation measures in the SWAPE letter, lists mitigation measures that could be incorporated to reduce DPM exposure above and beyond SCA AIR-1 (LMSAP SCA A).

RESPONSE: As noted above, LMSAP Impact AIR-3 (construction health risks) was determined to be less than significant in the LMSAP EIR with implementation of LMSAP SCA A (referred to as SCA AIR-1 in the W12 CEQA Analysis), which included the use of best available control technologies for all construction equipment, diesel trucks, and generators, as well as diesel engines that meet the California Air Resources Board's most recent certification standard, which are currently Tier 4. The LMSAP EIR was publicly reviewed and the impact

conclusions certified by the City. Consistent with CEQA Guidelines, the Project tiers from the analysis completed for the LMSAP EIR and, likewise, concludes that construction-related health risks would be less than significant with implementation of SCA AIR-1. Because the Project is consistent with the CEQA streamlining provisions discussed above and the CEQA Analysis is appropriately tiered from the LMSAP EIR, the control measures outlined in W12 SCA AIR-1 represent feasible mitigation required to minimize the impacts. While other control measures could be added to the control measures outlined in W12 SCA AIR-1, they would not be required because the impacts already would be mitigated to less than significant levels. Nonetheless, the following measures proposed in the SWAPE letter are evaluated for their feasibility and redundancy with W12 SCA AIR-1.

Limit Construction Equipment Idling Beyond Regulation Requirements

Subsection (h) of SCA AIR-1 requires idling times on all diesel-fueled off-road vehicles over 25 horsepower to be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes consistent with California Air Resources Board Off-Road Diesel Regulations. Further reduction in idling time allowances is a feasible measure as it is also identified as an operational control for trucks in SCA AIR-2.

Require Implementation of Diesel Control Measures as described by the Northeast Diesel Collaborative (NEDC).

The first NEDC measure cited is for all diesel vehicles onsite for more than 10 days to have emission control technology verified by EPA or CARB to reduce particulate emissions by 85 percent. Subsection (w) of SCA AIR-1 requires that diesel trucks be equipped with Best Available Control Technology. Currently this represents trucks with Level 3 verified diesel Emission Control strategies (particulate filters), which would reduce diesel PM by approximately 85 percent. Consequently, SCA AIR-1 already implements this suggested measure.

The second NEDC measure cited is for all diesel generators on the site to be equipped with emission control technology verified by EPA or CARB to reduce particulate emissions by 85 percent. Again, subsection (w) of SCA AIR-1 requires that diesel equipment be equipped with Best Available Control Technology. Currently this represents generators with Tier 4 engines, which would reduce diesel PM by approximately 85 percent. Consequently, SCA AIR-1 already implements this suggested measure.

The third NEDC measure cited is for all non-road diesel equipment to have engines meeting the EPA Tier 4 standard. Again, subsection (w) of SCA AIR-1 requires that diesel equipment be equipped with Best Available Control Technology. Currently this represents equipment with Tier 4 engines. Consequently, SCA AIR-1 already implements this suggested measure.

The last NEDC measure cited is for all diesel vehicles to be fueled ultra-low sulfur diesel fuel or a biodiesel blend. All commercially available diesel in California has been ultra-low sulfur diesel since 2006. Consequently, this measure no longer represents a meaningful mitigation.

Repower or Replace Older Construction Equipment Engines

This measure is an offset strategy for criteria pollutant emissions and would not serve to reduce local diesel PM risks surrounding the Project site since Tier 4 equipment would already be required for on-site equipment pursuant to SCA AIR-1

Install Retrofit Devices on Existing Construction Equipment

This measure is also an offset strategy for criteria pollutant emissions and would not serve to reduce local diesel PM risks surrounding the Project site since Tier 4 equipment would already be required for on-site equipment pursuant to SCA AIR-1

Use Electric and Hybrid Construction Equipment

While hybrid construction equipment is currently available for purchase for certain equipment types (loaders, rollers, excavators, and dozers), there is currently no regulatory mechanism requiring contractors to acquire equipment using this technology for their equipment fleets as there is for equipment with Tier 4 engines. As a consequence, unlike Tier 4 equipment, the availability of such equipment in contractor fleets cannot be reasonably assured, rendering this potential measure infeasible.

Instituting a Heavy-Duty Off-road Vehicle Plan

This is a potentially feasible component of a Mitigation Monitoring and Reporting Program but would not, through its implementation, result in meaningfully reduced diesel PM emissions or associated risks beyond those realized with implementation of SCA AIR-1.

Implement a Construction Vehicle Inventory Tracking System

A few jurisdictions (Cities of San Francisco and Sacramento) require a tracking system to ensure compliance with specified equipment requirements. This is a potentially feasible component of a Mitigation Monitoring and Reporting Program but would not necessarily equate to a reduction in diesel PM emissions or associated risks than those realized with implementation of SCA AIR-1.

Implement Enhanced Exhaust Control Practices of the Sacramento Metropolitan Air Quality Management District (SMAQMD).

The first two measures of SMAQMD's Enhanced Exhaust Control Practices are the same as the two previously discussed above for the Off-road Vehicle Plan and the Construction Vehicle Tracking System. The third measure would implement an opacity reaction of 40 percent. This would be a feasible mitigation measure, if mitigation were warranted, and if health risks were not reduced to less than significant level by other measures. The last Enhanced Exhaust Control Practice is for the SMAQMD to conduct compliance inspections. However, this measure was developed by SMAQMD which, therefore has agreed to conduct compliance inspections for its

recommended Enhanced Exhaust Control Practices. Since the proposed project is within the jurisdiction of the Bay Area Air Quality Management District, not SMAQMD, it cannot be assured that BAAQMD is adequately staffed or amenable to conducting inspections for control practices not developed are adopted by BAAQMD. Additionally, this measure, if implemented, would be a potentially feasible component of a Mitigation Monitoring and Reporting Program but would not necessarily equate to a reduction in emissions.

Therefore, beyond SCA AIR-1, there are no additional control measures required to further reduce construction-related DPM emissions.

D. Response to Comment Regarding the Adequacy of the Project-Specific Construction Emissions Analysis and Mitigation

Section II. D of the Adams Broadwell letter asserts that the CEQA Analysis incorrectly assumed the Use of Level 3 DPF Off-Road Equipment.

RESPONSE: Although the CalEEMod output contained a note regarding Level 3 PDF, as can be seen in the mitigated output, these emissions reductions were not included in the analysis or reported in the CEQA analysis. In fact, SWAPE performed a screening level assessment using these emission values that did not assume Level 3 PDF. SCA AIR-1 in the CEQA analysis states that all construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology (BACT) for emission reductions of NO_x and PM. At present, the BACT for PM control on off-road equipment is either Level 3 PDF or Tier 4 engines, the latter of which the applicant has now committed to.

Section II. D of the Adams Broadwell letter asserts that the CEQA Analysis fails to provide the public with information regarding project-specific construction emissions.

RESPONSE: While construction-related emissions associated with the parking component of the Project would result in an incremental increase not included in the CEQA Analysis for the W12 Project, this increase would be marginal and would not result in significant criteria air pollutant impacts.

Construction associated with the parking component of the Project would not result in a more severe impact than what was previously disclosed in the CEQA Analysis for the Project. Specifically, the construction of parking would result in an additional 3 pounds per day of ROG and NOx and a statistically insignificant increase in particulate emissions. Construction-related criteria pollutant emissions would still be less than half of the applicable significance thresholds for all four criteria pollutants analyzed, while Project-related emissions of criteria pollutants would be a less than significant air quality impact. CalEEMod files have since been provided to Adams Broadwell, which prove this out.

CITY OF OAKLAND

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Planning and Building Department
Bureau of Planning

(510) 238-3941
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Sent via U.S. Mail

August 22, 2016

Attn: Justin Osler
W12, LLC
44 Montgomery Street, Suite 4050
San Francisco, CA 94104

RE: Case File No. PLN16-133, W12, 285 and 301 12th Street (APNs 002 -0063-006-00 and 002 -0069-003-01)

Dear Applicant:

The above application was approved at the City Planning Commission meeting (by a +**4**, -**2** vote) on **August 17, 2016**. The Commission's action is indicated below. This action becomes final ten (10) days after the date of the announcement of the decision unless an appeal to the City Council is filed by **4:00 pm on Monday, August 29, 2016**.

1. **Affirm staff's environmental determination and adopt the attached CEQA findings and Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCAMMRP).**
2. **Approve the Major Conditional Use, Design Review and Vesting Tentative Parcel Map subject to the attached findings and conditions (including the SCAMMRP).**

If you, or any interested party, seeks to challenge this decision, an appeal **must** be filed by no later than ten calendar (10) days from the announcement of the decision by **4:00 pm on Monday, August 29, 2016**. An appeal shall be on a form provided by the Bureau of Planning of the Planning and Building Department, and submitted to the same at 250 Frank H. Ogawa Plaza, Suite 2114, to the attention of **Christina Ferracane, Planner III**. The appeal shall state specifically wherein it is claimed there was error or abuse of discretion by the Planning Commission or wherein their decision is not supported by substantial evidence and must include payment of **$1891.09** in accordance with the City of Oakland Master Fee Schedule. Failure to timely appeal will preclude you, or any interested party, from challenging the City's decision in court. The appeal itself must raise each and every issue that is contested, along with all the arguments and evidence in the record which supports the basis of the appeal; failure to do so may preclude you, or any interested party, from raising such issues during the appeal and/or in court. However, the appeal will be limited to issues and/or evidence presented to the City Planning Commission prior to the close of the City Planning Commission's public hearing on the matter.

If you have any questions, please contact the case planner, **Christina Ferracane** at (510) **238-3903** or **cferracane@oaklandnet.com,** however, this does not substitute for filing of an appeal as described above.

Very Truly Yours,

ROBERT MERKAMP
Development Planning Manager

cc: Laura E. Horton
Adams Broadwell Joseph & Cardozo
601 Gateway Blvd., Suite 1000
South San Francisco, CA 94080

Attachments:

A. Findings for Approval
B. Conditions of Approval, including Standard Conditions of Approvals and by reference incorporating the SCA/MMRP from the July15, 2016 CEQA Analysis Document prepared for the project.

ATTACHMENT A
FINDINGS FOR APPROVAL

This proposal meets all the required Conditional Use Permit Criteria (Section 17.134.050 & 17.101 .G.050B.2) and Design Review Criteria (Section 17.136.050) as set forth below and which are required to approve an application. This proposal does not contain characteristics that require denial pursuant to the Tentative Map Findings (Section 16.08.030) and is consistent with the Lot Design Standards (Section 16.24.040) of the Oakland Subdivision Regulations. The proposal also meets all the findings necessary to comply with the California Environmental Quality Act. Required findings are shown in bold capital type; reasons the proposal satisfies them are shown in normal or italic type. (Note: The Project's conformance with the following findings is not limited to the discussion below, but is also included in all discussions in this report and elsewhere in the record).

CONDITIONAL USE PERMIT FINDINGS

Section 17.134.050 General Use Permit Criteria

A. The location, size, design, and operating characteristics of the proposed development will be compatible with, and will not adversely affect, the livability or appropriate development of abutting properties and the surrounding neighborhood, with consideration to be given to harmony in scale, bulk, coverage, and density; to the availability of civic facilities and utilities; to harmful effect, if any upon desirable neighborhood character; to the generation of traffic and the capacity of surrounding streets; and to any other relevant impact of the development:

The W12 project will consist of two 7-story midrise buildings. One full block building & a quarter block building. In total the project will consist of 416 apartment units & approximately 25,000 sf of commercial space that will screen an internal parking structure housing adequate vehicular and bicycle parking. The new addition to Oakland's urban fabric will be located on a 1.38 acre (full block) & a .34 acre (1/4 block) site at the intersection of Webster & 12th in the Lake Merritt Station Area District Mixed Commercial Zone-4 (D-LM-4). The project will provide new housing and service opportunities in Oakland's Chinatown District. It is located within the region's major employment, retail, entertainment, cultural, and transportation center and conforms to the standards set in that zone.Indeed it is less dense thanit could be under the zoning regulations which anticipated such a development. Therefore, this proposal will not be harmful to the neighborhood character, to the generation of traffic and capacity of surrounding streets or any other factor.

B. The location, design, and site planning of the proposed development will provide a convenient and functional living, working, shopping, or civic environment, and will be as attractive as the nature of the use and its location and setting warrant:

The project plans for mid-rise apartments and neighborhood retail and support services. Modern community amenities, landscaped decks, and rooftop open space, are other planned features of the community. W12 is planned to be a cohesive residential community, incorporating sustainable best practices that complement the character of the Downtown urban fabric, existing resources on the site, and the surrounding neighborhood area context. The project is located within Downtown, Oakland's main job center and transit hub.

C. The proposed development will enhance the successful operation of the surrounding area in its basic community functions, or will provide an essential service to the community or region:

The Project will offer new housing that will increase foot traffic in the area as well as provide new retail / commercial amenities to the neighborhood. The Project includes 2 and 3 bedroom units that are suitable for families.

D. The proposal conforms with all applicable Regular Design Review criteria set forth in Section 17.136.050 of the Oakland Planning Code.

See Design Review findings below.

E. The proposal conforms in all significant respects with the Oakland General Plan and with any other applicable plan or development control map which has been adopted by the City Council.

As detailed in the accompanying staff report, the project is located within the Central Business District (CBD) General Plan Land Use Classification and within the boundaries of the Lake Merritt Station Area. The Project is consistent/conforms with the goals and policies in those plans, by creating a new, mixed use development with high density housing and an active commercial ground floor in close proximity to BART Stations. The Project fully conforms to all zoning requirements.

Section 17,101.G.050.B.2 Lake Merritt Station Area Plan Findings

1. The proposal is consistent with the intent and desired land use character identified in the Lake Merritt Station Area Plan and its associated policies.

   The Project is located in the LMSAP's Pedestrian Transition Land Use District, which calls for mixed-use projects with continuous ground floor retail. The Project includes 25,000 SF of ground floor, pedestrian-oriented retail, with nearly 70% of the ground floor designed as continuous commercial with high clear heights and commercially reasonable depths. From the perspective of a pedestrian, the integrated awnings, which provide clear delineation between ground floor commercial and upper story residential uses, will ensure a consistent character with neighboring buildings.

   The Project site is zoned for a total building height of 175' and a density of up to 681 units. The proposal is approx. 84' tall and has 417 units, and is therefore within the zonings standards that implement the vision of the LMSAP. Due to its proximity to Downtown, there are numerous buildings nearby that are 85ft or higher with no setbacks, including the EBMUD, California Regents, Hotel Oakland, Clorox, Oakland Marriott, 1111 Broadway and the Social Security office.

2. The proposal will promote implementation of the Lake Merritt Station Area Plan.

   The Proposal helps promote the implementation of the Lake Merritt Station Plan in the following ways:

   The Project will improve Public Safety by increasing foot traffic, increasing the street lighting and strengthening the linkage between Chinatown and the Downtown area. The Project will also address the needs of non-english speaking visitors & residents with wayfinding signage.

The Project has approximately 25,000 SF of retail space which will promote a variety of new businesses that will both offer employment to residents and serve the local community. The Project itself is anticipated to have 10 fulltime employees and the 25,000 SF of retail will create additional employment opportunities.
The Project will deliver 416 new multifamily rental units, supporting the demand for housing within the LMSAP and the Bay Area for individuals and families.

The Project greatly exceeds the minimum number of required bicycle parking spaces, thereby supporting an increase in bike vs. car trips.

The Project will incorporate art, wayfinding signage, symbolic color schemes and other design features that enhance the cultural heritage of Chinatown while providing a gateway on Webster Street into Chinatown to the south.

The Project exceeds the CalGreen requirements, promoting the sustainability goals of the LMSAP.

3. The proposal is consistent with the desired visual character described in the Lake Merritt Station Area Plan and Lake Merritt Station Area Design Guidelines, with consideration given to the existing character of the site and surrounding area.

The project is consistent with the LMSAP Design Guidelines, notably the following:
1) Conformity with neighboring buildings and colors (DG 1)
2) Tall (over the recommended 15 feet) ceiling height for ground floor retail (DG 2)
3) Emphasis of building corners at block corners (DG 7)
5) Three-Dimensional Articulation through windows, balconies and design elements (DG 16)
6) Distinct Ground Floor Design (DG 29)
7) Clear delineation between primary and secondary entrances (DG 30)
8) Consistent Horizontal Lines (DG 33)
9) Integrated Awnings (DG 35)
10) Bike Parking (over the requirement)(DG 119)
11) Flexible Commercial Design (DG 42)
12) Range of Unit Sizes (DG 53)
13) Enhanced shared residential space (DG 57)
14) High Quality, Durable and Attractive Building Materials (DG 69 & 70)
15) Significant Pedestrian Lighting (DG 124)
16) Special Paving via high contrast concrete (DG 129)
17) Wayfinding & Signage (DG 133)
19) Lighting and street trees (DG 136)
20) Lighting for safety (DG-150)

o Wayfinding Signage – The project incorporate wayfinding signage from Chinatown to better cement the Project's role as a gateway to Oakland's Chinatown.

o Awning Color – The project includes maroon red awnings to match colors of the wayfinding signage and nearby buildings. This helps better delineate between the commercial and residential space, better integrates the Project with neighboring buildings and helps support the LMSAP's goal of creating a visual entrance to Chinatown.

o Active Street Frontage – As noted earlier, the project includes a significant amount of ground floor retail, activating the pedestrian realm.

RESIDENTIAL DESIGN REVIEW CRITERIA
(Section 17.136.050(A))

A-1: That the proposed design will create a building or set of buildings that are well related to the surrounding area in their setting, scale, bulk, height, materials, and textures:

The Project ("W12") aims to fit in with the eclectic Chinatown & Downtown Oakland urban neighborhoods. W12's midrise scale, bulk and height will blend in well with the surrounding community, which contains numerous projects that are similar in scale. Throughout the neighborhood there is a large variety of unique buildings with a wide range of materials, that include brick, cement siding, painted plaster and aluminum. W12 aims to mimic the feeling left in the community through the use of these similar materials, but in a way that adds to the neighborhoods eclectic character. Massing of the building is varied through articulation and different colors, mixing recessed balconies and bay windows, both common design attributes in residential projects in the area.

A-2: That the proposed design will protect, preserve, or enhance desirable neighborhood characteristics:

W12 project will protect local neighborhood characteristics through cohesive design. W12 preserves the neighborhood by creating a pedestrian-oriented and transit-oriented development project in the heart of Downtown. Finally, W12 will enhance the neighborhood by meeting demand for new housing near transit and services, and extending the vibrancy of Chinatown's commercial district by including ground floor retail along most of the project's frontages.

W12 will help preserve the transit-oriented nature of the site through an active transit demand management program (Condition of Approval), and by providing more bike parking than required and a very low auto parking ratio.

A-3: That the proposed design will be sensitive to the topography and landscape:

The project site is flat and W12 is designed with this in mind without any changes in elevation throughout the project. W12's exterior landscape design will focus on new trees and foliage planted in a manner consistent with City & Community standards.

A-4: That, if situated on a hill, the design and massing of the proposed building relates to the grade of the hill:

Not applicable.

A-5: That the proposed design conforms in all significant respects with the Oakland General Plan and with any applicable design review guidelines or criteria, district plan, or development control map which has been adopted by the Planning Commission or City Council.

As proposed, W12 complies with the Lake Merritt Station Area Plan Design Guidelines and zoning standards, which are an implementation of the policies in the Oakland General Plan and the Lake Merritt Station Area Plan, as described in the Planning Commission staff report.

TENTATIVE MAP FINDINGS

Section 16.08.030 O.M.C. & California Government Code §66474

The Advisory Agency shall deny approval of a tentative map, or a parcel map for which a tentative map was not required, if it makes any of the following findings:

A. That the proposed map is not consistent with applicable general and specific plans as specified in the State Government Code Section 65451.

The proposal is consistent with the Central Business District General Plan designation and with the Lake Merritt Station Area Plan (LMSAP), by creating a mixed use development with viable street fronting retail. See additional General Plan Conformity findings above.

B. That the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans.

The proposal is consistent with the Central Business District General Plan designation and with the LMSAP, by creating a mixed use development with viable street fronting retail. See additional General Plan Conformity findings above.

C. That the site is not physically suitable for the type of development.

The site is suitable for the proposed development as it is located close to public utilities, transit, and other civic facilities, and fulfills the vision for the area as set forth in the LMSAP.

D. That the site is not physically suitable for the proposed density of development.

The proposed density is consistent with the General Plan and Specific Plan density envisioned for the area.

E. That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

The project is proposing to remove trees that currently contain night heron and egret rookeries. However, as a Condition of Approval, the trees cannot be removed if the birds are present, and the applicant will be implementing a Plan for relocation of the rookeries.

F. That the design of the subdivision or type of improvements is likely to cause serious public health problems.

There should be no adverse health effects. This is in a mixed use development containing residential and retail uses located in the downtown area and it will introduce no new use classifications that are incompatible with the surrounding neighborhood.

G. That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision. In this connection, the governing body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public. (This subsection shall apply only to easements of record or to easements established by judgment of a court of competent jurisdiction and no authority is hereby granted to a legislative body to determine that the public at large has acquired easements for access through or use of property within the proposed subdivision.)

There are no easements on this property at present therefore this finding is not applicable.

H. That the design of the subdivision does not provide to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision

The project could to be set up for solar panels on the rooftop.

Section 16.24.040 O.M.C. – Lot Design Standards

For condominium purposes, these standards are not applicable.

CEQA COMPLIANCE FINDINGS

An evaluation of the proposed project is provided in the CEQA Checklist in Section VI that follows. This evaluation concludes that the W12 Mixed-Use Project qualifies for an addendum as well as an exemption from additional environmental review. It is consistent with the development density and land use characteristics established by the City of Oakland General Plan, and any potential environmental impacts associated with its development were adequately analyzed and covered by the analysis in the 2014 LMSAP EIR, and in the applicable Prior EIRs: the 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR, and the 2010 General Plan Housing Element Update EIR and its 2014 Addendum.

The proposed project would be required to comply with the applicable mitigation measures and City of Oakland SCAs identified in the 2014 LMSAP EIR and presented in Attachment A to this document.[7] With implementation of the applicable mitigation measures and SCAs, the proposed project would not result in a substantial increase in the severity of previously identified significant impacts in the 2014 LMSAP EIR, the applicable Prior EIRs, or in any new significant impacts that were not previously identified in any of those Previous CEQA Documents.

In accordance with California Public Resources Code Sections 21083.3, 21094.5, and 21166; and CEQA Guidelines Sections 15183, 15183.3, 15162, 15164, 15168, and 15180, and as set forth in the CEQA Checklist below, the proposed project qualifies for an addendum and one or more exemptions because the following findings can be made:

- Addendum. The 2014 LMSAP EIR analyzed the impacts of development within the LMSAP. The proposed project would not result in substantial changes or involve new information not already analyzed in the 2014 LMSAP EIR because the level of development now proposed for the site is within the broader development assumptions analyzed in the EIR. The proposed project would not cause new significant impacts not previously identified in the 2014 LMSAP EIR, or result in a substantial increase in the severity of previously identified significant impacts. No new mitigation measures would be necessary to reduce significant impacts. No changes have occurred with respect to circumstances surrounding the LMSAP that would cause significant environmental impacts to which the proposed project would contribute considerably, and no new information has been put forward that shows that the proposed project would cause significant environmental impacts. Therefore, no supplemental environmental review is required in accordance with Public Resources Code Section 21166, and CEQA Guidelines Sections 15162 through 15164, as well as 15168 and 15180.

- Community Plan Exemption. The proposed project would not result in significant impacts that (1) are peculiar to the project or project site; (2) were not previously identified as significant project-level, cumulative, or offsite effects in the 2014 LMSAP EIR, or in the applicable Previous CEQA Documents: 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum; or (3) were previously identified as significant effects, but—as a result of substantial new information not known at the time the 2014 LMSAP EIR was prepared, or when the Prior EIRs were certified— would increase in severity beyond that described in those EIRs. Therefore, the proposed project would meet the criteria to be exempt from further environmental review in accordance with Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183.

- Qualified Infill Exemption. The proposed project would not cause any new specific effects on the environment that were not already analyzed in the 2014 LMSAP EIR or in the applicable Prior EIRs: the 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum. Further, the proposed project would not cause any new specific effects on the environment that are more significant than previously analyzed in the 2014 LMSAP EIR, or the aforementioned previously certified applicable Prior EIRs. The effects of the proposed project have been addressed in the 2014 LMSAP EIR and Prior EIRs, and no further environmental documents are required in accordance with Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3.

- Other Applicable Previous CEQA Documents - Prior EIRs and Redevelopment Projects. The analysis in the 2011 Redevelopment Plan Amendments EIR, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum, and in this CEQA Analysis demonstrates that the proposed project would not result in substantial changes or involve new information that would warrant preparation of a subsequent EIR, per CEQA Guidelines Section 15162, because the level of development now proposed for the site is within the broader development assumptions analyzed in the EIR. The effects of the proposed project have been addressed in that EIR and no further environmental documents are required in accordance with CEQA Guidelines Sections CEQA Guidelines Sections 15168 and 15180.

Overall, based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR, as well as those of the 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR (or "Redevelopment Plan Amendments EIR"), and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum—all of which are summarized in the CEQA Checklist in Section VI of this document—the potential environmental impacts associated with the W12 Mixed-Use Project have been adequately analyzed and covered in the LMSAP EIR and other Previous CEQA Documents. Therefore, no further review or analysis under CEQA is required.

Each of the above findings provides a separate and independent basis for CEQA compliance.

ATTACHMENT B
CONDITIONS OF APPROVAL

STANDARD ADMINISTRATIVE CONDITIONS:

1. **Approved Use**

The project shall be constructed and operated in accordance with the authorized use as described in the approved application materials, **staff report** and the approved plans **dated July 21, 2016**, as amended by the following conditions of approval and mitigation measures, if applicable ("Conditions of Approval" or "Conditions").

2. **Effective Date, Expiration, Extensions and Extinguishment**

This Approval shall become effective immediately, unless the Approval is appealable, in which case the Approval shall become effective in ten calendar days unless an appeal is filed. Unless a different termination date is prescribed, this Approval shall expire **two years** from the Approval date, or from the date of the final decision in the event of an appeal, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this Approval, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit or other construction-related permit for this project may invalidate this Approval if said Approval has also expired. If litigation is filed challenging this Approval, or its implementation, then the time period stated above for obtaining necessary permits for construction or alteration and/or commencement of authorized activities is automatically extended for the duration of the litigation.

3. **Compliance with Other Requirements**

The project applicant shall comply with all other applicable federal, state, regional, and local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Bureau of Building, Fire Marshal, and Public Works Department. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition #4.

4. **Minor and Major Changes**

a. Minor changes to the approved project, plans, Conditions, facilities, or use may be approved administratively by the Director of City Planning.

b. Major changes to the approved project, plans, Conditions, facilities, or use shall be reviewed by the Director of City Planning to determine whether such changes require submittal and approval of a revision to the Approval by the original approving body or a new independent permit/approval. Major revisions shall be reviewed in accordance with the procedures required for the original permit/approval. A new independent permit/approval shall be reviewed in accordance with the procedures required for the new permit/approval.

5. Compliance with Conditions of Approval

a. The project applicant and property owner, including successors, (collectively referred to hereafter as the "project applicant" or "applicant") shall be responsible for compliance with all the Conditions of Approval and any recommendations contained in any submitted and approved technical report at his/her sole cost and expense, subject to review and approval by the City of Oakland.

b. The City of Oakland reserves the right at any time during construction to require certification by a licensed professional at the project applicant's expense that the as-built project conforms to all applicable requirements, including but not limited to, approved maximum heights and minimum setbacks. Failure to construct the project in accordance with the Approval may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension, or other corrective action.

c. Violation of any term, Condition, or project description relating to the Approval is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approval or alter these Conditions if it is found that there is violation of any of the Conditions or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Approval or Conditions.

6. Signed Copy of the Approval/Conditions

A copy of the Approval letter and Conditions shall be signed by the project applicant, attached to each set of permit plans submitted to the appropriate City agency for the project, and made available for review at the project job site at all times.

7. Blight/Nuisances

The project site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60 days of approval, unless an earlier date is specified elsewhere.

8. Indemnification

a. To the maximum extent permitted by law, the project applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the Oakland Redevelopment Successor Agency, the Oakland City Planning Commission, and their respective agents, officers, employees, and volunteers (hereafter collectively called "City") from any liability, damages, claim, judgment, loss (direct or indirect), action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul this Approval or implementation of this Approval. The City may elect, in its sole discretion, to participate in the defense of said Action and the project applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.

b. Within ten (10) calendar days of the filing of any Action as specified in subsection (a) above, the project applicant shall execute a Joint Defense Letter of Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Joint Defense Letter of Agreement shall survive termination, extinguishment, or invalidation of the Approval. Failure to timely execute the Letter of Agreement does not relieve the project applicant of any of the obligations contained in this Condition or other requirements or Conditions of Approval that may be imposed by the City.

9. Severability

The Approval would not have been granted but for the applicability and validity of each and every one of the specified Conditions, and if one or more of such Conditions is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid Conditions consistent with achieving the same purpose and intent of such Approval.

10. Special Inspector/Inspections, Independent Technical Review, Project Coordination and Monitoring

The project applicant may be required to cover the full costs of independent third-party technical review and City monitoring and inspection, including without limitation, special inspector(s)/inspection(s) during times of extensive or specialized plan-check review or construction, and inspections of potential violations of the Conditions of Approval. The project applicant shall establish a deposit with the Bureau of Building, if directed by the Building Official, Director of City Planning, or designee, prior to the issuance of a construction-related permit and on an ongoing as-needed basis.

11. Public Improvements

The project applicant shall obtain all necessary permits/approvals, such as encroachment permits, obstruction permits, curb/gutter/sidewalk permits, and public improvement ("p-job") permits from the City for work in the public right-of-way, including but not limited to, streets, curbs, gutters, sidewalks, utilities, and fire hydrants. Prior to any work in the public right-of-way, the applicant shall submit plans for review and approval by the Bureau of Planning, the Bureau of Building, and other City departments as required. Public improvements shall be designed and installed to the satisfaction of the City.

12. Compliance Matrix

The project applicant shall submit a Compliance Matrix, in both written and electronic form, for review and approval by the Bureau of Planning and the Bureau of Building that lists each Condition of Approval (including each mitigation measure if applicable) in a sortable spreadsheet. The Compliance Matrix shall contain, at a minimum, each required Condition of Approval, when compliance with the Condition is required, and the status of compliance with each Condition. For multi-phased projects, the Compliance Matrix shall indicate which Condition applies to each phase. The project applicant shall submit the initial Compliance Matrix prior to the issuance of the first construction-related permit and shall submit an updated matrix upon request by the City.

13. Construction Management Plan

Prior to the issuance of the first construction-related permit, the project applicant and his/her general contractor shall submit a Construction Management Plan (CMP) for review and approval

by the Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department and the Public Works Department as directed. The CMP shall contain measures to minimize potential construction impacts including measures to comply with all construction-related Conditions of Approval (and mitigation measures if applicable) such as dust control, construction emissions, hazardous materials, construction days/hours, construction traffic control, waste reduction and recycling, stormwater pollution prevention, noise control, complaint management, and cultural resource management (see applicable Conditions below). The CMP shall provide project-specific information including descriptive procedures, approval documentation, and drawings (such as a site logistics plan, fire safety plan, construction phasing plan, proposed truck routes, traffic control plan, complaint management plan, construction worker parking plan, and litter/debris clean-up plan) that specify how potential construction impacts will be minimized and how each construction-related requirement will be satisfied throughout construction of the project.

14. Standard Conditions of Approval / Mitigation Monitoring and Reporting Program (SCAMMRP)

a. All mitigation measures identified in the **W12 CEQA Analysis** are included in the Standard Condition of Approval / Mitigation Monitoring and Reporting Program (SCAMMRP), which is included in these Conditions of Approval and is incorporated herein by reference, as **Exhibit A**, as Conditions of Approval of the project. The Standard Conditions of Approval identified in the **W12 CEQA Analysis** are also included in the SCAMMRP, and are, therefore, incorporated into these Conditions by reference but are not repeated in these Conditions. To the extent that there is any inconsistency between the SCAMMRP and these Conditions, the more restrictive Conditions shall govern. In the event a Standard Condition of Approval or mitigation measure recommended in the **W12 CEQA Analysis** has been inadvertently omitted from the SCAMMRP, that Standard Condition of Approval or mitigation measure is adopted and incorporated from the **W12 CEQA Analysis** into the SCAMMRP by reference, and adopted as a Condition of Approval. The project applicant and property owner shall be responsible for compliance with the requirements of any submitted and approved technical reports, all applicable mitigation measures adopted, and with all Conditions of Approval set forth herein at his/her sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or Condition of Approval, and subject to the review and approval by the City of Oakland. The SCAMMRP identifies the timeframe and responsible party for implementation and monitoring for each Standard Condition of Approval and mitigation measure. Monitoring of compliance with the Standard Conditions of Approval and mitigation measures will be the responsibility of the Bureau of Planning and the Bureau of Building, with overall authority concerning compliance residing with the Environmental Review Officer. Adoption of the SCAMMRP will constitute fulfillment of the CEQA monitoring and/or reporting requirement set forth in section 21081.6 of CEQA.

b. Prior to the issuance of the first construction-related permit, the project applicant shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

PROJECT-SPECIFIC CONDITIONS:

15. Exterior Finishes

Requirement: The final building permit plan set shall contain detailed information on all proposed exterior finishes. If requested by the Bureau of Planning sample materials shall be submitted and are subject to final approval by the Zoning Manager. This includes but is not limited to the texture and colors of the proposed vinyl windows, and metal balconies.

When Required: Prior to issuance of a Building Permit

Permit Initial Approval: Bureau of Planning Monitoring/Inspection:

Bureau of Planning

16. Public Art for Private Development Condition of Approval

Requirement: The project is subject to the City's Public Art Requirements for Private Development, adopted by Ordinance No. 13275 C.M.S. ("Ordinance"). The public art contribution requirements are equivalent to one-half percent (0.5%) for the "residential" building development costs, and one percent (1 .0%) for the "non-residential" building development costs. The contribution requirement can be met through the commission or acquisition and installation of publicly accessible art fund, or satisfaction of alternative compliance methods described in the Ordinance. The applicant shall provide proof of full payment of the in-lieu contribution, or provide proof of installation of artwork on the development site prior to the City's issuance of a final certificate of occupancy for each phase unless a separate, legal binding instrument is executed ensuring compliance within a timely manner subject to City approval. On-site art installation shall be designed by independent artists, or artists working in conjunction with arts or community organizations that are verified by the City to either hold a valid Oakland business license and/or be an Oakland-based 501(c)(3) tax designated organization in good standing.

When Required: Prior to issuance of Final Certificate of Occupancy and

Ongoing Initial Approval: Bureau of Planning

17. Covenants, Conditions and Restrictions & Homeowner's Association

Requirement: When the condominium units created are offered for sale, the Covenants, Conditions and Restrictions (CC&Rs) for the approved units shall be submitted to the Planning and Zoning Division for review. The CC&Rs shall provide for the establishment of a non-profit homeowners association to maintenance and operation of all common landscaping, driveways, and other facilities, in accordance with approved plans. Membership in the association shall be made a condition of ownership. The developer shall be a member of such association until all units are sold.

When Required: If the condominium units are offered for immediate sale, within one year after issuance of the first certificate of occupancy. If not, prior to the first sale of a condominium unit.

18. Miscellaneous Transportation Improvement Measures

Requirement #1: Ensure that the project has adequate sight distance between motorists who are exiting the driveway and pedestrians on adjacent sidewalks. This may require removing on-street parking spaces adjacent to the driveway and audio/visual warning devices at the driveway.

Requirement #2: Ensure that the project coordinates any public right of way activities, including trenching, repaving, sidewalk reconstruction, with improvements associated with the Bus Rapid Transit project.

Requirement #3: In order for adjacent intersections to properly handle the new pedestrians generated by the project, the project must implement safety improvements, such as corner bulbouts to shorten crossing distances. However the City is in the midst of a Downtown Circulation Plan which may call for the reconfiguration of streets in Downtown. In order to not preclude the possibility of those changes, the project will work with staff to either implement the bulbouts or an equivalent value of streetscape improvements.

When Required: Prior to issuance of Final Certificate of Occupancy

Approval: Bureau of Planning, Department of Transportation

19. Fire Safety Measures for Rooftop Open Space

Requirement #1:.The rooftop open space can have gas appliances, including grills, as long as these are hard-plumbed through the floor into the building. No charcoal fires, or fires utilizing other fuels besides gas, are permitted.

Requirement #2: As part of the design, add an aluminum fire ladder to be stored on the podium in addition to the enhanced stair access with a wider door. Coordinate with the Fire Prevention Bureau regarding details on the type of ladder.

Requirement #3: No permanent structures are allowed in the rooftop open space, but temporary tents, umbrellas, planting boxes, and other moveable furniture is allowed.

When Required: Prior to issuance of Final Certificate of Occupancy and ongoing monitoring.

Approval: Bureau of Planning, Fire Prevention Bureau, Bureau of Building

20. Building Design – Parking and Loading Frontage in Building 2 (quarter block)

Requirement: A significant amount of the 12th Street frontage on Building 2 (quarter block) is dedicated to parking and loading behind a wall faced with grey block material, which does not provides much visual interest to passersby. In detailed plans provided for Building permits, the applicant must include ways to enliven that frontage, with greater variety of materials, colors, and/or the insertion of public art and/or plantings (as shown in the renderings, but not in the landscape plan).

When Required: Building Permit submittal

Approval: Bureau of Planning, Bureau of Building

21. Streetscape Elements

Requirement: Consistent with the Lake Merritt Station Area Plan, the project will include streetscape elements, including pedestrian scaled lighting, way finding signage to match those found in the heart of Chinatown. The applicant shall submit plans.

Approval: Department of Public Works, Bureau of Planning
When Required: Building Permit submittal
Approval: Bureau of Planning, Bureau of Building

22. Lighting and Signage for Ground Floor

Requirement: Consistent with the zoning requirements, the project will include detailed lighting and signage plans for the ground floor retail.
When Required: Building Permit submittal
Approval: Bureau of Planning, Bureau of Building

23. Voluntary Project Conditions

Voluntary Condition #1: The applicant voluntarily agrees to incorporate, as conditions of approval, the items contained in the letter from the Martin Group presented by Justin Osler at the Planning Commission hearing on August 17, 2016, and listed here:

a. Affordable Housing – The applicant voluntarily agrees it shall sell the Quarter Block (301 12th Street) to East Bay Asian Local Development Corporation (EBALDC) or another affordable housing developer at its accrued cost basis less the value of the affordable housing impact fees, provided, however, it is able to obtain receipt of an Impact Fee Waiver under Section 15.72.080(A)(1) of the Municipal Code. Nothing in this condition or these project approvals shall relieve the applicant of its obligations to comply fully with the City's Impact Fee Ordinance, as specified in Oakland Municipal code 15.72.
When Required: Building Permit submittal
Approval: Bureau of Planning, City Administrator

b. Affordable Retail – The applicant voluntarily agrees it shall provide 4,900 square feet (approximately 20% of the retail space) at $1.50 per square foot triple net lease (50% below market) for a 10-year term. Such affordable retail space shall be leased to a local non-profit or directed to a local small business.
When Required: Certificate of Occupancy
Approval: Bureau of Planning, Economic Development Department

c. Contribution to Open Space - The applicant voluntarily agrees to provide a $100,000 cash contribution for Lincoln Recreation Center.
When Required: Certificate of Occupancy
Approval: Bureau of Planning, Parks and Recreation

d. Local Hire - The applicant voluntarily agrees it shall pursue a commercially reasonable goal of 25% Alameda County hires for project construction.
When Required: Ongoing during construction
Approval: Bureau of Planning

e. Workforce Development - The applicant voluntarily agrees it shall provide four (4) pre-Apprenticeships from the Cypress Mandela Training program.
When Required: Ongoing during construction

Approval: Bureau of Planning

f. Public Art - The applicant voluntarily agrees to a commitment to work with a committee of stakeholders to define the art in / on the Project, including 500 square feet of rotating free public art gallery managed in conjunction with local stakeholders. Public art may include: streetlights, decorative concrete, wall murals, public art gallery, etc. *Also see Condition of Approval #16 for this project.*
When Required: Ongoing, Certificate of Occupancy
Approval: Bureau of Planning, Public Art Program

g. Placemaking Items - The applicant voluntarily agrees it shall provide Ginkgo trees and park benches around the Project. That applicant shall also voluntarily agree to a commitment to eliminate dark spots on the street with Project lighting, and providing dual-language wayfinding signage. *Also see Conditions of Approval #21 and #22 for this project.*
When Required: Certificate of Occupancy
Approval: Bureau of Planning, Public Works Department

h. Other Local Support – The applicant voluntarily agrees to provide a $10,000 cash contribution toward the anti-graffiti program.
When Required: Certificate of Occupancy
Approval: Bureau of Planning

Voluntary Condition #2: The applicant voluntarily agrees to continue to work with the community to reach an agreement on the project.
When Required: Ongoing

Standard Conditions of Approval and Mitigation Monitoring and Reporting Program

This Standard Conditions of Approval ("SCAs") and Mitigation Monitoring and Reporting Program ("SCAMMRP") is based on the CEQA Analysis prepared for the W12 Mixed-Use Project.

This SCAMMRP is in compliance with Section 15097 of the CEQA Guidelines, which requires that the Lead Agency "adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." The SCAMMRP lists mitigation measures recommended in the 2014 LMSAP EIR that apply to the proposed project. The SCAMMRP also lists other SCAs that apply to the proposed project, most of which were identified in the LMSAP EIR and some of which have been subsequently updated or otherwise modified by the City. Specifically, on July 22, 2015, the City of Oakland released a revised set of all City of Oakland SCAs, which largely still include SCAs adopted by the City in 2008, along with supplemental, modified, and new SCAs. SCAs are measures that would minimize potential adverse effects that could result from implementation of the proposed project, to ensure the conditions are implemented and monitored. The revised set of the City of Oakland SCAs includes new, modified, and reorganized SCAs; however, none of the revisions diminish or negate the ability of the SCAs considered "environmental protection measures" to minimize potential adverse environmental effects. As such, the SCAs identified in the SCAMMRP reflect the current SCAs only. Although the SCA numbers listed below may not correspond to the SCA numbers in the 2014 LMSAP EIR, all of the environmental topics and potential effects addressed by the SCAs in the LMSAP EIR are included in this SCAMMRP (as applicable to the W12 Project). This SCAMMRP also identifies the mitigation monitoring requirements for each mitigation measure and SCA.

This CEQA Analysis is also based on the analysis in the following Prior EIRs that apply to the W12 Mixed-Use Project: Oakland's 1998 General Plan Land Use and Transportation Element ("LUTE") EIR ("1998 LUTE EIR"), the 2010 General Plan Housing Element Update EIR and its 2014 Addendum, and the 2011 Central District Urban Renewal Plan Amendments EIR (or "Redevelopment Plan Amendments EIR"). None of the mitigation measures or SCAs from these EIRs are included in this SCAMMRP because they, or an updated or equally effective mitigation measure or SCA, is identified in the 2014 LMSAP EIR, its addenda, or in this CEQA Analysis for the W12 Mixed-Use Project.

To the extent that there is any inconsistency between any mitigation measures and/or SCAs, the more restrictive conditions shall govern; to the extent any mitigation measure and/or SCA identified in the CEQA Analysis were inadvertently omitted, they are automatically incorporated herein by reference.

- The first column of the SCAMMRP table identifies the mitigation measure or SCA applicable to that topic in the CEQA Analysis. While a mitigation measure or SCA can apply to more than one topic, it is listed in its entirety only under its primary topic (as indicated in the mitigation or SCA designator). The SCAs are numbered to specifically apply to the W12 Mixed-Use Project and this CEQA Analysis; however, the SCAs as presented in the City's *Standard Conditions of Approval and Uniformly Applied Development Standards* document[24] are included in parenthesis for cross-reference purposes.
- The second column identifies the monitoring schedule or timing applicable to the Project.
- The third column names the party responsible for monitoring the required action for the Project.

The Project Sponsor is responsible for compliance with any recommendations identified in City-approved technical reports, all applicable mitigation measures adopted, and with all SCAs set forth herein at its sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or condition of approval, and subject to the review and approval of the City of Oakland. Overall monitoring and compliance with the mitigation measures will be the responsibility of the Bureau or Planning, Zoning Inspections Division. Prior to the issuance of a demolition, grading, and/or construction permit, the Project Sponsor shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

[24] Dated July 22, 2015, as amended.

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
General		
SCA GEN-1 (Standard Condition Approval 15) *Regulatory Permits and Authorizations from Other Agencies* Requirement: The project applicant shall obtain all necessary regulatory permits and authorizations from applicable resource/regulatory agencies including, but not limited to, the Regional Water Quality Control Board, Bay Area Air Quality Management District, Bay Conservation and Development Commission, California Department of Fish and Wildlife, U. S. Fish and Wildlife Service, and Army Corps of Engineers and shall comply with all requirements and conditions of the permits/authorizations. The project applicant shall submit evidence of the approved permits/authorizations to the City, along with evidence demonstrating compliance with any regulatory permit/authorization conditions of approval.	Prior to activity requiring permit/authorization from regulatory agency.	City of Oakland Bureau of Planning and Building
Aesthetics, Shadow, and Wind		
SCA AES-1 (Standard Condition of Approval 16) *Graffiti Control* a. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation: i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces. ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces. iii. Use of paint with anti-graffiti coating. iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED). b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following: i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system. ii. Covering with new paint to match the color of the surrounding surface. iii. Replacing with new surfacing (with City permits if required).	Ongoing.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA AES-2 (Standard Condition of Approval 17) *Landscape Plan* a. Landscape Plan Required The project applicant shall submit a final Landscape Plan for City review and approval that is consistent with the approved Landscape Plan. The Landscape Plan shall be included with the set of drawings submitted for the construction-related permit and shall comply with the landscape requirements of chapter 17.124 of the Planning Code. b. Landscape Installation The project applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or other equivalent instrument acceptable to the Director of City Planning, is provided. The financial instrument shall equal the greater of $2,500 or the estimated cost of implementing the Landscape Plan based on a licensed contractor's bid.	a. Prior to approval of construction-related permit. b. Prior to building permit final. c. Ongoing	a. City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Aesthetics, Shadow, and Wind (cont.)		
c. Landscape Maintenance All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. The property owner shall be responsible for maintaining planting in adjacent public rights-of-way. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.		
SCA AES-3 (Standard Condition of Approval 18): *Lighting* Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties.	Prior to building permit final.	City of Oakland Bureau of Building Services Division, Zoning Inspections
Also **SCA UTIL-2, Underground Utilities.** See *Utilities and Service Systems*, below.		
Air Quality		
SCA AIR-1 (Standard Condition of Approval 19) *Construction-Related Air Pollution Controls (Dust and Equipment Emissions)* The project applicant shall implement all of the following applicable air pollution control measures during construction of the project: a. Water all exposed surfaces of active construction areas at least twice daily (using reclaimed water if possible). Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible. b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. d. Pave all roadways, driveways, sidewalks, etc., as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. e. Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.). f. Limit vehicle speeds on unpaved roads to 15 miles per hour. g. Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points. h. Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations").	During construction.	City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Air Quality (cont.)		
i. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.		
j. Portable equipment shall be powered by electricity if available. If electricity is not available, propane or natural gas shall be used if feasible. Diesel engines shall only be used if electricity is not available and it is not feasible to use propane or natural gas.		
k. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.		
l. All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.		
m. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.		
n. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).		
o. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.		
p. Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind blown dust. Wind breaks must have a maximum 50 percent air porosity.		
q. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.		
r. Activities such as excavation, grading, and other ground-disturbing construction activities shall be phased to minimize the amount of disturbed surface area at any one time.		
s. All trucks and equipment, including tires, shall be washed off prior to leaving the site.		
t. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.		
u. All equipment to be used on the construction site and subject to the requirements of Title 13, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations") must meet emissions and performance requirements one year in advance of any fleet deadlines. Upon request by the City, the project applicant shall provide written documentation that fleet requirements have been met.		
v. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings).		
w. All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM.		
x. Off-road heavy diesel engines shall meet the California Air Resources Board's most recent certification standard.		
y. Post a publicly-visible large on-site sign that includes the contact name and phone number for the project complaint manager responsible for responding to dust complaints and the telephone numbers of the City's Code Enforcement unit and the Bay Area Air Quality Management District. When contacted, the project complaint manager shall respond and take corrective action within 48 hours.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Air Quality (cont.)		
SCA AIR-2 (Standard Condition of Approval 20) *Exposure to Air Pollution (Toxic Air Contaminants)* ***a. Health Risk Reduction Measures*** Requirement: The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. The project applicant shall choose one of the following methods: i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. - or - ii. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City: • Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required. • Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph). • Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible. • The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall be located as far away as feasible from a loading dock or where trucks concentrate to deliver goods. • Sensitive receptors shall be located on the upper floors of buildings, if feasible. • Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (*Pinus nigra* var. *maritima*), Cypress (*X Cupressocyparis leylandii*), Hybrid popular (*Populus deltoids X trichocarpa*), and Redwood (*Sequoia sempervirens*). • Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible. • Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible.	a. Prior to approval of construction-related permit. b. ongoing	a. City of Oakland Bureau of Planning and Building; City of Oakland Bureau of Building Services Division, Zoning Inspections b. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Air Quality (cont.)		
• Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible: – Installing electrical hook-ups for diesel trucks at loading docks. – Requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards. – Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels. – Prohibiting trucks from idling for more than two minutes. – Establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented. *b. Maintenance of Health Risk Reduction Measures* Requirement: The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.		
SCA AIR-3 (Standard Condition of Approval 21) *Stationary Sources of Air Pollution (Toxic Air Contaminants)* The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to on-site stationary sources of toxic air contaminants. The project applicant shall choose one of the following methods: a. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk associated with proposed stationary sources of pollution in the project. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. - or – b. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City: i. Installation of non-diesel fueled generators, if feasible, or; ii. Installation of diesel generators with an EPA-certified Tier 4 engine or engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy, if feasible.	Prior to approval of construction-related permit.	City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Biological Resources		
SCA BIO-1 (Standard Condition of Approval 26): *Tree Removal During Bird Nesting Season* To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.	Prior to removal of trees.	City of Oakland Public Works Department, Tree Division; Bureau of Buildings
SCA BIO-2 (Standard Condition of Approval 27): *Tree Permit* *a. Tree Permit Required* Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit. *b. Tree Protection During Construction* Requirement: Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist: i. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree. ii. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree. iii. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.	a. Prior to approval of construction-related permit b. During construction.	a. City of Oakland Public Works Department, Tree Division; Bureau of Buildings b. City of Oakland Public Works Department, Tree Division; Bureau of Buildings

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Biological Resources (cont.)		
iv. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration. v. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed. vi. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.		
Recommendation BIO-1: While not required to address a CEQA impact, the following will be included as additional implementation details for **SCA BIO-1**. For all projects that propose removal of a tree[25] that is associated with a heron rookery, the project applicant shall take the following additional actions, which will require City review and approval, to implement **SCA BIO-1**: **1) Prior to tree removal:** a. *Field Survey*: The applicant shall submit the results of a field survey conducted by a qualified biologist to determine if the heron rookery shall be deemed active. An historical heron rookery must be assumed to be active unless a qualified biologist visits the rookery three times between March and July, with at least one month between visits, and does not observe any herons engaging in nesting behavior (e.g., territorial displays, courtship, nest building, food deliveries to the nest) at any time. If the rookery is deemed inactive, no further steps are necessary. If the rookery is deemed active, the applicant shall proceed with steps 1(b) through 1 (f). b. *Technical Memorandum*: The project applicant shall submit a Technical Memorandum drafted by a qualified biologist that characterizes the rookery by documenting individual tree size (i.e., diameter at breast height, vertical height); canopy width, height and depth (sq ft); distance between tree trunks or canopies, as appropriate; number of nests per tree canopy (sq ft), and overall characteristics of the existing rookery site (such as size, number of trees in rookery, noise level, substrate below trees, adjacent habitat/ building types, observations of predators or prey, etc.). Ideally, the survey is conducted during the breeding season, but it can be conducted during the non-breeding season. c. *Identification of Replacement Site*: The project applicant, in coordination with the City of Oakland and a qualified biologist, shall identify a replacement rookery site located as near as possible to the existing rookery (e.g., Lake Merritt, Oakland shoreline, estuary, parks). The applicant must demonstrate how the replacement rookery site meets the following requirements:	Prior to removal of trees.	City of Oakland Public Works Department, Tree Division; Bureau of Buildings

[25] "Tree removal" means the destruction of any tree by cutting, regrading, girdling, interfering with the water supply, or applying chemicals, or distortion of the tree's visual proportions by topping; or "Topping", which means elimination of the upper twenty-five percent or more of a tree's trunk(s) or main leader(s).

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Biological Resources (cont.)		
i. Support an equal or greater number of nests as the existing rookery ii. Be composed of trees/ shrubs that are the same or similar (in foliage cover, canopy density, and branching structure) to those which are documented to have supported a successful rookery for BCNH and SNEG; or be a site in which such trees/ shrubs (immature or mature) can be planted in order to develop a rookery within the time frame required by the SCA (see item 1(f) below). iii. Be within 3 miles of foraging habitat iv. Be in an area of equal or less human disturbance than the existing rookery v. Not conflict with other uses in that area (e.g., presence of dogs or other domestic animals, human activity that could either cause heron nest abandonment, scheduled redevelopment projects, or nuisance problems associated with heron activity affecting humans). d. *Implementation Plan*: The applicant, in coordination with the City of Oakland and a qualified biologist, shall submit an Implementation Plan describing any enhancements to the replacement rookery site, including construction plans, landscaping plans or plant lists; detailed methods for using social attractants to attract herons to the site (e.g., number of decoy birds and nests, duration of playback recordings, etc.); and a timeline for implementation. e. *Monitoring Program*: The project applicant, in coordination with a qualified Biologist, shall submit a Monitoring Program for monitoring birds and vegetation in the replacement rookery. The Program shall include a monitoring protocol; performance criteria; and strategies for adaptive management should performance criteria not be met. Colonial nesting birds are known to take several years to reach the point of self-recruitment to a new rookery site (i.e. when social attractants are no longer needed to attract additional birds to the site), so a monitoring period of at least three heron breeding seasons is recommended. The Monitoring Program can include a provision that monitoring may be suspended if performance criteria are met within the first or second breeding season. f. *Implementation*: The project applicant, in coordination with the City of Oakland, and/or other entities, shall complete installation of any enhancements, including vegetation, and social attractants at the replacement rookery site. If new vegetation is required for rookery enhancement, it must be fully performing by the third year of monitoring. **2) Tree removal:** a. If the rookery is deemed active, tree removal can only occur during the non-nesting season, defined as October 1 through January 31. **3) Following tree removal:** a. Following tree removal and prior to the beginning of nesting season (February 1), social attractants will be activated to lure herons to the replacement rookery site. b. The Monitoring Plan will be implemented during the first nesting season following tree removal and will be implemented for at least three breeding seasons, unless otherwise stated in the approved Monitoring Plan.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Cultural Resources		
SCA CUL-1 (Standard Condition of Approval 29): *Archaeological and Paleontological Resources – Discovery During Construction* Requirement: Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented. In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense. In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA CUL-2 (Standard Condition of Approval 30): *Archaeologically Sensitive Areas – Pre-Construction Measures* Requirement: The project applicant shall implement either Provision A (Intensive Pre-Construction Study) or Provision B (Construction ALERT Sheet) concerning archaeological resources. ***Provision A: Intensive Pre-Construction Study.*** The project applicant shall retain a qualified archaeologist to conduct a site-specific, intensive archaeological resources study for review and approval by the City prior to soil-disturbing activities occurring on the project site. The purpose of the site-specific, intensive archaeological resources study is to identify early the potential presence of history-period archaeological resources on the project site. At a minimum, the study shall include: a. Subsurface presence/absence studies of the project site. Field studies may include, but are not limited to, auguring and other common methods used to identify the presence of archaeological resources. b. A report disseminating the results of this research. c. Recommendations for any additional measures that could be necessary to mitigate any adverse impacts to recorded and/or inadvertently discovered cultural resources.	Prior to approval of construction-related permit; during construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Cultural Resources (cont.)		
If the results of the study indicate a high potential presence of historic-period archaeological resources on the project site, or a potential resource is discovered, the project applicant shall hire a qualified archaeologist to monitor any ground disturbing activities on the project site during construction and prepare an ALERT sheet pursuant to Provision B below that details what could potentially be found at the project site. Archaeological monitoring would include briefing construction personnel about the type of artifacts that may be present (as referenced in the ALERT sheet, required per Provision B below) and the procedures to follow if any artifacts are encountered, field recording and sampling in accordance with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation, notifying the appropriate officials if human remains or cultural resources are discovered, and preparing a report to document negative findings after construction is completed if no archaeological resources are discovered during construction. *Provision B: Construction ALERT Sheet.* The project applicant shall prepare a construction "ALERT" sheet developed by a qualified archaeologist for review and approval by the City prior to soil-disturbing activities occurring on the project site. The ALERT sheet shall contain, at a minimum, visuals that depict each type of artifact that could be encountered on the project site. Training by the qualified archaeologist shall be provided to the project's prime contractor, any project subcontractor firms (including demolition, excavation, grading, foundation, and pile driving), and utility firms involved in soil- disturbing activities within the project site. The ALERT sheet shall state, in addition to the basic archaeological resource protection measures contained in other standard conditions of approval, all work must stop and the City's Environmental Review Officer contacted in the event of discovery of the following cultural materials: concentrations of shellfish remains; evidence of fire (ashes, charcoal, burnt earth, fire-cracked rocks); concentrations of bones; recognizable Native American artifacts (arrowheads, shell beads, stone mortars [bowls], humanly shaped rock); building foundation remains; trash pits, privies (outhouse holes); floor remains; wells; concentrations of bottles, broken dishes, shoes, buttons, cut animal bones, hardware, household items, barrels, etc.; thick layers of burned building debris (charcoal, nails, fused glass, burned plaster, burned dishes); wood structural remains (building, ship, wharf); clay roof/floor tiles; stone walls or footings; or gravestones. Prior to any soil-disturbing activities, each contractor shall be responsible for ensuring that the ALERT sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, and supervisory personnel. The ALERT sheet shall also be posted in a visible location at the project site.		
SCA CUL-3 (Standard Condition of Approval SCA 31): *Human Remains – Discovery During Construction* Requirement: Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Geology, Soils, and Geohazards		
SCA GEO-1 (Standard Condition of Approval 33): *Construction-Related Permit(s)* Requirement: The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA GEO-2 (Standard Condition of Approval 34): *Soils Report* Requirement: The project applicant shall submit a soils report prepared by a registered geotechnical engineer for City review and approval. The soils report shall contain, at a minimum, field test results and observations regarding the nature, distribution and strength of existing soils, and recommendations for appropriate grading practices and project design. The project applicant shall implement the recommendations contained in the approved report during project design and construction.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
See **SCA HYD-1, Erosion and Sedimentation Control Plan for Construction**, See *Hydrology and Water Quality*, below.		
Greenhouse Gases and Climate Change		
See **SCA AES-2, Landscape Plan**. See *Aesthetics, Wind, and Shadow*, above.		
See **SCA AIR-1, Construction-Related Air Pollution Controls (Dust and Equipment Emissions)**. See *Air Quality*, above.		
See **SCA UTIL-1, Construction and Demolition Waste Reduction and Recycling.** See *Utilities and Service Systems*, below.		
See **SCA UTIL-4, Green Building Requirements**. See *Utilities and Service Systems*, below.		
Hazards and Hazardous Materials		
SCA HAZ-1 (Standard Condition of Approval 39): *Hazards Materials Related to Construction* Requirement: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following: a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction; b. Avoid overtopping construction equipment fuel gas tanks; c. During routine maintenance of construction equipment, properly contain and remove grease and oils; d. Properly dispose of discarded containers of fuels and other chemicals; e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and f. If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Hazards and Hazardous Materials (cont.)		
SCA HAZ-2 (Standard Condition of Approval 40): *Site Contamination* *a. Environmental Site Assessment Required* Requirement: The project applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency. *b. Health and Safety Plan Required* Requirement: The project applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan. *c. Best Management Practices (BMPs) Required for Contaminated Sites* Requirement: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following: i. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements. ii. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building.	a. Prior to approval of construction-related permit b. Prior to approval of construction-related permit c. During Construction	a. Oakland Fire Department b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Building Services Division, Zoning Inspections
See **SCA TRA-1, Construction Activity in the Public Right-of-Way.** See *Transportation and Traffic*, below.		
Hydrology and Water Quality		
SCA HYD-1 (Standard Condition of Approval 45): *Erosion and Sedimentation Control Plan for Construction* *a. Erosion and Sedimentation Control Plan Required* Requirement: The project applicant shall submit an Erosion and Sedimentation Control Plan to the City for review and approval. The Erosion and Sedimentation Control Plan shall include all necessary measures to be taken to prevent excessive stormwater runoff or carrying by stormwater runoff of solid materials on to lands of adjacent property owners, public streets, or to creeks as a result of conditions created by grading and/or construction operations. The Plan shall include, but not be limited to, such measures as short-term erosion control planting, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and stormwater retention basins. Off-site work by the project applicant may be necessary. The project applicant shall obtain permission or easements necessary for off-site work. There shall be a clear notation that the plan is subject to	a. Prior to approval of construction-related permit. b. During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Hydrology and Water Quality (cont.)		
changes as changing conditions occur. Calculations of anticipated stormwater runoff and sediment volumes shall be included, if required by the City. The Plan shall specify that, after construction is complete, the project applicant shall ensure that the storm drain system shall be inspected and that the project applicant shall clear the system of any debris or sediment. *b. Erosion and Sedimentation Control During Construction* Requirement: The project applicant shall implement the approved Erosion and Sedimentation Control Plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Bureau of Building.		
SCA HYD-2 (Standard Condition of Approval 48): *Site Design Measures to Reduce Stormwater Runoff* Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate site design measures into the project to reduce the amount of stormwater runoff. These measures may include, but are not limited to, the following: a. Minimize impervious surfaces, especially directly connected impervious surfaces and surface parking areas; b. Utilize permeable paving in place of impervious paving where appropriate; c. Cluster structures; d. Direct roof runoff to vegetated areas; e. Preserve quality open space; and f. Establish vegetated buffer areas.	Ongoing.	N/A
SCA HYD-3 (Standard Condition of Approval 50): *NPDES C.3 Stormwater Requirements for Regulated Projects* *a. Post-Construction Stormwater Management Plan Required* Requirement: The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following: i. Location and size of new and replaced impervious surface; ii. Directional surface flow of stormwater runoff; iii. Location of proposed on-site storm drain lines; iv. Site design measures to reduce the amount of impervious surface area; v. Source control measures to limit stormwater pollution; vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff.	a. Prior to approval of construction-related permit. b. Prior to building permit final.	a. City of Oakland Bureau of Building Services Division, Zoning Inspections; City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Hydrology and Water Quality (cont.)		
b. Maintenance Agreement Required Requirement: The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following: i. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense.		
Also **SCA GEO-1, Construction-Related Permit(s).** See *Geology, Soils, and Geohazards*, above.		
Also **SCA GEO-2, Soils Report.** See *Geology, Soils, and Geohazards*, above.		
Also **SCA UTIL-6, Storm Drain System.** See *Utilities and Service Systems*, below.		
Noise		
SCA NOI-1 (Standard Condition of Approval 58) *Construction Days/Hours* Requirement: The project applicant shall comply with the following restrictions concerning construction days and hours: a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday. c. No construction is allowed on Sunday or federal holidays. Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non- enclosed area. Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Noise (cont.)		
SCA NOI-2: (Standard Condition of Approval 59) *Construction Noise* Requirement: The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following: a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. c. Applicant shall use temporary power poles instead of generators where feasible. d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction. e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-3 (Standard Condition of Approval 60) *Extreme Construction Noise* ***a. Construction Noise Management Plan Required*** Requirement: Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following: i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; ii. Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions; iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site; iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.	a. Prior to approval of construction-related permit. b. During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Noise (cont.)		
b. Public Notification Required Requirement: The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented.		
SCA NOI-4 (Standard Condition of Approval 61) *Project-Specific Construction Noise Reduction Measures* Requirement: The project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site- specific noise attenuation measures to further reduce construction noise impacts. The project applicant shall implement the approved Plan during construction	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-5 (Standard Condition of Approval 62) *Construction Noise Complaints* Requirement: The project applicant shall submit to the City for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include: a. Designation of an on-site construction complaint and enforcement manager for the project; b. A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit; c. Protocols for receiving, responding to, and tracking received complaints; and d. Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-6 (Standard Condition of Approval 63) *Exposure to Community Noise* Requirement: The project applicant shall submit a Noise Reduction Plan prepared by a qualified acoustical engineer for City review and approval that contains noise reduction measures (e.g., sound-rated window, wall, and door assemblies) to achieve an acceptable interior noise level in accordance with the land use compatibility guidelines of the Noise Element of the Oakland General Plan. The applicant shall implement the approved Plan during construction. To the maximum extent practicable, interior noise levels shall not exceed the following: a. 45 dBA: Residential activities, civic activities, hotels b. 50 dBA: Administrative offices; group assembly activities c. 55 dBA: Commercial activities d. 65 dBA: Industrial activities	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-7 (Standard Condition of Approval 64) *Operational Noise* Requirement: Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City.	Ongoing.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Noise (cont.)		
SCA NOI-8 (Standard Condition of Approval 66) *Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities* *Requirement*: The project applicant shall submit a Vibration Analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structure and/or substantially interfere with activities located at 260 13th Street and 274 14th Street. The Vibration Analysis shall identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The applicant shall implement the recommendations during construction.	Prior to construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections
Transportation and Circulation		
SCA TRA-1 (Standard Condition of Approval 68) *Construction Activity in the Public Right-of-Way* *a. Obstruction Permit Required* Requirement: The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets and sidewalks. *b. Traffic Control Plan Required* Requirement: In the event of obstructions to vehicle or bicycle travel lanes, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle, and pedestrian detours, including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The project applicant shall implement the approved Plan during construction. *c. Repair of City Streets* Requirement: The project applicant shall repair any damage to the public right-of way, including streets and sidewalks caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately.	a. Prior to approval of construction-related permit. b. Prior to approval of construction-related permit. c. Prior to building permit final.	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. Public Works Department, Transportation Services Division c. City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA TRA-2 (Standard Condition of Approval 69) *Bicycle Parking* Requirement: The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA TRA-3 (Standard Condition of Approval 71) *Transportation and Parking Demand Management* *a. Transportation and Parking Demand Management (TDM) Plan Required* Requirement: The project applicant shall submit a Transportation and Parking Demand Management (TDM) Plan for review and approval by the City. i. The goals of the TDM Plan shall be the following: • Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable, consistent with the potential traffic and parking impacts of the project.	a. Prior to building permit final. b. Prior to building permit final c. Ongoing	a. City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
• Achieve the following project vehicle trip reductions (VTR): – Projects generating 50-99 net new a.m. or p.m. peak hour vehicle trips: 10 percent VTR – Projects generating 100 or more net new a.m. or p.m. peak hour vehicle trips: 20 percent VTR • Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate. • Enhance the City's transportation system, consistent with City policies and programs. ii. TDM strategies to consider include, but are not limited to, the following: • Inclusion of additional long-term and short-term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan and the Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement. • Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority bikeways, on-site signage and bike lane striping. • Installation of safety elements per the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project. • Installation of amenities such as lighting, street trees, and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan. • Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements. • Direct on-site sales of transit passes purchased and sold at a bulk group rate (through programs such as AC Transit Easy Pass or a similar program through another transit agency). • Provision of a transit subsidy to employees or residents, determined by the project applicant and subject to review by the City, if employees or residents use transit or commute by other alternative modes. • Provision of an ongoing contribution to transit service to the area between the project and nearest mass transit station prioritized as follows: 1) Contribution to AC Transit bus service; 2) Contribution to an existing area shuttle service; and 3) Establishment of new shuttle service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario 3). • Guaranteed ride home program for employees, either through 511.org or through separate program. • Pre-tax commuter benefits (commuter checks) for employees. • Free designated parking spaces for on-site car-sharing program (such as City Car Share, Zip Car, etc.) and/or car-share membership for employees or tenants. • On-site carpooling and/or vanpool program that includes preferential (discounted or free) parking for carpools and vanpools. • Distribution of information concerning alternative transportation options. • Parking spaces sold/leased separately for residential units. Charge employees for parking, or provide a cash incentive or transit pass alternative to a free parking space in commercial properties.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
• Parking management strategies including attendant/valet parking and shared parking spaces. • Requiring tenants to provide opportunities and the ability to work off-site. • Allow employees or residents to adjust their work schedule in order to complete the basic work requirement of five eight-hour workdays by adjusting their schedule to reduce vehicle trips to the worksite (e.g., working four, ten-hour days; allowing employees to work from home two days per week). • Provide or require tenants to provide employees with staggered work hours involving a shift in the set work hours of all employees at the workplace or flexible work hours involving individually determined work hours. The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report. *b. TDM Implementation – Physical Improvements* Requirement: For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project. *c. TDM Implementation – Operational Strategies* Requirement: For projects that generate 100 or more net new a.m. or p.m. peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR achieved by the project during operation. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports are not submitted and/or the annual reports indicate that the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM Plan is implemented but the VTR goal is not achieved.		
TRA-1 (LMSAP Mitigation Measure TRAN-1) Requirement: Implement the following measures: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the PM peak hour. • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. To implement this measure, the individual project applicant shall submit the following to City of Oakland's Transportation Services Division for review and approval: • Signal timing plans for the signals in the coordination group. • Plans, Specifications, and Estimates (PS&E) to modify intersection. All elements shall be designed to City and Caltrans standards in effect at the time of construction and all new or upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both City standards	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, at the time when about 50 percent of the Project is operational and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached.	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
and Americans with Disabilities Act (ADA) standards (according to Federal and State Access Board guidelines) at the time of construction. Current City Standards call for the elements listed below: — 2070L Type Controller with cabinet assembly — GPS communications (clock) — Accessible pedestrian crosswalks according to Federal and State Access Board guidelines with signals (audible and tactile) — Countdown pedestrian head module switch out — City standard ADA wheelchair ramps — Video detection on existing (or new, if required) — Mast arm poles, full actuation (where applicable) — Polara push buttons (full actuation) — Bicycle detection (full actuation) — Pull boxes — Signal interconnect and communication with trenching (where applicable), or through (E) conduit (where applicable)- 600 feet maximum — Conduit replacement contingency — Fiber Switch — PTZ Camera (where applicable) — Transit Signal Priority (TSP) equipment consistent with other signals along corridor The individual project applicant shall fund the cost of preparing and implementing the mitigation measures. However, if the City adopts a transportation impact fee program prior to implementation of this mitigation measure, the individual project applicant shall have the option to pay the applicable fee in lieu of implementing this mitigation measure and payment of the fee shall mitigate the impact to less than significant. A straight line interpolation of intersection delay between Existing and Existing Plus Project conditions indicates that mitigation at this intersection may be required when about 50 percent of the Project is developed. Investigation of the need for this mitigation shall be studied at the time when this threshold is reached and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	
TRA-2 (LMSAP Mitigation Measure TRAN-3) Requirement: Implement the following measures: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the AM peak hour. • Coordinate this signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. To implement this measure, the individual project applicant shall submit the following to City of Oakland's Transportation Services Division for review and approval:	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, at the time when about 75 percent of the Project is operational and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
• Signal timing plans for the signals in the coordination group. • Plans, Specifications, and Estimates (PS&E) as detailed in Mitigation Measure TRAN- 1. The individual project applicant shall fund the cost of preparing and implementing the mitigation measures. However, if the City adopts a transportation impact fee program prior to implementation of this mitigation measure, the individual project applicant shall have the option to pay the applicable fee in lieu of implementing this mitigation measure and payment of the fee shall mitigate the impact to less than significant. A straight line interpolation of intersection delay between Existing and Existing Plus Project conditions indicates that mitigation at this intersection may be required when about 75 percent of the Project is developed. Investigation of the need for this mitigation shall be studied at the time when this threshold is reached and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	
TRA-3 (LMSAP Mitigation Measure TRAN-5) Requirement: Implement the following measures: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. To implement this measure, the individual project applicant shall submit the following to City of Oakland's Transportation Services Division for review and approval: • Signal timing plans for the signals in the coordination group. • Plans, Specifications, and Estimates (PS&E) as detailed in Mitigation Measure TRAN- 1. The individual project applicant shall fund the cost of preparing and implementing the mitigation measures. However, if the City adopts a transportation impact fee program prior to implementation of this mitigation measure, the individual project applicant shall have the option to pay the applicable fee in lieu of implementing this mitigation measure and payment of the fee shall mitigate the impact to less than significant. A straight line interpolation of intersection delay between Existing and Existing Plus Project conditions indicates that mitigation at this intersection may be required when about 54 percent of the Project is developed. Investigation of the need for this mitigation shall be studied at the time when this threshold is reached and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, at the time when about 54 percent of the Project is operational and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division

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	Schedule	Responsibility
Transportation and Circulation (cont.)		
TRA-4 (LMSAP Mitigation Measure TRAN-10) Requirement: Implement the following measures: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the PM peak hour. • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2017 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division
TRA-5 (LMSAP Mitigation Measure TRAN-11) Requirement: Implement the following measures: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Create an interconnected corridor along Oak Street from 5th to 14th Streets, and coordinate the signal timing changes at this intersection with the coordination group.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2014 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications,	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
	and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	
TRA-6 (LMSAP Mitigation Measure TRAN-12) Requirement: Implement Mitigation Measure TRAN-11: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Create an interconnected corridor along Oak Street from 5th to 14th Streets, and coordinate the signal timing changes at this intersection with the coordination group.		
TRA-7 (LMSAP Mitigation Measure TRAN-13) Requirement: Implement the following measures: • Provide permitted-protected left-turn phasing for the northbound and southbound approaches. • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2015 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
TRA-8 (LMSAP Mitigation Measure TRAN-14) Requirement: Implement the following measures: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Create an interconnected corridor along Madison Street from 5th to 14th Streets, and coordinate the signal timing changes at this intersection with the coordination group.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2016 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division
TRA-9 (LMSAP Mitigation Measure TRAN-15) Requirement: Implement Mitigation Measure TRAN-14: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Create an interconnected corridor along Madison Street from 5th to 14th Streets, and coordinate the signal timing changes at this intersection with the coordination group.		
TRA-10 (LMSAP Mitigation Measure TRAN-16) Requirement: Implement Mitigation Measure TRAN-14: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Create an interconnected corridor along Madison Street from 5th to 14th Streets, and coordinate the signal timing changes at this intersection with the coordination group.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
TRA-11 (LMSAP Mitigation Measure TRAN-17) Requirement: Implement the following measures: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group within the Oak Street interconnect corridor (5th to 14th Streets).	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2015 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division
TRA-12 (LMSAP Mitigation Measure TRAN-19) Requirement: Implement the following measures: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the AM peak hour. • Coordinate the signal timing changes at this intersection with the adjacent intersections.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2018 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor	City of Oakland, Planning and Zoning Division City of Oakland - Building Services Division, Zoning Inspection City of Oakland, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
	will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.	
TRA-13 (LMSAP Mitigation Measure TRAN-20) Requirement: Implement Mitigation Measure TRAN-17: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group within the Oak Street interconnect corridor (5th to 14th Streets).		
TRA-14 (LMSAP Mitigation Measure TRAN-22) Requirement: Implement Mitigation Measure TRAN-17: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group within the Oak Street interconnect corridor (5th to 14th Streets).		
TRA-15 (LMSAP Mitigation Measure TRAN-25) Requirement: Implement Mitigation Measure TRAN-17: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group within the Oak Street interconnect corridor (5th to 14th Streets).		
TRA-16 (LMSAP Mitigation Measure TRAN-26) Requirement: Implement Mitigation Measure TRAN-17: • Optimize the signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group within the Oak Street interconnect corridor (5th to 14th Streets).		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Utilities and Service Systems		
SCA UTIL-1 (Standard Condition of Approval 74) *Construction and Demolition Waste Reduction and Recycling* Requirement: The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of $50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center.	Prior to approval of construction-related permit	City of Oakland Public Works Department, Environmental Services Division
SCA UTIL-2 (Standard Condition of Approval 75) *Underground Utilities* Requirement: The project applicant shall place underground all new utilities serving the project and under the control of the project applicant and the City, including all new gas, electric, cable, and telephone facilities, fire alarm conduits, street light wiring, and other wiring, conduits, and similar facilities. The new facilities shall be placed underground along the project's street frontage and from the project structures to the point of service. Utilities under the control of other agencies, such as PG&E, shall be placed underground if feasible. All utilities shall be installed in accordance with standard specifications of the serving utilities.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA UTIL-3 (Standard Condition of Approval 76) *Recycling Collection and Storage Space* Requirement: The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten cubic feet.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA UTIL-4 (Standard Condition of Approval 77) *Green Building Requirements* a. ***Compliance with Green Building Requirements During Plan-Check*** Requirement: The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code). i. The following information shall be submitted to the City for review and approval with the application for a building permit: • Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards. • Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit. • Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit. • Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below.	a. Prior to approval of construction-related permit. b. During construction. c. After project completion as specified.	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Utilities and Service Systems (cont.)		
• Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance. • Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit. • Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. ii. The set of plans in subsection (i) shall demonstrate compliance with the following: • CALGreen mandatory measures. • All pre-requisites per the green building checklist approved during the review of the Planning and Zoning permit, or, if applicable, all the green building measures approved as part of the Unreasonable Hardship Exemption granted during the review of the Planning and Zoning permit. • [INSERT: Green building point level/certification requirement: (See Green Building Summary Table; for New Construction of Residential or Non- residential projects that remove a Historic Resource (as defined by the Green Building Ordinance) the point level certification requirement is 53 points for residential and LEED Gold for non-residential)] per the appropriate checklist approved during the Planning entitlement process. • All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted. • The required green building point minimums in the appropriate credit categories. *b. Compliance with Green Building Requirements During Construction* Requirement: The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project. The following information shall be submitted to the City for review and approval: i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit. ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance. iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. *c. Compliance with Green Building Requirements After Construction* Requirement: Within sixty (60) days of the final inspection of the building permit for the project, the Green Building Certifier shall submit the appropriate documentation to Build It Green or Green Building Certification Institute and attain the minimum required certification/point level. Within one year of the final inspection of the building permit for the project, the applicant shall submit to the Bureau of Planning the Certificate from the organization listed above demonstrating certification and compliance with the minimum point/certification level noted above.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Utilities and Service Systems (cont.)		
SCA UTIL-5 (Standard Condition of Approval 79) *Sanitary Sewer System* Requirement: The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system.	Prior to approval of construction-related permit.	City of Oakland Public Works Department, Department of Engineering and Construction
SCA UTIL-6 (Standard Condition of Approval 80) *Storm Drain System* Requirement: The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA UTIL-7 (Standard Condition of Approval 81) *Recycled Water* Requirement: Pursuant to section 16.08.030 of the Oakland Municipal Code, the project applicant shall provide for the use of recycled water in the project for landscape irrigation purposes unless the City determines that there is a higher and better use for the recycled water, the use of recycled water is not economically justified for the project, or the use of recycled water is not financially or technically feasible for the project. The project applicant shall contact the New Business Office of the East Bay Municipal Utility District (EBMUD) for a recycled water feasibility assessment by the Office of Water Recycling. If recycled water is to be provided in the project, the project drawings submitted for construction-related permits shall include the proposed recycled water system and the project applicant shall install the recycled water system during construction.	Prior to approval of construction-related permit.	City of Oakland Bureau of Planning and Building ; City of Oakland Bureau of Building Services Division, Zoning Inspections
Also **SCA HYD-1, Erosion and Sedimentation Control Plan for Construction**. See *Hydrology and Water Quality*, above.		
Also **SCA HYD-2, Site Design Measures to Reduce Stormwater Runoff**. See *Hydrology and Water Quality*, above.		

Approved as to Form and Legality

DRAFT
City Attorney

FILED
OFFICE OF THE CITY CLERK
OAKLAND

OAKLAND CITY COUNCIL

2016 NOV 17 PM 4:30

RESOLUTION NO. _____ C.M.S.

Introduced by Councilmember _____

A RESOLUTION DENYING THE APPEALS OF OAKLAND RESIDENTS FOR RESPONSIBLE DEVELOPMENT AND THE W12 BENEFITS COALITION, AND THUS UPHOLDING THE PLANNING COMMISSION'S APPROVAL OF A PROPOSAL TO CONSTRUCT 416 DWELLING UNITS OVER APPROXIMATELY 26,200 SQUARE FEET OF RETAIL LOCATED AT 285 AND 301 12TH STREET, OAKLAND CA (PROJECT CASE NO. PLN16133), INCLUDING ADOPTING CEQA EXEMPTIONS (15183 & 15183.3) AND AN ADDENDUM (RELYING ON THE PREVIOUSLY CERTIFIED 2014 LAKE MERRITT STATION AREA PLAN EIR)

WHEREAS, the project applicant, W12 LLC, filed an application on May 5, 2015, to construct a 262 unit residential building over approximately 26,000 square feet of ground floor commercial at 285 and 301 12th Street, Oakland Ca. (Project); and

WHEREAS, the Design Review Committee of the Planning Commission considered the design review aspects of the Project at a duly noticed public meeting on June 22, 2016; and

WHEREAS, the City Planning Commission took testimony and considered the project at its duly noticed public meeting of August 3, 2016. At the conclusion of the public hearing, the Commission deliberated the matter and voted to continue the item to a date certain on August 17, 2016; and

WHEREAS, the City Planning Commission took testimony and considered the project at its public meeting of August 17, 2016. At the conclusion of the public hearing, the Commission deliberated the matter and voted (3-2-0) to approve the Project; and

WHEREAS on August 26, 2016, an appeal of the Planning Commission's approval and a statement setting forth the basis of the appeal was filed by Laura Horton on behalf of Oakland Residents for Responsible Development;

WHEREAS on August 29, 2016, an appeal of the Planning Commission's approval and a statement setting forth the basis of the appeal was filed by Alvina Wong, on the W12 Benefits Coalition;

WHEREAS, after giving due notice to the Appellant, the Applicant, all interested parties and the public, the Appeal came before the City Council at a duly noticed public hearing on November 29, 2016; and

WHEREAS, the Appellant, the Applicant, supporters of the application, those opposed to the application and interested neutral parties were given ample opportunity to participate in the public hearing by submittal of oral and/or written comments; and

WHEREAS, the public hearing on the Appeal was closed by the City Council on November 29, 2016; now, therefore be it

RESOLVED: That, the City Council hereby independently finds and determines that the requirements of the California Environmental Quality Act (CEQA) of 1970, as prescribed by the Secretary of Resources, and the City of Oakland's environmental review requirements, have been satisfied, and, the adoption of this resolution is exempt from CEQA pursuant to CEQA Guidelines Section 15183 and/or Section 15183.3; and furthermore none of the factors requiring further CEQA review are met and the City can rely on an Addendum to the previously Certified 2014 Lake Merritt Station Area Plan EIR, pursuant to CEQA Guidelines section 15162-15164, each of the foregoing provides a separate and independent basis for CEQA compliance; and be it

FURTHER RESOLVED: That, the City Council, having heard, considered and weighed all the evidence in the record presented on behalf of all parties and being fully informed of the Application, the Planning Commission's decision, and the Appeals, finds that the Appellants have **not** shown, by reliance on evidence already contained in the record before the City Planning Commission that the Commission's decision on August 17, 2016 was made in error, that there was an abuse of discretion by the Planning Commission or that the Commission's decision was not supported by substantial evidence in the record, based on the August 3, 2016 Staff Report to the City Planning Commission and the November 29, 2016, City Council Agenda Report hereby incorporated by reference as if fully set forth herein. Accordingly, the Appeal is denied, the Planning Commission's CEQA Determination is upheld, based upon the August 3, 2016 Staff Report to the City Planning Commission and the November 29, 2016, City Council Agenda Report, each of which is hereby separately and independently adopted by this Council in full; and be it

FURTHER RESOLVED: That, in support of the Planning Commission's decision to approve the Project, the City Council affirms and adopts the August 3, 2016 Staff Report to the City Planning Commission (including without limitation the discussion, findings, conclusions and conditions of approval each of which is hereby separately and independently adopted by this Council in full), as well as the November 29, 2016, City Council Agenda Report, (including without limitation the discussion, findings, conclusions and conditions of approval, each of which is hereby separately and independently adopted by this Council in full), except where otherwise expressly stated in this Resolution; and be it

FURTHER RESOLVED: That, the City Council finds and determines that this Resolution complies with CEQA and the Environmental Review Officer is directed to cause to be filed a Notice of Exemption and Notice of Determination with the appropriate agencies; and be it

FURTHER RESOLVED: That, the record before this Council relating to this application and appeal includes, without limitation, the following:

1. the application, including all accompanying maps and papers;

2. all plans submitted by the Applicant and his representatives;

3. the notice of appeal and all accompanying statements and materials;

4. all final staff reports, final decision letters and other final documentation and information produced by or on behalf of the City, including without limitation and all related/supporting final materials, and all final notices relating to the application and attendant hearings;

5. all oral and written evidence received by the City Planning Commission and City Council during the public hearings on the appeal; and all written evidence received by relevant City Staff before and during the public hearings on the application and appeal;

6. all matters of common knowledge and all official enactments and acts of the City, including, without limitation (a) the General Plan; (b) Oakland Municipal Code (c) Oakland Planning Code; (d) other applicable City policies and regulations; and, (e) all applicable state and federal laws, rules and regulations; and be it

FURTHER RESOLVED: That, the custodians and locations of the documents or other materials which constitute the record of proceedings upon which the City Council's decision is based are respectively: (a) Department of Planning & Building, Bureau of Planning, 250 Frank H. Ogawa Plaza, 2114, Oakland CA.; and (b) Office of the City Clerk, 1 Frank H. Ogawa Plaza, 1st floor, Oakland, CA; and be it

FURTHER RESOLVED: That, the recitals contained in this Resolution are true and correct and are an integral part of the City Council's decision.

IN COUNCIL, OAKLAND, CALIFORNIA, _____

PASSED BY THE FOLLOWING VOTE:

AYES - BROOKS, CAMPBELL WASHINGTON, GALLO, GUILLEN, KALB, KAPLAN, REID, AND PRESIDENT GIBSON MCELHANEY

NOES -

ABSENT -

ABSTENTION -

ATTEST:_____
LaTonda Simmons
City Clerk and Clerk of the Council
of the City of Oakland, California