

MEMORANDUM

June 16, 2023

To: Belvedere City Council

From: M. R. Wolfe & Associates, P.C.
on behalf of Belvedere Residents for Intelligent Growth (BRIG)

cc: Members of the Planning Commission
Robert Zadnik, City Manager
Bradley Evanson, Community Development Advisor
Andrew Shen, City Attorney

Re: Mallard Pointe Project – Updated Preliminary Geotechnical
Investigation

We have reviewed the October 19, 2022 “Updated Preliminary Geotechnical Investigation” prepared by Miller Pacific Engineering Group for the proposed Mallard Pointe Project (“Project”), and offer the following points in response.

As you may recall, the Project developer first submitted a “Preliminary Geotechnical Investigation” (“Initial Report”) to the City on January 19, 2022, in support of its claim that the Project qualified for the Class 32 categorical exemption from CEQA for in-fill development. BRIG refuted this claim in an April 27, 2022 letter to the City Council, explaining that the Project did not meet the criteria for the in-fill development exemption, and that even if it nominally did, it would still require environmental review pursuant to CEQA’s blanket exception to any categorical exemption “where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.” (Guidelines, § 15300.2(c).) BRIG’s letter showed that the Project is not consistent with the applicable General Plan and zoning designations; is not substantially surrounded by urban uses; and would likely result in significant effects relating to traffic, noise, air quality, or water quality. Notably, BRIG forwarded a memo from Lawrence Karp, PhD, an expert in geotechnical engineering, structural engineering, and architecture, who reviewed Miller Pacific’s Initial Report. Dr. Karp explained that this initial Investigation did not address the unusual circumstances potentially giving rise to

significant impacts as a result of building the Project's structures on marshland that was dredged, filled, and flooded in the 1950s, and that is highly prone to settlement. A copy of BRIG's April, 2022 letter and Dr. Karp's memo are attached here for ease of reference.

Miller Pacific's Updated Preliminary Geotechnical Investigation ("Updated Report") does not address the points that BRIG and Dr. Karp raised with respect to the Initial Report. It does not include a subsurface exploration program to assess foundation features for the apartment building, nor does it reflect physical field tests or Index borings to support its conclusions. It does not provide actual foundation design and construction recommendations for the Project's structures. Instead, the Updated Report makes some relatively superficial changes to the original, likely in response to comments received from Ascent, the City's CEQA consulting firm. These changes include a new, brief discussion of the semi-subterranean parking garage (pp. 16-17), additional details relating to the existing lagoon bulkheads (p. 20), and replacement of the phrase "less than significant with mitigation" with "less than significant with engineered design" in several instances, following ASCENT's suggestion. The technical appendices are unchanged, and there is no indication of any new sub-surface investigations.

These omissions are significant, as Dr. Karp has explained. The Project's apartment building would be approximately five times as long as it is wide, with no structural or design features that would accommodate large differential settlement. Dr. Karp's recent experience with projects including long, narrow structures built on fill in Foster City and Redwood Shores confirms that the Project's long, narrow apartment building will likely experience differential settlement and subsidence unless major subgrade foundation systems are implemented. Installing such systems, which may include pile-driving, is environmentally intrusive, and will very likely cause significant adverse impacts on neighboring structures and the Lagoon.

In short, the Updated Report does not address the concerns that BRIG and Dr. Karp raised with respect to its predecessor, and nothing in it alters the conclusion that the Project should undergo reasonable environmental review under CEQA rather than evading scrutiny based on an unsupportable finding of exemption.

Thank you for considering these additional concerns.

MRW:sa

Attachment

ATTACHMENT

April 27, 2022

Via E-Mail

Hon. Sally Wilkinson, Mayor
Members of the City Council
City of Belvedere
450 San Rafael Avenue
Belvedere, CA 94920

Re: CEQA Compliance for Proposed Mallard Pointe Project

Dear Mayor Wilkinson and Councilmembers:

On behalf of Belvedere Residents for Responsible Growth (BRIG), please accept and consider the following points addressing the appropriate mode of compliance with the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., with respect to the proposed Mallard Pointe development project (Project). As described in application materials, the Project would demolish 22 existing residential duplex units on a 2.8-acre site immediately adjacent to the Belvedere Lagoon, and replace them with 42 new residential units comprising five duplexes (10 units); six single-family homes; three accessory dwelling units; and 23 apartment units in a single apartment building.

A March 15, 2022 memorandum from Riley F. Hurd III (Hurd Memo) asserts that the Project satisfies the criteria for the Class 32 categorical exemption from CEQA for in-fill development projects and is therefore exempt from CEQA review. We respectfully disagree. After consulting applicable legal authorities, including those cited in the Hurd Memo, it is quite apparent that the Project does **not** qualify for the Class 32 categorical exemption, nor indeed any other statutory or categorical exemption from CEQA. The City therefore should prepare an initial study pursuant to section 15063 of the CEQA Guidelines to determine whether the Project may have potentially significant environmental impacts, and if such impacts are found, the City must prepare an environmental impact report (EIR) before taking any action to approve the Project.

Preliminarily, we would emphasize that our State Supreme Court has repeatedly affirmed that “[t]he foremost principle under CEQA is that the Legislature

intended the act “to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.” (*Laurel Heights Improvement Association v. Regents of Univ. of California* (1988) 47 Cal.3d 376, 390; *Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259.) CEQA’s broader framework accordingly “reflects a preference for resolving doubts in favor of environmental review when the question is whether any such review is warranted.” (*Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1316-1317.) Based on these foundational principles of CEQA, if the City is presented with conflicting factual and legal assessments as to whether environmental review is required for the Mallard Pointe Project, it should resolve any doubts in favor of finding the Project not exempt from such review.

With these principles in mind, set forth below is the basis for our conclusion that the Project does not qualify for the Class 32 categorical exemption, nor indeed any exemption from CEQA.

I. The Project does not qualify for CEQA’s categorical exemption for in-fill development projects.

The California Resources Agency’s CEQA Guidelines (14 Cal.Code.Reg. § 15000 et seq.) define the Class 32 categorical exemption from CEQA as follows:

15332. IN-FILL DEVELOPMENT PROJECTS

Class 32 consists of projects characterized as in-fill development meeting the conditions described in this section.

- (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
- (b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.
- (c) The project site has no value as habitat for endangered, rare or threatened species.
- (d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
- (e) The site can be adequately served by all required utilities and public services.

CEQA Guidelines, § 15332, emphasis added.

In order to qualify for the Class 32 categorical exemption cited above, a project must satisfy each of the five conditions listed in section 15332 of the CEQA Guidelines. As discussed below, the Project here demonstrably fails to satisfy at least two of these conditions, and possibly a third as well.

A. The Project is not consistent with the applicable zoning designation and regulations as the Applicant has acknowledged.

The Belvedere General Plan 2030 designates the Project site “Medium Density MFR: 5.0 to 20 units/net acre.” The Belvedere Zoning Code places the site within the “R-2 (Duplex) Two-Family Residential” zoning district. Chapter 19.28 of the Zoning Code specifies the permitted land uses, regulations, and development standards that apply in the R-2 Zoning District. Specifically, section 19.28.030, titled “Prohibited uses,” expressly prohibits “apartment courts” and “apartment houses” in the R-2 District. Thus, the Project’s apartment building component is not consistent with the applicable R-2 zoning designation and its prohibition on apartment uses, as the Applicant has acknowledged. (*See* Density Bonus Application (Jan. 26, 2022), p. 2 (seeking waivers from “[t]he prohibition on apartment courts and/or apartment houses in the R-2 zone”); *see also* Hurd Memo, p. 3.)

Citing *Wollmer v. City of Berkeley* (2011) 193 Cal.App.4th 1329, the Hurd Memo asserts that the R-2 zoning prohibition on apartment structures does not apply to the Project because the R-2 zoning restrictions in general are inconsistent with the General Plan’s Medium Density MFR designation, and that “the R-2 density formula could never achieve the density allowed under the General Plan, and is therefore inapplicable under state law.” (Hurd Memo, p. 3.) Note that the Applicant has presented the City with no evidence whatsoever to support this bald assertion that the General Plan’s 20-unit per net acre density specification cannot be achieved without building a prohibited apartment building. To the contrary, and as BRIG has previously explained in earlier correspondence with the City,¹ there is no inconsistency between the General Plan’s MFR classification and the R-2 zoning designation, and the latter’s prohibition of apartment buildings plainly applies. The Project accordingly does not meet the first condition for the Class 32 in-fill development exemption, and is therefore not exempt from environmental review.

¹ *See* July 21, 2022 memorandum, available on the City’s website at: https://www.cityofbelvedere.org/DocumentCenter/View/7637/Final_Ltr-to-City-Council_10-18-21

B. The Project site is not substantially surrounded by urban uses.

Even if the R-2's prohibition against apartment structures did not apply, the Project still would not qualify for the Class 32 exemption because it is not on "a site of no more than five acres substantially surrounded by urban uses." Guidelines, § 15332(b). Although less than five acres, the 2.8-acre site is in no manner whatsoever "substantially surrounded" by urban uses. To the contrary, approximately 56 percent of the site is bounded by the Belvedere Lagoon. While the Class 32 exemption does not define "substantially surrounded," the CEQA statute itself defines the term for purposes of residential or mixed-use housing projects as follows:

"substantially surrounded" means at least 75 percent of the perimeter of the project site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses. The remainder of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that have been designated for qualified urban uses in a zoning, community plan, or general plan for which an environmental impact report was certified.

See Pub. Resources Code § 21159.25(a)(2).

Here, according to the Applicant's site boundary survey, the Project's perimeter totals 1,638.53 linear feet, of which 921.43 (56.2 percent) is water and 717.10 feet (43.8 percent) is land arguably developed with urban uses.² Thus, under the foregoing statutory definition, not to mention basic reason, the Project plainly is not "substantially surrounded" by urban uses. To the contrary, the General Plan's Sustainability and Resources Conservation Element specifically affirms that the Lagoon provides habitat for a variety of migratory bird species, as well as wetland habitat. (General Plan 2030 pp. 90-104.) Accordingly, the General Plan specifies Policy SUST-11.1 : "Manage the Lagoon using the most effective, environmentally friendly methods available, considering that the waters of the Lagoon empty into Richardson Bay." (*Id.*, p. 104.) Given the stated importance of protection and conservation of biological resources in the Lagoon, any proposed development with this much frontage on the Lagoon should not as a matter of policy be deemed fully exempt from environmental review.

The Hurd Memo, however, cites *Bankers Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego* (2006) 139 Cal.App.4th 249, to argue that the Lagoon is in fact an "urban use" by operation of law. With due respect, the Memo

² *See* site boundary survey (10/13/20), available on the City's website at: https://www.cityofbelvedere.org/DocumentCenter/View/7835/MALLARD-POINTE_Site-Boundary-Survey

mischaracterizes *Bankers Hill* and is otherwise incorrect on this point. In that case, the Court of Appeal agreed with the City of San Diego that that city's famed Balboa Park was an "urban use" for purposes of the Class 32 in-fill exemption. The court explained its reasoning as follows:

we focus on the fact that Balboa Park is a quintessential urban park, heavily landscaped, surrounded by a densely populated area, and containing urban amenities such as museums, theaters and restaurants. Accordingly, it is "characteristic of a city or a densely populated area," and we conclude that it constitutes an urban use.

Id. at p. 271.

The *Bankers Hill* court's rationale simply does not extend to the Belvedere Lagoon, which is a body of water, not an urban park. Needless to say, the Lagoon is not "heavily landscaped" as Balboa Park is, nor does the Lagoon contain any "urban amenities." It is also not itself "surrounded by a densely populated area." As should be plain, *Bankers Hill* is simply inapt. The Project is not "substantially surrounded by urban uses" and therefore is not categorically exempt from CEQA under the Class 23 in-fill development exemption.

C. The Project is likely to result in significant effects relating to traffic, noise, air quality, or water quality.

BRIG is aware that the Applicant has already submitted, and will continue to submit, technical studies of its own purporting to show that neither construction nor operation of the Project will result in significant impacts on traffic, noise, air quality, and/or water quality. BRIG intends to review the Applicant's studies in consultation with its own technical consultants, and will report its findings to the City Council at the appropriate time.

Suffice it to say for the present time that it is plainly foreseeable that demolition of the existing 22 residential units, and construction of the 42 replacement units, may cause significant noise and air quality impacts affecting neighboring residential uses, and water quality impacts affecting the Lagoon. These impacts are likely to be compounded by the geotechnical/structural engineering that will be necessary to stabilize the proposed buildings, particularly the apartment building, on unstable fill soils in a seismically active environment. This latter point is discussed in further detail below.

II. Even if the Class 32 categorical exemption applied on its own terms, the Project is not exempt from CEQA due to a reasonable possibility of significant impacts due to “unusual circumstances” relating to its site characteristics.

The CEQA Guidelines provide a “blanket exception” to the applicability of any categorical exemption, including the Class 32 exemption, “where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.” (Guidelines, § 15300.2(c); *Bankers Hill, supra*, 139 Cal.App.4th at p. 260.) Here, there is a reasonable possibility that demolition of the existing duplex structures, and the subsequent construction of new structures including an apartment building, will have significant adverse impacts relating to geology and soils, given the prevalence of unstable fill soils underlying the site. We note there also appears to be a seismic fault running directly across the property. (See California Geological Survey (2014), *Geology of Ring Mountain and Tiburon Peninsula, Marin County, California*, and enlargement, attached to this letter as **Attachment 1**.)

The Applicant has submitted a “Preliminary Geotechnical Report” dated January 18, 2022, prepared by Miller Pacific Engineering Group (“Miller Report”), which concludes that site conditions are generally suitable for the proposed new buildings, so long as recommended design and engineering specifications are adhered to. (See Miller Report, pp. 12-18.) Skeptical of the Report’s analysis and conclusions, BRIG consulted Lawrence Karp, PhD, an expert in geotechnical engineering, structural engineering, and architecture, to review it. Dr. Karp holds a PhD in civil engineering from U.C. Berkeley, is a licensed architect, and has served as a court-appointed expert assigned to engineering design and construction disputes throughout California for over 40 years. Dr. Karp specializes in soil-structure interaction and resistance to lateral forces with applications to foundations for buildings and other structures including all types of ground support systems, deep foundations and retained excavations, bulkheads, tiebacks, anchors, underpinning and shoring. Dr. Karp’s letter addressing some of the geotechnical engineering concerns relating to the Project is attached as **Attachment 2**, together with a statement of his credentials.

As Dr. Karp explains, the Miller Report does not address the unusual circumstances potentially giving rise to significant impacts as a result of building the Project’s structures on marshland that was dredged, filled, and flooded in the 1950s, and that is highly prone to settlement. Miller did not undertake a subsurface exploration program to assess foundation features for the apartment building, nor did it perform physical field tests or Index borings to support its conclusions. Notably, the Miller Report does not provide actual foundation design and construction recommendations for the Project’s structures.

These omissions are significant. The existing duplex structures, which were built in the 1950s, are “settlement forgiving,” meaning they have length-to-width aspect ratios that are close to equal, such that settlement occurs uniformly across the structure. By contrast, as Dr. Karp notes, the Project’s apartment building would be approximately five times as long as it is wide, with no structural or design features that would accommodate large differential settlements. Dr. Karp’s recent experience with projects including long, narrow structures built on fill in Foster City and Redwood Shores confirms that the Project’s long, narrow apartment building will likely experience differential settlement and subsidence unless major subgrade foundation systems are implemented. Installing such systems, which may include pile-driving, is environmentally intrusive, and will very likely cause significant adverse impacts on neighboring structures and the Lagoon.

Dr. Karp’s opinion affirms that there is a reasonable possibility that the Project will cause significant impacts due to unusual circumstances relating to geology and soils, and that the Project therefore is not exempt from CEQA. As our Supreme Court has explained: “when there is a reasonable possibility of a significant environmental effect from a project belonging to a class that generally does not have such effects, the project necessarily presents “unusual circumstances,” and section 15300.2(c) applies.” *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1127.³

For these reasons, regardless of whether the Class 32 exemption might nominally apply to the Project under its own terms, the Project is still not exempt from environmental review by operation of the “blanket exception” to CEQA exemptions pursuant to section 15300.2 of the Guidelines.

III. The City’s determination that the Project is not exempt from CEQA would almost certainly be upheld in court were the Applicant to challenge it.

In *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, the State Supreme Court explained that courts are to afford great deference to public agencies such as the City in their determinations whether a given project is subject to the “unusual circumstances” blanket exception to CEQA’s various categorical exemptions. The Court reasoned:

³ The Supreme Court further underscored that “an agency invoking a categorical exemption may not simply ignore the unusual circumstances exception; it must ‘consider the issue of significant effects ... in determining whether the project is exempt from CEQA where there is some information or evidence in the record that the project might have a significant environmental effect.’” (*Id.* at p. 1103, citing *Association for Protection etc. Values v. City of Ukiah* (1991) 2 Cal.App.4th 720, 732.)

Whether a particular project presents circumstances that are unusual for projects in an exempt class is an essentially factual inquiry, “founded on the application of the fact-finding tribunal’s experience with the mainsprings of human conduct.” [Citation.] Accordingly, as to this question, the agency serves as “the finder of fact” (citation), and a reviewing court should apply the traditional substantial evidence standard that [CEQA] incorporates.

¶

Under that relatively deferential standard of review, the reviewing court’s “ ‘role’ ” in considering the evidence differs from the agency’s. (*Western States Petroleum Assn. v. Superior Court* (1995) 9 Cal.4th 559, 576.) “ ‘Agencies must weigh the evidence and determine “which way the scales tip,” while courts conducting [traditional] substantial evidence ... review generally do not.’ ” (*Ibid.*) **Instead, reviewing courts, after resolving all evidentiary conflicts in the agency’s favor and indulging in all legitimate and reasonable inferences to uphold the agency’s finding, must affirm that finding if there is any substantial evidence, contradicted or uncontradicted, to support it.**

Berkeley Hillside Preservation at p. 1114, boldface added.

The next prong of the analysis, *i.e.*, whether unusual circumstances will give rise to a reasonable possibility of significant environmental impacts, is subject to a less stringent “fair argument” standard. Under this standard, if there is any substantial evidence that the Project may have significant impacts, then the blanket exception applies and the Project cannot be found categorically exempt from CEQA. *Berkeley Hillside Preservation* at p. 1115-1116.

Here, after weighing the evidence, the City Council will ultimately determine whether the scales tip in favor of exempting the Project from environmental review and therefore considering it in an informational vacuum, or in favor of requiring an initial study to evaluate whether it may have potentially significant impacts on one or more areas of the environment. Given the high degree of deference that courts are required to afford to local agency determinations of “unusual circumstances,” the City Council’s ultimate conclusion is highly unlikely to be overturned should the Applicant choose to challenge it in court.

IV. Conclusion

In sum, BRIG submits that the Project plainly fails to meet all the required conditions for the Class 32 categorical exemption for in-fill development, and that even if it did, it would still not be exempt from CEQA due to the demonstrated reasonable possibility of significant impacts resulting from unusual circumstances

April 27, 2022

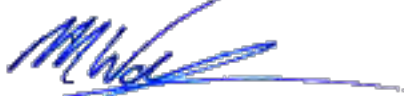
Page 9

relating to construction on unstable fill soils at this particular location. The City should therefore prepare an initial study consistent with the requirements of CEQA to determine whether the Project may have one or more significant environmental effects. If such effects are found, then a full environmental impact report (EIR) will be required before the City may lawfully act to approve the Project.

Thank you for your consideration of these points.

Most sincerely,

M. R. WOLFE & ASSOCIATES, P.C



Mark R. Wolfe
On behalf of BRIG

MRW:sa

cc: Craig Middleton, City Manager
Patricia Carapiet, Planning Commission Chairperson
Irene Borba, Director of Planning and Building

ATTACHMENT 1

The following abbreviations are used where necessary to describe the units in this map. Symbols and colors are consistent with the symbols and colors used in the accompanying maps of the Ring Mountain Melange, the Coast Range Ophiolite, and the Ring Mountain Melange.

RING MOUNTAIN MELANGE (Jurassic-Cretaceous)

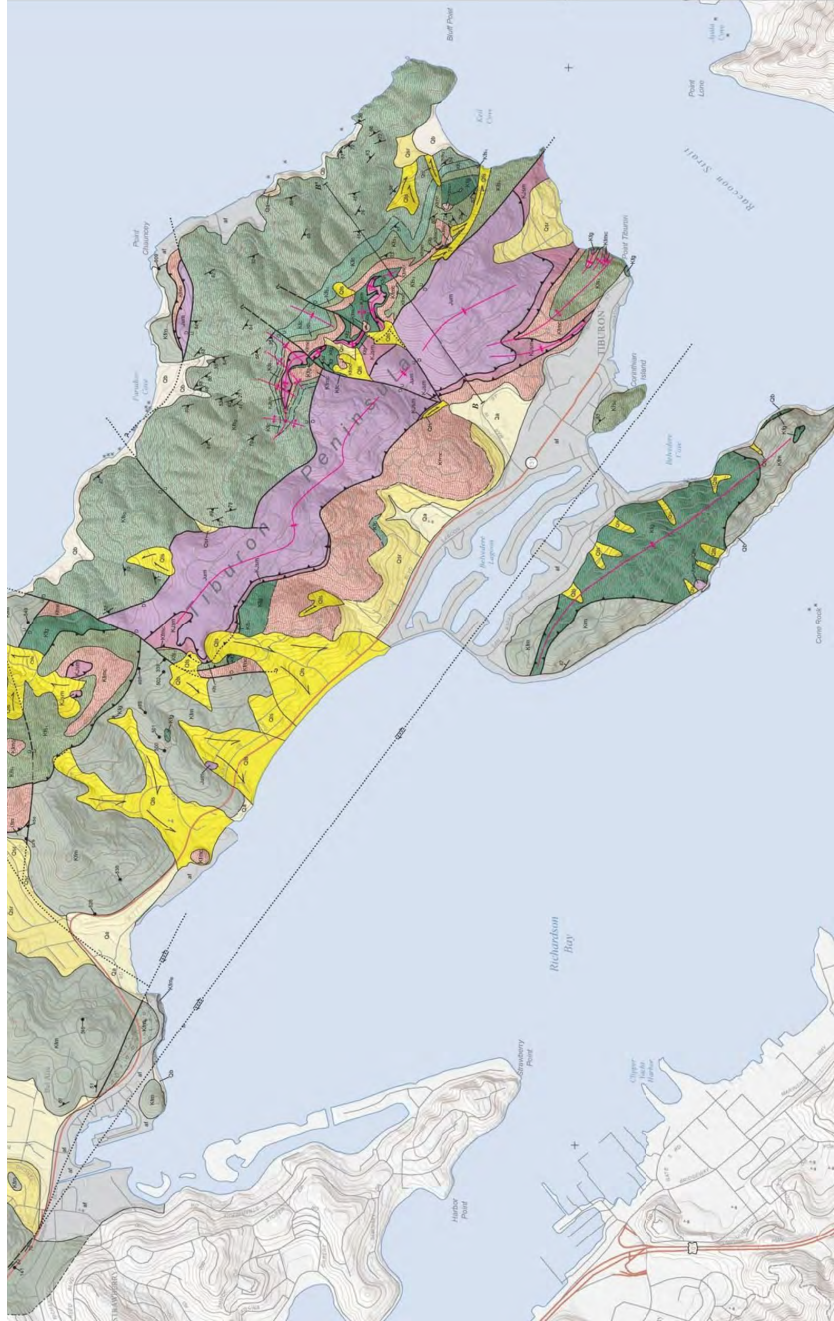
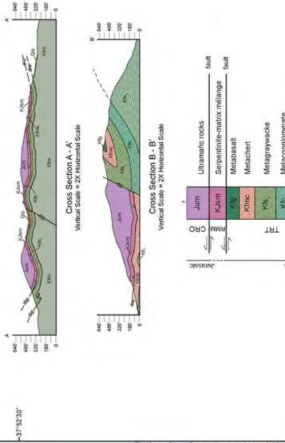
- Serpentine-matrix melange** - Indicate composed of basaltic with minor and chlorite, exhibiting a fine-grained matrix containing dark gray to black, pinkish-gray, and yellowish-brown matrix, plus green to black, pink-shaped serpentine phacoids. Includes:
 - high - High grade blocks include medium- to coarse-grained eclogite, amphibolite, and glaucophane schist blocks. Components of glaucophane schist on eclogite and amphibolite types are common and abundant.
 - medium - Medium grade blocks include medium- to coarse-grained eclogite, amphibolite, and glaucophane schist blocks. Components of glaucophane schist on eclogite and amphibolite types are common and abundant.
 - low - Low grade blocks include medium- to coarse-grained eclogite, amphibolite, and glaucophane schist. Components of glaucophane schist on eclogite and amphibolite types are common and abundant.
- Eclogite** - Dark gray to black, pink-shaped eclogite, with a pervasively abundant and foliated, but relatively coherent, dark green to light turquoise, amphibole-serpentine matrix.
- Amphibolite** - Dark gray to black, pink-shaped amphibolite, with a pervasively abundant and foliated, but relatively coherent, dark green to light turquoise, amphibole-serpentine matrix.
- Glaucophane schist** - Dark gray to black, pink-shaped glaucophane schist, with a pervasively abundant and foliated, but relatively coherent, dark green to light turquoise, amphibole-serpentine matrix.
- Basaltic** - Dark gray to black, pink-shaped basaltic, with a pervasively abundant and foliated, but relatively coherent, dark green to light turquoise, amphibole-serpentine matrix.

COAST RANGE OPHIOLITE (Jurassic)

- Ultramafic rocks** - Composed of partially recrystallized peridotite (nearly completely) containing solid orites of olivine + orthopyroxene + clinopyroxene + spinel in a matrix of kersantite giving the unit a blocky appearance in outcrop.

MAP SYMBOLS

- Contact between map units** - Solid where accurately located; dashed where approximately located; dotted where uncertain.
- Fault** - Solid where accurately located, dashed where approximately located; dotted where uncertain. Arrow indicates direction of lateral movement. Fault indicate relative or apparent direction of lateral movement.
- Thrust fault** - Solid where accurately located, dashed where approximately located; dotted where uncertain. Arrow indicates direction of lateral movement.
- Antiform** - Solid where accurately located; dashed where approximately located; dotted where uncertain. Arrow indicates direction of plunge.
- Synform** - Solid where accurately located; arrowhead indicates direction of plunge.
- Strike and dip of bedding** - Arrow indicates direction of strike; number indicates dip.
- Strike and dip of foliation** - Arrow indicates direction of strike; number indicates dip.
- Sample location** - showing Map No. (see Table 1 in report)
- Boundary of geologic mapping** - Dashed line



ATTACHMENT 2

LAWRENCE B. KARP
CONSULTING GEOTECHNICAL ENGINEER

FOUNDATIONS, WALLS, PILES
UNDERPINNING, TIEBACKS
DEEP RETAINED EXCAVATIONS
SHORING & BULKHEADS
CEQA, EARTHWORK & SLOPES
CAISSONS, COFFERDAMS
COASTAL & MARINE STRUCTURES

SOIL MECHANICS, GEOLOGY
GROUNDWATER HYDROLOGY
CONCRETE TECHNOLOGY

April 16, 2022

Mark R. Wolfe, Esq.
580 California Street, Suite 1200
San Francisco, CA 94104

USPS & <mrw@mrwolfeassociates.com>

Subject: Proposed Mallard Pointe Development, Belvedere
Significant Environmental Impacts Not Identified by Developer
Environmental Impact Report Required

Dear Mr. Wolfe:

Geotechnical and structural engineering are specialty fields within civil engineering; "geotechnical" is a collective term for "soil mechanics and foundation" engineering adopted by California in 1986, which expertise is entirely missing from the specious 1/18/22 report by Miller Pacific prefaced with the disclaimers "document is for the sole use of the client and consultants on this project" and "No other use is authorized."; however, the report was submitted to the City by the developer of the subject project in an attempt to gain advantage by circumventing important safeguards provided by the California Environmental Quality Act.

Projects for multi-family residential use on reclaimed land in the locally sensitive and seismically active marine environment of San Francisco Bay have been proven to be environmentally problematical; examples are Redwood Shores and recent experiences in Foster City where long narrow buildings have experienced distress due to ground movements causing differential settlements and subsidence. For the subject project it will be worse; damage to nearby structures and the Lagoon including shallow shoreline bulkheads, first during demolition then second during implementation of the necessary subgrade foundation system for the proposed multi-family building that will not damage nearby buildings and the Lagoon during construction as there will be activities having significant effects upon the environment due to unusual circumstances.

The 1/18/22 Miller Pacific report does nothing to show why demolition of residences and construction of the apartment house will not have significant effects upon the environment and does nothing (termed "Preliminary") to explain the unusual circumstances of the project's environment. Dredged, filled, and flooded marshland between Belvedere Island and Tiburon was opened in 1955 without any environment oversight and modern engineering; settlement-forgiving homes were built before and after having length-width aspect ratios near equal so differential settlements would be almost uniform. Not so with the proposed building being five times as long as it will be wide with no architectural features to accommodate large differential settlements.

Instead of a genuine subsurface exploration program for foundations for the apartments (e.g. driven piles), the report contains only public maps and CPT (cone penetration tests) logs without Index borings (physical field tests, sampling, and laboratory tests) to correlate electronic CPT results gathered distant from the apartments operated within a van. No foundation design and construction recommendations exist and the architectural drawings also do nothing to show foundation support below the ground surface for the apartment house, which would be unusual and much different than were built for existing houses which essentially float on fill. A full environmental impact report is necessary.


Lawrence B. Karp



LAWRENCE B. KARP
CONSULTING GEOTECHNICAL ENGINEER

FOUNDATIONS, WALLS, PILES
UNDERPINNING, TIEBACKS
DEEP RETAINED EXCAVATIONS
SHORING & BULKHEADS
CEQA, EARTHWORK & SLOPES
CAISSONS, COFFERDAMS
COASTAL & MARINE STRUCTURES

February 20, 2022

SOIL MECHANICS, GEOLOGY
GROUNDWATER HYDROLOGY
CONCRETE TECHNOLOGY

Mark R. Wolfe
Attorney at Law
580 California Street, Ste 1200
San Francisco, CA 94104

USPS & <mrw@mrwolfeassociates.com>

Subject: Proposed Mallard Pointe Development, Belvedere

Dear Mr. Wolfe:

The following is a summary résumé of qualifications and expertise, and general consulting conditions, that was used recently in an expert disclosure statement:

“Lawrence B. Karp holds an earned doctorate in civil engineering and other degrees from the University of California, Berkeley (with honors), and he is licensed as a civil and geotechnical engineer and architect in California, as an architect and a professional engineer, civil and/or structural engineer in other states, and as a marine engineer/naval architect in Washington.

Dr. Karp was awarded a post-doctoral Earthquake Engineering certificate by the University of California, Berkeley (with distinction). He has been issued national certifications in structural engineering and architecture. Dr. Karp taught advanced foundation design and construction at Berkeley for 11 years and at Stanford for 3 years, and he has been a court appointed expert assigned to engineering design and construction disputes at various times and in California counties over the last 40 years. In 1989 he was appointed Special Inspector of buildings in San Francisco following the Loma Prieta Earthquake. He has membership in various professional societies, and he has authored numerous engineering and technical reports as well as conference and journal papers.

With over 50 years experience in design and construction, Dr. Karp specializes in soil-structure interaction and resistance to lateral forces with applications to foundations for buildings and other structures including all types of ground support systems, deep foundations and retained excavations, bulkheads, tiebacks, anchors, underpinning and shoring, CEQA and environmental analyses, controlled grading and slope stabilization including repair of ground failures and landslides, investigation of causation and remediation of subsidence and foundation failures, seismic upgrades of foundations for buildings and other structures, reinforced and prestressed and marine concrete technology, determination of defects in construction and building materials, stability evaluation of excavations, bracing, slopes, earthwork, groundwater hydrology, demolition and construction logistics, and coastal engineering.”

The undersigned has a professional claim and complaint free history, and maintains, subject to continuing availability, a \$1M policy of professional liability insurance.

Yours truly,

Lawrence B. Karp

