7.0 Alternatives to the Proposed Project

7.0 ALTERNATIVES TO THE PROPOSED PROJECT

In accordance with CEQA Guidelines Section 15126.6, this section describes a range of reasonable alternatives to the project, or to the location of the project. The analysis focuses on alternatives capable of avoiding or substantially lessening the project's significant environmental effects, even if the alternative would impede, to some degree, the attainment of the proposed project objectives, or would be more costly. The range of required alternatives is governed by the "rule of reason" that requires the analysis to set forth only those alternatives necessary to permit a reasoned choice. The alternatives are limited to ones that would avoid or substantially lessen any of the project's significant effects. Of those alternatives, only the ones that the lead agency has determined could feasibly attain most of the basic project objectives are examined in detail.

The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. The range of potential alternatives to the proposed project shall also include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, General Plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). Only locations that would avoid or substantially lessen any of the project's significant effects need be considered for inclusion. An alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative need not be considered.

PROJECT OBJECTIVES

The following are the project's goals and objectives, which were developed by the project Applicant team, in consultation with community feedback, and the City of Lake Forest.

- To implement the General Plan land use designations established for the property by the Opportunities Study Area (OSA) project, consisting of a variety of housing types including single-family detached, multi-family, and affordable units, distributed across approximately 146 acres of net development area, including approximately 57 affordable units in a mixed-use site.

- To develop in accordance with the provisions of the Portola Center Development Agreement to ensure the orderly and economically viable build out of the project site.

- To create a balanced and integrated community by providing linkages to other segments of the City through trail systems, public amenities, and carefully planned residential neighborhoods.

- To implement the funding provisions set forth in the Portola Center Development Agreement which ensure that fees are paid as development proceeds to fund public facilities which provide community- and City-wide benefits.

- To benefit the entire community by providing adequate public open space (public parks and trail connections to existing regional trails), including the dedication of minimum 5-acre Neighborhood Park to the City.

- Ensure adequate internal circulation through street designs consistent with City standards.

Per CEQA Guidelines, only those impacts found significant and unavoidable are relevant in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project. As discussed throughout Section 5.0, *Environmental Analysis*, of this SEIR, environmental issue areas related to aesthetics, cultural resources, geology and soils, hydrology and water quality, land use and relevant planning, noise, traffic and circulation would result in less than significant impacts after implementation of recommended mitigation, if applicable. However, the City determined that new information exists that the proposed project would result in significant and unavoidable affects involving air quality and greenhouse gas (GHG) emissions not discussed in the OSA PEIR. These significant and unavoidable impacts are further detailed below.

AIR QUALITY

- Regional Construction Related Emissions – Activities related to construction of the project would exceed the SCAQMD daily emission thresholds for regional ROG and NO_X after implementation of all feasible mitigation measures. Therefore, the construction of the project would have a significant and unavoidable impact on regional air quality. Construction emissions would not exceed the SCAQMD significance threshold for CO, SO_X, PM_{10}, and $PM_{2.5}$.

- Localized Construction Related Emission – Construction-related emissions would exceed the SCAQMD localized significance thresholds for NO_X and PM_{10} after implementation of all feasible mitigation measures. Therefore, construction would have a significant and unavoidable impact on localized significance air quality.

- Regional Operational Emissions – During project operations, the project would result in an exceedance of regional emissions thresholds from the operation of both stationary and mobile sources. OSA PEIR Mitigation Measures GCC2 through GCC8 and additional Mitigation Measure GHG-1 would reduce the potential air quality impacts to the degree technically feasible; however, ROG and NO_X emissions would remain above SCAQMD significance thresholds. Therefore, operation of the proposed project would have a significant and unavoidable impact on regional air quality.

- Cumulative Emissions – As stated above, construction and operational activities would create a significant and unavoidable impact due to exceedances of SCAQMD thresholds for ROG and NO_X. Implementation of recommended OSA PEIR Mitigation Measures 3.3-1

through 3.3-7, GCC2 through GCC8, and additional Mitigation Measures AQ-1 and GHG-1 would reduce impacts; however, a significant and unavoidable impact would remain.

GREENHOUSE GAS EMISSIONS

- GHG Emissions – Implementation of OSA PEIR Mitigation Measures GCC2 through GCC8, and Mitigation Measure GHG-1would reduce project-related GHG emissions to 5.9 $MTCO_2eq$ per capita per year, which would still exceed the 4.8 $MTCO_2eq$ per capita per year project level GHG threshold.

- Cumulative GHG Emissions – As stated above, project-related GHG emissions would be significant and unavoidable despite the implementation of applicable OSA PEIR Mitigation Measures GCC2 through GCC8, and Mitigation Measure GHG-1. Therefore, the project's cumulative GHG emissions would be considered significant and unavoidable.

The proposed project evaluated in this SEIR is one of the alternatives that was considered and approved as a part of the OSA PEIR process (OSA PEIR and Recirculated OSA PEIR). As described below, seven alternatives were considered in the OSA PEIR process, and Alternative 7 was implemented for the Portola Center project site (Site 2), which resulted in a reduction of dwelling units from 1,132 to 930 and a reduction in commercial uses from 178,720 square feet to 40,000 square feet, as compared to the original project proposed. This SEIR describes the alternatives considered in the OSA PEIR and other alternatives that were rejected as infeasible, and the potential environmental impacts associated with the following alternatives are compared to impacts from the proposed project:

- No Project/No Build Alternative;
- Reduced Density Alternative; and
- Reduced Grading/Reduced Intensity Alternative.

Throughout the following analysis, the alternatives' impacts are analyzed for air quality and GHG emissions, as examined in Section 5.6 and Section 5.7 of this SEIR, respectively. In this manner, each alternative can be compared to the proposed project on an issue-by-issue basis. The end of this section provides an overview of the alternatives analyzed and a comparison of each alternative's impact in relation to the proposed project. This section also identifies alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process. Per CEQA Guidelines Section 15126.6, among the factors used to eliminate alternatives from detailed consideration are: failure to meet most of the basic project objectives; infeasibility; or inability to avoid significant environmental impacts. Section 7.4, *Environmentally Superior Alternative*, references the "environmentally superior" alternative, as required by the CEQA Guidelines.

7.1 ALTERNATIVES CONSIDERED BUT REJECTED FROM FURTHER ANALYSIS

The following is a discussion of the land use alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this SEIR. Per CEQA

Guidelines Section 15126.6(c), among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

7.1.1 OSA PEIR ALTERNATIVES

The project site is part of the larger OSA and is one of the City's seven remaining vacant properties. The Lake Forest Opportunities Study (Opportunities Study) involved a systematic analysis of the project site and an additional six properties (838 acres), in order to amend their General Plan (and Zoning) designations from industrial and commercial uses to residential and commercial uses. The overall purpose of the Opportunities Study was to examine the impacts and benefits of changes to the allowed land uses in the OSA. A phased approach to completion of the Opportunities Study was conducted, which included consideration of conceptual plans from the OSA landowners (i.e., Landowner Concept Plan) involving residential and mixed uses. The land use changes proposed by the landowners were evaluated from planning, traffic, and fiscal perspectives and compared against the industrial and commercial land uses currently allowed under the General Plan. Ultimately, a "Recommended Plan" was developed for further study, which consisted of development on six parcels and approval of a public facilities overlay on a portion of a seventh parcel. Collectively, the systematic analyses that were conducted as part of the OSA and OSA PEIR discussed below encompass the alternative development scenarios for the project site (subject of this SEIR) that were considered by the City of Lake Forest but were rejected as infeasible. The following summarizes the development scenarios that were considered, and presents the findings of the environmental impact analyses that were conducted.

The OSA PEIR was prepared to consider the potential environmental impacts that would result from implementation of the City's proposed land use changes pursuant to the Recommended Plan. The project site, subject of this SEIR, is one of the seven properties analyzed in the OSA PEIR. OSA PEIR Chapter 2.5, *Proposed Project*, details the proposed GPA and ZC of the seven properties involving 838 acres of vacant lands. The GPA and ZC involved development of 5,415 DU on Sites 1 through 6 and a public facilities overlay on Site 7. Approximately 50 acres of neighborhood parks, up to 45 acres of public facilities (sports park and Community Center/Civic Center), and 648,720 square feet of commercial development were proposed. The proposed land uses are summarized in OSA PEIR Table 2-5, *Project Summary*, and illustrated on OSA PEIR Figure 2-4, *Proposed Project Land Use Map*. The project site, subject of this SEIR, is analyzed as Site 2 in the OSA PEIR.

OSA PEIR Chapter 4, *Alternatives to the Proposed Project*, analyzed the following alternatives to the project (i.e., the Recommended Plan) or to the location of the project:

- *Alternative 1*. No Project/Reasonably Foreseeable Development General Plan Alternative – This alternative assumed that development would occur on the OSA project sites as set forth in the then current General Plan.

- *Alternative 2*. Development on Sites 1 through 6 and Public Facilities Overlay on Site 1 – This alternative assumed that the proposed OSA project development, with the exception that 408 residential units would be removed from Site 1 to allow development of all three community facilities (Civic Center, Community Center, and sports park) on a 45-acre

portion in the northwestern portion of Site 1 adjacent to Bake Parkway. The site would have remained developed with 320,000 square feet of commercial development, and a new net development of 2,407 dwelling units consisting of 1,102 medium-density residential units, 805 single-family units, and 500 rental units. New General Plan designations would have remained for the site as under the proposed OSA project.

- *Alternative 3*. Development on Sites 1 through 6 and Public Facilities Overlay on Sites 1, 3, and 4 – This alternative included the proposed OSA project development on Sites 2, 5, and 6. The analysis assumed that the Civic Center and Community Center would be built on Site 3, utilizing 6 acres, while two sports parks would utilize 18 acres from Site 1 and 20 acres from the southern portion of Site 4. Site 1 would have continued to accommodate residential units and commercial uses. Site 3 would have continued to accommodate 833 medium-density dwelling units, eliminating 250 residential units from Site 4 as under the proposed OSA project; 150,000 square feet of commercial would have been developed on Site 4. New General Plan designations would have remained the same as under the proposed OSA project alone.

- *Alternative 4*. Development on Sites 1 through 6 and Public Facilities Overlay on Sites 4 and 9 – This overlay assumed 35 acres from Site 4 and 10 acres from Site 9 for the public facilities; 150,000 square feet of commercial would have been developed on Site 4; the 200,000 square feet of business park uses that could be accommodated without the overlay would have been eliminated on Site 9. The 475 residential units would have removed from Site 4. Zoning for Site 9 would have changed from urban activity (Baker Ranch Planned Community) to Public Facility Overlay. Land use designation for site 9 would have been changed from business park to business park with land use overlay. Development on Sites 1, 2, 3, 5, and 6 would have remained as under the proposed OSA project.

- *Alternative 5*. Landowner Concept Plan – This alternative consisted of the conceptual plans submitted by six participating OSA landowners during Phase 2 of the Opportunities Study. Those plans comprised a mixed-use plan for the OSA with 6,617 residential units, 498,720 square feet of commercial uses, and 41.4 acres of neighborhood parks.

- *Alternative 6*. Proposed Project Plus Public Facilities/Land Use Overlay on Site 7 – In this alternative, the entire 121-acre site would have hosted all three public facilities on a 45-acre portion, plus 450 low-medium density (single-family detached) dwelling units on 76 acres at a gross density of approximately six units per acre. These units were in addition to the proposed OSA project's maximum of 5,415 residential units. The site would have retained its current General Plan designation of Business Park. All development on Sites 1 through 6 would have continued as under the proposed OSA project.

The following alternatives were also considered infeasible and rejected from further consideration:

- General Plan Amendment and Zone Change for All-Commercial Development;
- General Plan Amendment and Zone Change for All-Residential Development;
- General Plan Amendment and Zone Change for All-Industrial/Business Park Development;
- General Plan Amendment and Zone Change for Industrial-Residential Alternative;

- Reduced Density Alternative; and
- Public Facilities Overlay on Sites 4 and 8.

Subsequent to the OSA PEIR public comment period, the City identified a new alternative for locating the public facilities. This new alternative (Alternative 7), which is a combination of several of the alternatives discussed in the OSA PEIR, is referred to as the "Hybrid Alternative." The new Chapter 7, which was circulated for public review and analysis, describes the Alternative 7 (Hybrid Alternative) and provides additional information on significant changes or new information that occurred subsequent to circulation of the prior Draft OSA PEIR. The land uses proposed under Alternative 7 are summarized in Recirculated OSA PEIR Table 7.4-1.

From among the seven development alternatives analyzed in the OSA PEIR and Recirculated OSA PEIR, the environmentally superior alternative was concluded to be Alternative 7 (Hybrid Alternative), since it would reduce impacts to the greatest extent by reducing project trip generation and overall development. Pursuant to Recirculated OSA PEIR Table 7.4-1, Alternative 7 involves a maximum of 930 dwelling units, 40,000 square feet of commercial uses, and 8 acres of Neighborhood Park on Site 2 (the subject site of this SEIR). The OSA PEIR, which analyzed the environmental impacts associated with implementation of General Plan Amendment 2008-02B and Zone Change 2008-02, was certified in June 2008.

Overall, six alternatives to the Recommended Plan were analyzed in OSA PEIR Chapter 4. These involved development of the proposed project components (i.e., residential, parks/recreational, and mixed-use commercial uses, among others) on the project site and six additional sites. Alternative 7 analyzed in Recirculated OSA PEIR Chapter 7 was identified as environmentally superior and was implemented for the Portola Center project site (Site 2) through the City's approval of the GPA and the Development Agreement. As explained in the OSA PEIR, the General Plan and Zoning designations assigned to and approved for the Portola Center property would allow densities that are compatible with the existing Portola Hills community (see OSA PEIR, Response to Comment 23-1 in the Final EIR). Thus, Alternative 7 for Site 2 is the "project" subject of this SEIR. As they do not focus analysis on a project-level basis, they have been supplemented with two other alternatives considered in Section 7.2, Alternatives Considered for Further Analysis, which include the "Reduced Density" Alternative and "Reduced Grading/Reduced Intensity" Alternative, below. Therefore, the six other alternatives analyzed in the OSA PEIR have been considered but rejected from further consideration.

7.1.2 ALTERNATIVE DEVELOPMENT AREAS

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. Per CEQA Guidelines Section 15126.6(2)(A), the key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the SEIR. In general, any development of the size and type proposed by the Portola Center project would have substantially the same impacts on air quality and GHG emissions impacts. Without a site specific analysis, impacts on aesthetics, biological resources, cultural resources, geology/soils, hazards and hazardous

materials, hydrology/water quality, mineral resources, etc., cannot be evaluated. In addition, the Applicant has a vested right to develop the proposed project on the Portola Center project site, and not another location, pursuant to the Portola Center Development Agreement. Consequently, this alternative has been considered and rejected from further analysis.

7.1.3 NO DEVELOPMENT/ EXISTING GENERAL PLAN ALTERNATIVE

Pursuant to CEQA Guidelines Section 15126.6(e)(2), this alternative describes what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. The Applicant has a vested right to develop a minimum of 904 units (not exceeding 930 units) and a total commercial floor area of a minimum of 10,000 square feet (not to exceed 40,000 square feet) pursuant to the Portola Center Development Agreement. The practical result of the disapproval of the proposed project is that the Applicant would utilize the property pursuant to the Portola Center Development Agreement. It is reasonably foreseeable that as land values increase, the Applicant would develop the 195 acres to the maximum extent allowed under the Portola Center Development Agreement. This would result in development of a similar number of residential units and approximately 30,000 additional square feet of commercial use, and a reduction of active and passive open space. While this alternative would meet all of the project objectives, it would not avoid or substantially lessen any of the significant and unavoidable environmental impacts. As a result, this alternative has been rejected from further analysis.

7.2 ALTERNATIVES CONSIDERED FOR FURTHER ANALYSIS

In addition to the alternatives considered in the OSA PEIR, three additional alternatives were selected based on the criteria set forth in the CEQA Guidelines Section 15126.6 and the new information considered in this SEIR. The "No Project/No Build" Alternative, the "Reduced Density" Alternative, and the "Reduced Grading/Reduced Intensity" Alternative were selected to in order to reduce air quality and GHG construction related impacts by reducing the development footprint and the corresponding amount of grading required. These alternatives are analyzed in detail in the following sections.

An EIR must identify an "environmentally superior" alternative and where the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior. However, only those impacts found significant and unavoidable are used in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project. Only the impacts involving air quality and GHG were found to be significant and unavoidable. Section 7.3 identifies the Environmentally Superior Alternative.

7.2.1 "NO PROJECT/NO BUILD" ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

This alternative assumes that the existing 195-acre site would remain in the current state, graded-vacant land, and would not be developed for other uses, including the proposed project. None of the buildings or improvements proposed as part of the project would be constructed. A new community of residential neighborhoods and 10,000 square feet of commercial mixed-use development would not be developed. A 5-acre Neighborhood Park and 2.0 lineal miles (1.9 acres) of new hiking and walking trails and trail amenities including rest areas, viewing areas, and par course-style activity nodes would not be constructed. Under this alternative, a new network of public collector roadways and private local streets, and the proposed drainage and water quality improvements would not be constructed. Additionally, the proposed hardscape (i.e., retaining walls, soundwalls, perimeter walls, walkways, and entrance driveways) and landscape improvements would not be installed. New signals along Glenn Ranch Road would not be constructed. The project's proposed grading, which would involve approximately 2,300,000 cubic yards of cut and an equal amount of fill in the Portola South Planning Area and approximately 1,970,000cubic yards of cut and an equal amount of fill in the Portal Northeast and Northwest Planning Areas.

The following discussion evaluates the potential environmental impacts associated with the No Project/No Build Alternative, as compared to impacts from the proposed project.

IMPACT COMPARISON TO THE PROPOSED PROJECT

Air Quality

Short-term air quality impacts from demolition, grading, and construction activities would not occur with the No Project/No Build Alternative. The project's construction-related emissions would exceed South Coast Air Quality Management District (SCAQMD) thresholds. Therefore, the significant and unavoidable short-term air quality impacts for ROG, NO_X, and PM_{10} that would occur with the proposed project would be avoided with this alternative.

Long-term air quality impacts from mobile and area source pollutant emissions would not occur with the No Project/No Build Alternative. The project's long-term combined mobile and area source pollutant emissions and cumulative emissions would exceed SCAQMD thresholds for ROG and NO_X. Therefore, the significant and unavoidable long-term and cumulative air quality impacts for ROG and NO_X that would occur with the proposed project would be avoided with this alternative.

Greenhouse Gas Emissions

GHG emissions from construction and operational activities would not occur with the No Project/No Build Alternative. The project's GHG emission impacts and cumulative impacts would exceed the 4.8 $MTCO_2eq$ per capita per year project level GHG threshold, while no impacts would occur with this alternative. Therefore, the significant and unavoidable GHG emissions and

cumulative emissions impacts that would occur with the proposed project would be avoided with this alternative.

The No Project/No Build Alternative would be environmentally superior to the proposed project regarding GHG emissions, because no GHG emissions would result from construction.

ABILITY TO MEET PROJECT OBJECTIVES

The No Project/No Build Alternative would avoid short-term and operational significant and unavoidable impacts associated with regional and local air quality and GHG emissions. It would also avoid any other impacts associated with project development. However, this alternative would not attain any of the objectives of the proposed project, as it is not reasonable to assume that the Applicant would never develop this site, a valuable economic resource, and that it would remain in its current physical condition. The Applicant has a vested right to develop a minimum of 904 units (not exceeding 930 units) and a total commercial floor area of a minimum of 10,000 square feet (not to exceed 40,000 square feet) pursuant to the Portola Center Development Agreement. Based on current land use plans, the Portola Center Development Agreement, and consistent with available infrastructure, it is reasonably foreseeable that the site would be developed with some other permitted land use, such as a single family homes, medium density residential, business park, and/or commercial uses. Consequently, the No Project/No Build Alternative is legally infeasible, as it would conflict with the Applicant's vested right to construct between 904 and 930 dwelling units on the property. Further, the entire community would not benefit from the provision of public open space (public parks and trail connections to existing regional trails).

7.2.2 "REDUCED DENSITY" ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

This alternative assumes development of 81 single-family residential units, no commercial space, and 0.78 acres of park/trail on the 28 acre site (the Portola Northwest Planning Area). This is approximately the maximum number of units that could be developed while avoiding most of the short-term construction and operation phase air quality and GHG impacts. The recorded Portola Center Development Agreement allows a minimum of 904 residential units (a maximum of 930 residential units) and a minimum of 10,000 square feet of commercial space (a maximum of 40,000 square feet of commercial space).

Grading the Portola Northwest Planning Area would result in 370,000 cubic yards of cut and an equal amount of fill, and 110,000 cubic yards of export and 110,000 cubic yards of import. Overall, this alternative would reduce grading by approximately 3.9 million cubic yards of cut and an equal amount of fill.

Table 7-1, *Comparison of Proposed Project and Reduced Density Alternative*, compares the proposed project and Reduced Density Alternative. Comparatively, this alternative proposes an 86.9 percent decrease in dwelling units overall, with 536 fewer single-family detached units and no new multi-family or apartment units. This alternative would not construct any commercial floor space. Parkland/trails

would also be reduced by 9.93 acres, compared to the proposed project. The remaining project components (i.e., open space and circulation system) would only be developed similar to the proposed project in the Portola Northwestern Planning Area. The remaining planning areas would remain vacant/undeveloped as part of this alternative.

Table 7-1
Comparison of Proposed Project and Reduced Density Alternative

Land Use	Project	Reduced Density Alternative	Difference	% Difference
Residential Uses (dwelling units)				
Single-Family Detached	617	81	-536	-86.9
Multi-Family	256	0	-256	-100
Apartment	57	0	-57	-100
Commercial (square feet)	10,000	0	-10,000	-100
Population (persons)	2,759[1]	261[2]	-2,498	-90.5
Employment (persons)	20	0	-20	-100
Average Daily Trips[3]	10,400	833	-9,567	-92
Park Dedication (net acres)	10.8	0.78[4]	-9.93	-91.9

Notes:
1. Based on 948 dwelling units (930 dwelling units plus 18 with attached accessory living quarters/secondary units) and 2.91 persons per household, consistent with the OSA PEIR.
2. Based on 88 dwelling units (81 dwelling units plus 7 with attached accessory living quarters/secondary units) and 2.91 persons per household, consistent with the OSA PEIR.
3. Based on a trip generation rate of 9.57 trips per unit for single family dwelling units and 8.15 trips per unit for townhomes/multi-family/ apartments/attached accessory living quarters/secondary units, and the assumption of 1,520 average daily trips for 10,000 square feet of commercial uses. Trips for the park dedication are 269 trips for the proposed project (Consistent with the Traffic Impact Study) and 1.59 trips per acre for the Reduced Density Alternative.
4. Based on the required three net acres of usable park per every 1,000 persons requirement in the Portola Center Development Agreement.

IMPACT COMPARISON TO THE PROPOSED PROJECT

Air Quality

Short-Term Construction Emissions. Short-term construction emissions would result from the Reduced Density Alternative's construction activities. Fugitive dust would be generated during demolition of the existing structures/improvements and grading of the site, and air pollutants would be emitted by construction equipment.

The greatest amount of PM_{10} and $PM_{2.5}$ fugitive dust generation occurs during the construction phase due to site grading and excavation. The project's fugitive dust emissions were calculated as part of the site earthwork activity emissions; refer to Table 5.6-5. With the application of OSA PEIR Mitigation Measure 3.3-7 (adherence to SCAQMD Rule 403 and other dust control techniques), the project's maximum mitigated fugitive dust emissions would be below SCAQMD regional thresholds. The Reduced Density Alternative's development footprint and grading would be reduced compared to the proposed project. The Reduced Density Alternative would only require 110,000 cubic yards of soil to be hauled off-site instead of being balanced in the Northwest Planning area. Additionally, the import of 110,000 cubic yards would be required to provide stable backfill

for the retaining walls and soil would be required to be hauled from off-site rather than balanced between TTM's 15353 and 17300. This alternative would exceed the SCAQMD regional construction emissions thresholds for PM_{10} due to the required earthwork and off-site hauling that would be required; refer to Table 7-2, *Reduced Density Alternative Construction Emissions*. Impacts in this regard would be reduced, but not to a less than significant level, for PM_{10}.

Table 7-2
Reduced Density Alternative Construction Emissions

Emissions Source	Daily Pollutant Emissions (lbs/day)[1]					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Year 1 (2013)						
Unmitigated	11.31	82.76	69.03	0.08	21.01	12.61
Mitigated[2]	8.58	51.10	71.55	0.08	9.66	5.99
SCAQMD Construction Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Mitigated Emissions Exceed Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***
Year 2 (2014)						
Unmitigated	19.38	125.98	80.99	0.16	357.57	10.46
Mitigated[2]	14.31	77.85	85.24	0.16	262.95	6.97
SCAQMD Construction Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Mitigated Emissions Exceed Thresholds?	***No***	***No***	***No***	***No***	***Yes***	***No***
Year 3 (2015)						
Unmitigated	18.24	115.28	78.15	0.16	356.92	9.81
Mitigated[2]	14.10	75.72	83.86	0.16	262.87	6.88
SCAQMD Construction Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Mitigated Emissions Exceed Thresholds?	***No***	***No***	***No***	***No***	***Yes***	***No***
Year 4 (2016)						
Unmitigated	14.00	86.39	61.13	0.14	354.47	7.58
Mitigated[2]	12.11	63.50	69.07	0.14	261.57	5.75
SCAQMD Construction Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Mitigated Emissions Exceed Thresholds?	***No***	***No***	***No***	***No***	***Yes***	***No***

CO = carbon monoxide; VOC = volatile organic compounds; NO_X = nitrogen oxides; PM_{10} = particulate matter smaller than 10 microns; $PM_{2.5}$ = particulate matter smaller than 2.5 microns

Notes:

1. Emissions were calculated using CalEEMod, as recommended by the SCAQMD.
2. The reduction/credits for construction emission mitigations are based on mitigation included in the CalEEMod model and as typically required by the SCAQMD through Rule 403. The mitigation includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces twice daily; cover stock piles with tarps; water all haul roads twice daily; limit speeds on unpaved roads to 15 miles per hour; and use CARB certified engines.

Refer to Appendix 11.6, *Air Quality/Greenhouse Gas Data*, for assumptions used in this analysis.

Exhaust emissions from construction activities are generated by the transport of machinery and materials to and from the project site, workers' vehicles in their daily commuting, and emissions produced on-site as the equipment is used. As presented in Table 5.6-5, the project's equipment and worker vehicle exhaust emissions would exceed the established SCAQMD thresholds during years 2013 through 2016. Despite implementation of OSA PEIR Mitigation Measures 3.3-1 through 3.3-6, the project's construction-related NO_X emissions are considered significant and unavoidable. Comparatively, this alternative's on-site exhaust emissions would be less than the proposed project's,

given this alternative would decrease the overall construction and building footprints considerably. Unlike the proposed project, this alternative would require the import of 110,000 cubic yards and the export of 110,000 cubic yards of material instead of being balanced in the Northwest Planning area, which would increase off-site hauling emissions. However, mitigated NO_X emissions would be less than significant due to the considerably lower amounts of earthwork required, compared to the proposed project. The significant and unavoidable short-term NO_X air quality impacts that would occur with the proposed project would be avoided with this alternative.

The application of asphalt and surface coatings creates ROG emissions, which are O_3 precursors. The project's ROG emissions would exceed SCAQMD thresholds and therefore would be considered significant. Rule 1113 and Additional Mitigation Measure AQ-1 would reduce ROG emissions through standard painting practices as well as requiring the use of high-pressure-low-volume (HPLV) paint applicators. As the Reduced Density Alternative's construction and building footprints would be considerably less than the proposed project's, this alternative's ROG emissions would be reduced to below SCAQMD thresholds. Therefore, unlike the proposed project, this alternative would avoid the project's significant and unavoidable impacts involving ROG emissions.

Localized Construction Emissions. Implementation of the proposed project could expose the nearest sensitive receptors to criteria pollutant concentrations that would exceed the SCAQMD localized significance thresholds for NO_X and PM_{10} (after implementation of OSA PEIR Mitigation Measures 3.3-1 through 3.3-7 and Additional Mitigation Measure AQ-1), resulting in a significant and unavoidable impact during construction. With the substantial reduction in residential uses, the localized mitigated emissions from the Reduced Alternative would not exceed SCAQMD localized significance thresholds.

Long -Term Operational Emissions. Long-term operational emissions would be generated by both stationary and mobile sources. Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Stationary source emissions would be generated due to an increased demand for electrical energy and natural gas with the development of the proposed project. OSA PEIR Mitigation Measures GCC2 through GCC8 and additional Mitigation Measure GHG-1 require the project to implement various energy efficiency measures that would reduce stationary source emissions. However, the project's mitigated operational emissions would remain above SCAQMD thresholds for ROG and NO_X; refer to Table 5.6-6. Therefore, the project's long-term operational ROG and NO_X emissions are considered significant and unavoidable. The Reduced Density Alternative proposes a reduction in residential uses, which would result in a proportionate decrease in average daily trips (ADT) (a reduction of approximately 9,567 ADT), as compared to the proposed project. With a substantial decrease in ADT, the Reduced Density Alternative would only generate 833 daily trips, and the project's significant and unavoidable operational ROG and NO_X emissions impact would be avoided with this alternative.

Cumulative Impacts. For the proposed project, construction and operational activities would create a significant and unavoidable impact due to exceedances of SCAQMD thresholds for ROG and NO_X. Implementation of recommended OSA PEIR Mitigation Measures 3.3-1 through 3.3-7, GCC2 through GCC8, and Additional Mitigation Measures AQ-1 and GHG-1 would reduce impacts; however, a significant and unavoidable impact would remain. With the substantial reduction in residential uses, the cumulative mitigated emissions from the Reduced Density

Alternative would reduce ROG and NO_X emissions. However, this alternative would exceed the SCAQMD's regional construction related thresholds for PM_{10} due to the necessary earthwork and the off-site soil hauling. Therefore, the significant and unavoidable short-term ROG and NO_X impacts would be avoided. However, PM_{10} emissions, combined with other cumulative projects that would also occur in the areas would be significant.

Long-term air quality emissions, combined with other cumulative projects that would also occur in the area, would be avoided with implementation of this alternative. The Reduced Density Alternative would result in a substantial reduction in certain emissions due to the reduction in intensity from the proposed project. This alternative would result in reduced air quality impacts compared to the proposed project. Therefore, this alternative would avoid the significant and unavoidable short-term, long-term, and cumulative air quality impacts.

Greenhouse Gas Emissions

GHG emissions for "business as usual" conditions include direct project emissions from construction activities and operational activities (i.e., area and mobile sources), and indirect project emissions from energy and water demand, and solid waste generation. As indicated in Table 5.7-1, the project's total "business as usual" GHG emissions from direct and indirect sources combined would total 18,274.87 $MTCO_2eq/yr$. Table 5.7-2 shows the project's reduced GHG emissions associated with the project design features required by Mitigation Measure GHG-1, which would result in GHG emissions of 6.6 $MTCO_2eq$ per capita per year. Therefore, the proposed project would exceed the 4.8 $MTCO_2eq$ per capita per year project level GHG threshold (Tier 4) and impacts in this regard would remain significant and unavoidable despite the implementation of OSA PEIR Mitigation Measures GCC2 through GCC8 and Mitigation Measure GHG-1.

The Reduced Density Alternative would be required to incorporate Mitigation Measure GHG-1's project design features as well as OSA PEIR Mitigation Measures GCC2 through GCC8. This alternative's total GHG emissions would be 1,684.89 $MTCO_2eq$ per year, which would be below the SCAQMD's Tier 3 non-industrial project screening threshold of 3,000 $MTCO_2eq$ per year.[1] Therefore, unlike the proposed project, this alternative would avoid the significant and unavoidable impacts involving GHG emissions.

The Reduced Density Alternative would result in a reduction in GHG emissions from the proposed project as this alternative would result in a reduction in residential uses. This alternative would generate less overall GHG emissions and implementation of the recommended Mitigation Measures would further reduce these impacts. This alternative would avoid the project's significant and unavoidable short-term, long-term, and cumulative impacts regarding GHG emissions.

[1] Tier 3 excludes projects with annual emissions lower than a screening threshold of 3,000 $MTCO_2eq$ per year for all non-industrial projects. The SCAQMD GHG CEQA Significance Threshold Working Group concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact. Projects that exceed the screening threshold would continue to Tier 4. The analysis for the proposed project used the 4.8 $MTCO_2eq$ per service population option under Tier 4.

ABILITY TO MEET PROJECT OBJECTIVES

The Reduced Density Alternative would only attain some, but not all of the project's objectives. By eliminating the Portola Northeast and South Planning Areas and shifting single-family units to the Northwest Planning Area only, this alternative would only result in the development of 81 single-family residential units. This alternative would not provide for a variety of housing types including single-family detached, multi-family, and affordable units, distributed across approximately 146 acres of net development area, including affordable units in a mixed-use site. This alternative does not meet the objective to develop the project site in accordance with the provisions of the Portola Center Development Agreement to ensure the orderly and economically viable build out of the project site. The Development Agreement provides the applicant with a vested right to develop all of the planning areas, including the Portola Northeast and South Planning Areas, consistent with the General Plan and Zoning designations. Thus, this alternative, in eliminating two planning areas would not be consistent with these provisions of the Development Agreement. This alternative would only partially meet the project's objective of creating a balanced and integrated community by providing linkages to other segments of the City through trail systems, public amenities, and carefully planned residential neighborhoods, as this alternative would result in significantly decreased park uses. Unlike the proposed project, this alternative would not fully implement the funding provisions set forth in the Portola Center Development Agreement which ensure that fees are paid as development proceeds to fund public facilities which provide community- and City-wide benefits, because the amount of fees are far less than contemplated in the Development Agreement. Further, the Reduced Density Alternative would somewhat benefit the entire community by providing adequate public open space (public parks and trail connections to existing regional trails), although not to the extent of the proposed project. Lastly, this alternative would ensure adequate internal circulation through street designs consistent with City standards.

7.2.3 "REDUCED GRADING/ REDUCED INTENSITY" ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

This alternative assumes that no development would occur at the Portola Northwest Planning Area. Project development would be limited to areas within the Portola Northeast and South Planning Areas. As stated previously, the Applicant has a vested right to develop the Portola Center project site pursuant to the General Plan and Zoning designations, and other City regulations, including the vested right to develop a minimum of 904 units (not exceeding 930 units) and a total commercial floor area of a minimum of 10,000 square feet (not to exceed 40,000 square feet), pursuant to the Portola Center Development Agreement. Nonetheless, this alternative assumes that 904 dwelling units, 10,000 square feet of commercial uses, park and open space, and roadways and infrastructure would be built on approximately 167 acres.

Grading the Portola Northeast and South Planning Areas would result in 3.9 million cubic yards of cut and an equal amount of fill, and 110,000 cubic yards of export. Overall, this alternative would reduce grading by approximately 370,000 cubic yards of cut and an equal amount of fill.

Table 7-3, *Comparison of Proposed Project and Reduced Grading/Reduced Intensity Alternative*, compares the proposed project and Reduced Grading/Reduced Intensity Alternative. This alternative would develop single-family residential uses similar to the proposed project within the Northeast Planning Area. The proposed park uses within this area would total approximately 0.85 acres. Densities within the South Planning Area would have to be increased in order to be within the range of the DA's allowed 904 to 930 units on-site. Density increases would occur within the General Plan designated Medium Density Residential (15 to 25 dwelling units per net acre) within the northern portion of the South Planning Area. Park uses proposed within the South Planning Area would total approximately 7.2 acres.

Table 7-3
Comparison of Proposed Project and Reduced Grading/Reduced Intensity Alternative

Land Use	Project	Reduced Grading/Reduced Intensity Alternative	Difference	% Difference
Residential Uses (dwelling units)				
Single-Family Detached	617	478	-139	-22.5
Multi-Family	256	369	+113	+44.1
Apartment	57	57	0	0
Commercial (square feet)	10,000	10,000	0	0
Population (persons)	2,759[1]	2,683[2]	-76	-2.8
Employment (persons)	20	20	0	0
Average Daily Trips[3]	10,400	9,987	-413	-4.0
Park Dedication (net acres)	10.8	8.05[4]	-2.75	-25.5

Notes:
1. Based on 948 dwelling units (930 dwelling units plus 18 with attached accessory living quarters/secondary units) and 2.91 persons per household, consistent with the OSA PEIR.
2. Based on 922 dwelling units (904 dwelling units plus 18 with attached accessory living quarters/secondary units) and 2.91 persons per household, consistent with the OSA PEIR.
3. Based on a trip generation rate of 9.57 trips per unit for single family dwelling units and 8.15 trips per unit for townhomes/multi-family/ apartments/attached accessory living quarters/secondary units, and the assumption of 1,520 average daily trips for 10,000 square feet of commercial uses. Trips for the park dedication are 269 trips for the Project (Consistent with the Traffic Impact Study) and 53.8 trips per acre for the 5-acre Neighborhood Park and 1.59 trips for the remaining 3.05 acres of park proposed for the Reduced Grading/Reduced Intensity Alternative.
4. Based on the required three net acres of usable park per every 1,000 persons requirement in the Portola Center Development Agreement.

Comparatively, this alternative proposes 139 fewer single-family detached units, an increase in 113 multi-family units, and the same number of apartment units (57 units) compared to the proposed project. This alternative proposes the same square footage in overall commercial floor space (10,000 square feet, similar to the proposed project). Parkland would also be reduced by 2.75 net acres, compared to the proposed project. As to the remaining project components (i.e., trails, open space, and circulation system) there would be little variation between the proposed project and the Reduced Grading/Reduced Intensity Alternative to account for the Portola Northwestern Planning Area remaining vacant/undeveloped as part of this alternative.

IMPACT COMPARISON TO THE PROPOSED PROJECT

Air Quality

Short-Term Construction Emissions. Short-term construction emissions would result from the Reduced Grading/Reduced Intensity Alternative's construction activities. Fugitive dust would be generated during demolition of the existing structures/improvements and grading of the site, and air pollutants would be emitted by construction equipment.

The greatest amount of PM_{10} and $PM_{2.5}$ fugitive dust generation occurs during the construction phase due to site grading and excavation. The project's fugitive dust emissions were calculated as part of the site earthwork activity emissions; refer to Table 5.6-5. With the application of OSA PEIR Mitigation Measure 3.3-7 (adherence to SCAQMD Rule 403 and other dust control techniques), the project's maximum mitigated fugitive dust emissions would be below SCAQMD regional thresholds. The Reduced Grading/Reduced Intensity Alternative's development footprint and grading would be reduced compared to the proposed project. However, the Reduced Grading/Reduced Intensity Alternative would require 110,000 cubic yards of soil to be hauled off-site instead of balanced on the Northwest Planning area. Additionally, the import of 110,000 cubic yards would be required to provide stable backfill for the retaining walls. Since the soil would be required to be hauled from off-site rather than balanced between TTM's 15353 and 17300, this alternative would exceed the SCAQMD regional construction emissions thresholds for ROG, NOx, and PM_{10}; refer to Table 7-4, *Reduced Grading/Reduced Intensity Alternative Construction Emissions*. Impacts in this regard would be greater than the proposed project.

Exhaust emissions from construction activities are generated by the transport of machinery and materials to and from the project site, workers' vehicles in their daily commuting, and emissions produced on-site as the equipment is used. As presented in Table 5.6-5, the project's equipment and worker vehicle exhaust emissions would exceed the established SCAQMD thresholds during years 2013 through 2016. Despite implementation of OSA PEIR Mitigation Measures 3.3-1 through 3.3-6, the project's construction-related NO_X emissions are considered significant and unavoidable. Comparatively, this alternative's on-site exhaust emissions would be less than the proposed project's, given this alternative would decrease the overall construction and building footprints. However, as noted above, this alternative would require the import and export of 110,000 cubic yards of material instead of being balanced in the Northwest Planning area, which would increase off-site hauling emissions. Therefore, the significant and unavoidable short-term air quality impacts that would occur with the proposed project would remain with this alternative.

The application of asphalt and surface coatings creates ROG emissions, which are O_3 precursors. The project's ROG emissions would exceed SCAQMD thresholds and therefore would be considered significant. Rule 1113 and Additional Mitigation Measure AQ-1 would reduce ROG emissions through standard painting practices as well as requiring the use of high-pressure-low-volume (HPLV) paint applicators. Despite the Reduced Grading/Reduced Intensity Alternative's construction and building footprints would be less than the proposed project's, this alternative's ROG emissions would not be reduced below SCAQMD thresholds. Therefore, as with the proposed project, this alternative would result in significant and unavoidable impacts involving ROG emissions.

Table 7-4
Reduced Grading/Reduced Intensity Alternative Construction Emissions

Emissions Source	Daily Pollutant Emissions (lbs/day)[1]					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Year 1 (2013)						
Unmitigated	59.49	501.10	267.47	0.54	297.00	21.82
Mitigated[2]	42.84	290.20	300.74	0.54	220.20	17.01
SCAQMD Construction Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Mitigated Emissions Exceed Thresholds?	***No***	***Yes***	***No***	***No***	***Yes***	***No***
Year 2 (2014)						
Unmitigated	98.44	463.06	248.34	0.54	295.10	19.92
Mitigated[2]	88.18	285.12	296.62	0.54	219.96	16.77
SCAQMD Construction Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Mitigated Emissions Exceed Thresholds?	***Yes***	***Yes***	***No***	***No***	***Yes***	***No***
Year 3 (2015)						
Unmitigated	95.24	254.71	235.06	0.47	30.86	15.83
Mitigated[2]	87.65	182.02	255.19	0.47	25.88	14.87
SCAQMD Construction Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Mitigated Emissions Exceed Thresholds?	***Yes***	***Yes***	***No***	***No***	***No***	***No***
Year 4 (2016)						
Unmitigated	88.08	202.74	209.54	0.43	27.30	12.46
Mitigated[2]	84.12	160.39	227.02	0.43	24.10	13.23
SCAQMD Construction Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Mitigated Emissions Exceed Thresholds?	***Yes***	***Yes***	***No***	***No***	***No***	***No***

CO = carbon monoxide; VOC = volatile organic compounds; NO_X = nitrogen oxides; PM_{10} = particulate matter smaller than 10 microns; $PM_{2.5}$ = particulate matter smaller than 2.5 microns

Notes:

1. Emissions were calculated using CalEEMod, as recommended by the SCAQMD.
2. The reduction/credits for construction emission mitigations are based on mitigation included in the CalEEMod model and as typically required by the SCAQMD through Rule 403. The mitigation includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces twice daily; cover stock piles with tarps; water all haul roads twice daily; limit speeds on unpaved roads to 15 miles per hour; and use CARB certified Tier 3 engines.

Refer to Appendix 11.6, *Air Quality/Greenhouse Gas Data*, for assumptions used in this analysis.

Localized Construction Emissions. Implementation of the proposed project could expose the nearest sensitive receptors to criteria pollutant concentrations that would exceed the SCAQMD localized significance thresholds for NO_X and PM_{10} (after implementation of OSA PEIR Mitigation Measures 3.3-1 through 3.3-7 and Additional Mitigation Measure AQ-1), resulting in a significant and unavoidable impact during construction. Despite the reduction in residential uses, the localized mitigated emissions from the Reduced Grading/Reduced Intensity Alternative would also still exceed SCAQMD localized significance thresholds.

Long -Term Operational Emissions. Long-term operational emissions would be generated by both stationary and mobile sources. Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Stationary source emissions would be generated due to an increased demand for electrical energy and natural gas with the development of the proposed project. OSA PEIR Mitigation Measures GCC2 through GCC8 and additional Mitigation Measure GHG-1 require

the project to implement various energy efficiency measures that would reduce stationary source emissions. However, the project's mitigated operational emissions would remain above SCAQMD thresholds for ROG and NO_X; refer to Table 5.6-6. Therefore, the project's long-term operational ROG and NO_X emissions are considered significant and unavoidable. The Reduced Grading/Reduced Intensity Alternative proposes a reduction in residential uses, which would result in a proportionate decrease in average daily trips (ADT) (a reduction of approximately 413 ADT), as compared to the proposed project. However, the Reduced Grading/Reduced Intensity Alternative would still generate 9,987 daily trips, and operational ROG and NO_X emissions would remain significant and unavoidable.

Cumulative Impacts. For the proposed project, construction and operational activities would create a significant and unavoidable impact due to exceedances of SCAQMD thresholds for ROG and NO_X. Implementation of recommended OSA PEIR Mitigation Measures 3.3-1 through 3.3-7, GCC2 through GCC8, and Additional Mitigation Measures AQ-1 and GHG-1 would reduce impacts; however, a significant and unavoidable impact would remain. Despite the reduction in residential uses, the cumulative mitigated emissions from the Reduced Grading/Reduced Intensity Alternative would still exceed SCAQMD thresholds. Furthermore, this alternative would exceed also exceed the SCAQMD's regional construction related thresholds. Therefore, the significant and unavoidable short- and long-term air quality emissions, combined with other cumulative projects that would also occur in the area, would remain with implementation of this alternative.

In regard to long-term emissions, the Reduced Grading/Reduced Intensity Alternative would result in a slight reduction in certain emissions due to the reduction in intensity from the proposed project. However, due to the need for off-site soil hauling activities, this alternative would result in greater short-term air quality impacts than the proposed project. Therefore, this alternative would result in significant and unavoidable short-term, long-term, and cumulative air quality impacts, similar to the proposed project.

Greenhouse Gas Emissions

GHG emissions for "business as usual" conditions include direct project emissions from construction activities and operational activities (i.e., area and mobile sources), and indirect project emissions from energy and water demand, and solid waste generation. As indicated in Table 5.7-1, the project's total "business as usual" GHG emissions from direct and indirect sources combined would total 18,274.87 $MTCO_2eq/yr$. Table 5.7-2 shows the project's reduced GHG emissions associated with the project design features required by Mitigation Measure GHG-1, which would result in GHG emissions of 6.6 $MTCO_2eq$ per capita per year. Therefore, the proposed project would exceed the 4.8 $MTCO_2eq$ per capita per year project level GHG threshold and impacts in this regard would remain significant and unavoidable despite the implementation of OSA PEIR Mitigation Measures GCC2 through GCC8 and Mitigation Measure GHG-1.

Although the Reduced Grading/Reduced Intensity Alternative would be required to incorporate Mitigation Measure GHG-1's project design features as well as OSA PEIR Mitigation Measures GCC2 through GCC8, this alternative's GHG emissions would be 5.7 $MTCO_2eq$ per capita per year, which would not be below the 4.8 $MTCO_2eq$ per capita per year project level GHG threshold,

similar to the proposed project. Therefore, as with the proposed project, this alternative would result in significant and unavoidable impacts involving GHG emissions.

The Reduced Grading/Reduced Intensity Alternative would result in a slight reduction in GHG emissions from the proposed project as this alternative would result in a reduction in residential uses. This alternative would generate less overall GHG emissions and implementation of the recommended Mitigation Measures would further reduce these impacts. However, this alternative would result in significant and unavoidable short-term, long-term, and cumulative impacts regarding GHG emissions, similar to the proposed project.

ABILITY TO MEET PROJECT OBJECTIVES

The Reduced Grading/Reduced Intensity Alternative would attain some, but not all of the project's objectives. As with the proposed project, this alternative would implement the General Plan land use designations established for the property by the Opportunities Study, consisting of a variety of housing types including single-family detached, multi-family, and affordable units, distributed across approximately 146 acres of net development area, including affordable units in a mixed-use site. This alternative does not meet the objective to develop the project site in accordance with the provisions of the Portola Center Development Agreement to ensure the orderly and economically viable build out of the project site. The Development Agreement provides the applicant with a vested right to develop all of the planning areas, including the Portola Northwest Planning Area, consistent with the General Plan and Zoning designations, including a vested right to develop a range of 904 to 930 residential units in a mix of single-family and multi-family units to be determined by the Applicant. Thus, this alternative, which eliminates a planning area and varies from the residential mix of the proposed project, would not be consistent with these provisions of the Development Agreement. This alternative would only partially meet the project's objective of creating a balanced and integrated community by providing linkages to other segments of the City through trail systems, public amenities, and carefully planned residential neighborhoods, as this alternative would result in decreased park uses. Similar to the proposed project, this alternative would implement the funding provisions set forth in the Portola Center Development Agreement which ensure that fees are paid as development proceeds to fund public facilities which provide community- and City-wide benefits. Further, the Reduced Grading/Reduced Intensity Alternative would benefit the entire community by providing adequate public open space (public parks and trail connections to existing regional trails), including the dedication of minimum 5-acre Neighborhood Park to the City, although to a lesser extent than the proposed project (as fewer park acreage is proposed). Lastly, this alternative would ensure adequate internal circulation through street designs consistent with City standards.

7.3 "ENVIRONMENTALLY SUPERIOR" ALTERNATIVE

Table 7-5, *Comparison of Alternatives*, summarizes the comparative analysis presented above (i.e., the alternatives compared to the proposed project). Review of Table 7-5 and the analysis presented above indicates the No Project/No Build Alternative is the environmentally superior alternative, because it would avoid the air quality and GHG impacts associated with development of the

proposed project. According to CEQA Guidelines Section 15126.6(e), "*No Project" Alternative*, "if the environmentally superior alternative is the "no project" alternative, the SEIR shall also identify an environmentally superior alternative among the other alternatives." Accordingly, an environmentally superior alternative among the other alternatives is identified below.

Table 7-5
Comparison of Alternatives

Impact Issue Areas	No Project/No Build Alternative	Reduced Density Alternative	Reduced Grading/Reduced Intensity Alternative
Air Quality			
Regional Construction Emissions	↓	↓*	↑*
Localized Construction Emissions	↓	↓	↓*
Regional Operational Emissions	↓	↓	↓*
Cumulative Impacts	↓	↓	↓*
Greenhouse Gas Emissions			
Greenhouse Gas Emissions	↓	↓	↓*
Cumulative Greenhouse Gas Emissions	↓	↓	↓*

↑ Indicates an impact that is greater than the proposed project (environmentally inferior).
↓ Indicates an impact that is less than the proposed project (environmentally superior).
= Indicates an impact that is equal to the proposed project (neither environmentally superior nor inferior).
* Indicates a significant and unavoidable impact.

Among the other alternatives, the environmentally superior alternative is the Reduced Density Alternative, given it would achieve the greatest impact reductions in air quality and GHG emissions. As concluded in the analysis presented above, the Reduced Density Alternative would lessen the impacts associated with development of the proposed project, because it would involve a 849-unit reduction of proposed residential uses and a 10,000 square-foot reduction of commercial uses, with corresponding decreases in construction activities, building footprints, and traffic volumes. These decreases would result in proportionate decreases in air quality and GHG emissions and would avoid most of the project's significant and unavoidable impacts pertaining to air quality and GHG emissions. However, due to off-site hauling and earthwork volumes, construction PM_{10} emissions would exceed SCAQMD thresholds and impacts would be significant and unavoidable with this alternative.

The Reduced Density Alternative is considered environmentally superior to the proposed project and it would avoid most of the project's significant and unavoidable project impacts involving air quality and GHG emissions. However, this alternative only achieves some, but not all of the project's objectives. More importantly, the Reduced Density Alternative would not meet the most basic project objective of allowing development of the site consistent with the Development Agreement.