

ENVIRONMENTAL CHECKLIST FORM

Project title: 1688 West Garvey Avenue Residential Project

Lead agency name and address: City of Monterey Park, Community and Economic Development Department, 320 West Newmark Avenue, Monterey Park, CA 91754

Contact person and telephone number: Jon Turner, Acting City Planner, 320 West Newmark Avenue, Monterey Park, CA 91754, jturner@phoenixcivil.com

Project location: The Project Site is located in a residential area in the City of Monterey Park (City) within the County of Los Angeles (County). This area is on the northern edge of the City with the City of Alhambra immediately north of West Garvey Avenue, as shown in **Figure 1: Regional Location Map**. The Project Site is located at 1688 West Garvey Avenue, south of West Garvey Avenue between Casuda Canyon Drive and Abajo Drive, as shown in **Figure 2: Project Location**. The Project Site is on a hill at approximately 600 feet above mean sea level (AMSL) and approximately 150 feet above the intersection of West Garvey Avenue and Abajo Drive.

Project sponsor's name and address: Center Int'l Investments, Inc., 501 W. Garvey Avenue #501, Monterey Park, CA 91754

General Plan designation: High Density Residential

Zoning: High Density Residential (R-3)

Description of Project:

The Project would include complete removal of the existing slopes and retaining walls on the lower portion of the Project Site and the existing street and utilities on the upper portion of the Project Site; grading of the Project Site; installation of a new retaining walls on the lower and upper portions of the Project Site; and installation of new utilities and a new street as shown in **Figure 3: Conceptual Site Grading Plan**.

Subdivision of the 6.22-acre Project Site is proposed to create 16 lots for development of single-family residences and one open space lot as shown in **Figure 4: Vesting Tentative Tract Map**. As shown in **Table 1: Project Area Breakdown**, Lots 1 through 16, residential lots, would consist of approximately 177,000 SF; Lot A, the private access road, would consist of approximately 40,000 SF; and Lot B, open space, would consist of approximately 55,000 SF.

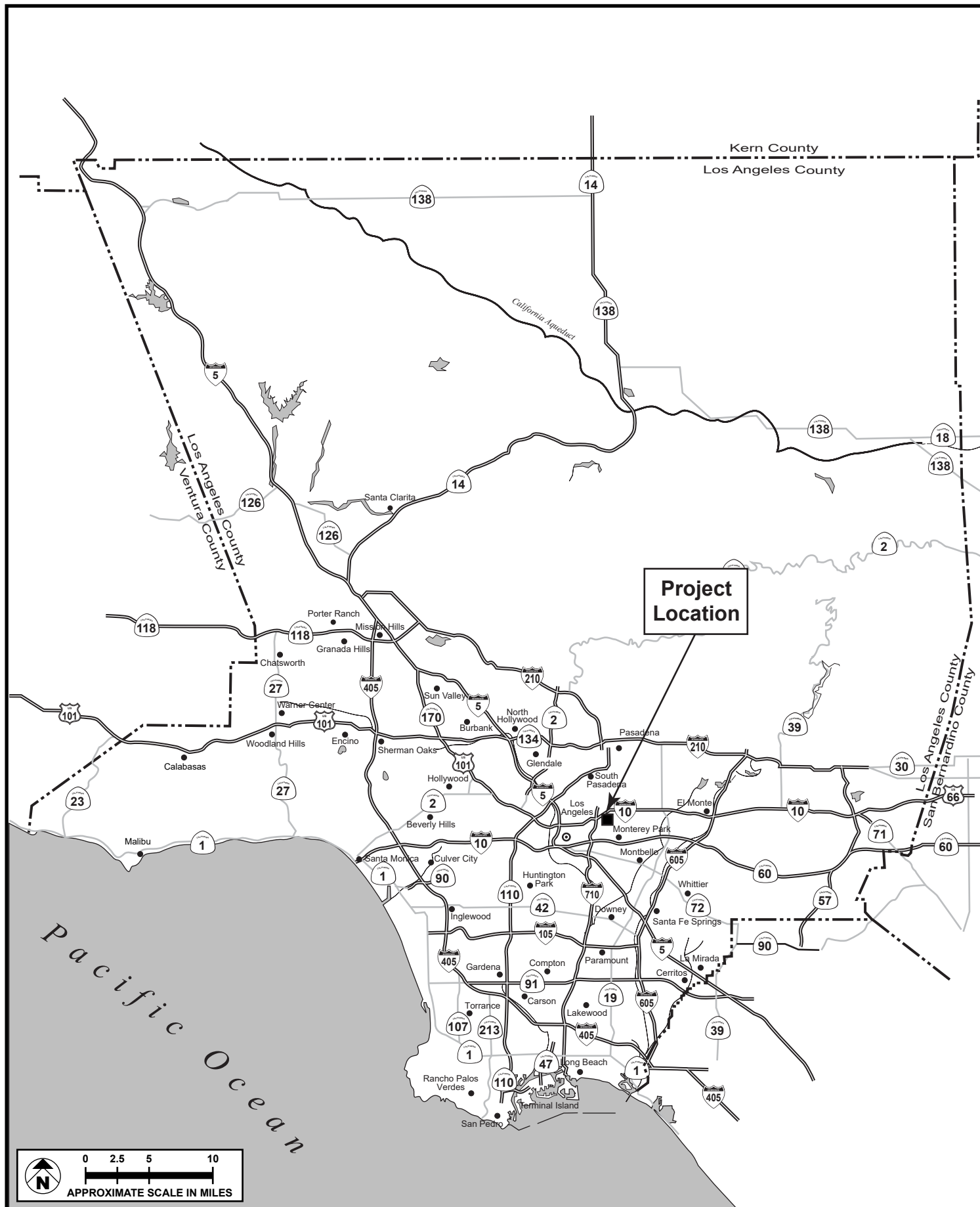
Table 1
Project Area Breakdown

Lot Number	Use	Lot Area (SF)
1-16	Single-Family Residential	176,660
A	Private Access Road	39,260
B	Open Space	55,096
Total		271,016

The residential lots would range in size from 7,515 SF to 15,369 SF as shown in **Table 2: Lot Summary** below.

Table 2
Lot Summary

Lot Number	Gross Area	
	Square Feet	Acres
1	11,433	0.262
2	7,515	0.173
3	8,060	0.185
4	8,764	0.201
5	8,943	0.205
6	9,265	0.213
7	9,777	0.224
8	11,255	0.258
9	11,261	0.259
10	9,808	0.225
11	14,329	0.329
12	14,648	0.336
13	15,369	0.353
14	14,366	0.330
15	13,729	0.315
16	8,138	0.187
Total	176,660	4.055



SOURCE: Meridian Consultants, LLC - 2020

FIGURE 1



SOURCE: Google Earth - 2020

FIGURE 2

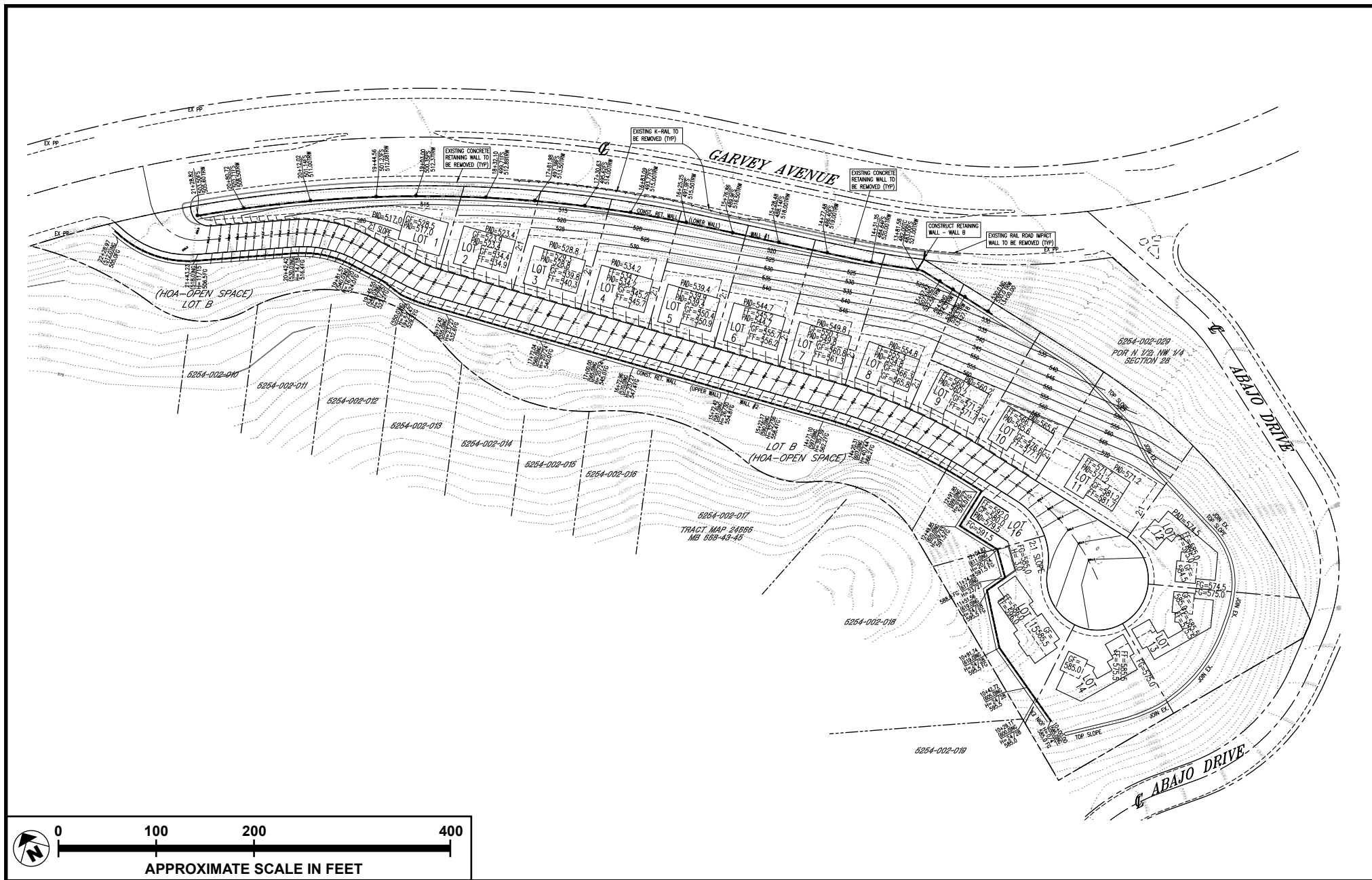


FIGURE 3

Existing Site Conditions

In 1978-1979, Tract Map No. 34875 was approved to subdivide the Project Site to create 31 residential condominium parcels and one common area parcel. The Project Site was graded, water and sewer lines were installed, and foundations were built for the planned residential buildings. A private road, named Goodview Drive, was constructed to access the lots, located on both sides of the road. The upper portion of Goodview Drive ends on a cul-de-sac with residential lots surrounding the road. Numerous retaining walls and foundations were constructed for the residential structures. Two other retaining walls are also present, one adjacent to Goodview Drive near the entrance, which is approximately eight feet in height, and one along a portion of the eastern property line, starting from West Garvey Avenue and continuing up the slope, straddling the property line. Two approximately 15-foot high crib walls were also constructed, although portions of these walls have since failed. A five-foot high cantilever retaining wall is also present along West Garvey Avenue and is located just outside the property line. Another cantilever retaining wall, up to approximately 12 feet in height, is located mostly off site along Abajo Drive, although a small portion is located within the Project Site. A series of 24 piles, starting from 40 feet west of Garvey Avenue and extending to the west for 205 feet, have been constructed immediately behind a portion of this wall, presumably to reinforce the wall after slope failures occurred above this wall in 2005.

In or around 1980 development on the Project Site ceased. In the intervening years slope failures occurred, some of which involved the retaining walls installed in the initial development. Surficial failures and settlement of Goodview Drive were seen on the Project Site starting in 1980, possibly during a series of intense storms that brought nearly 16 inches of rain over a nine-day period in February 1980. During the same year, debris flows damaged numerous homes along Abajo Drive to the south and southwest of the Project Site. The development was halted, and by 1982, a portion of the crib wall and slope had failed, blocked a portion of Garvey Avenue, and led to the evacuation of the apartment complex on the opposite side of Garvey Avenue. Some of the retaining walls for the partially constructed residential structures along the southern property line began to fail in 1983. Subsequent failures in the lower crib wall occurred in March and April of 1983. By the end of 1984, a supplemental retaining wall, referred to as the impact wall, had been erected along a portion of Garvey Avenue to contain some of the slope failures. This wall, constructed of steel beams and wood lagging, is about 200 feet long and 20 feet tall, and is still in place. Subsequent failure of the upper crib wall occurred in 1985. In late 2004, a progressive slope failure occurred above Abajo Drive, sending debris onto Abajo Drive. This failure was left unrepaired and migrated up the slope before the slope was stabilized in 2007. Over the last decade, minor failures have occurred. Currently, numerous erosion control measures are present on the Project Site, including plastic covered slope, straw wattles, sand bags, and drainage pipes, as shown in **Figure 5: Site Photos A** and **Figure 6: Site Photos B**. Above the Project Site, the slopes are covered in vegetation, however there is scarce vegetation in the plastic-covered areas of the Project Site. The original retaining walls accounted for approximately 15,900 square feet of visible retaining wall area. The existing sidewalk along the edge of the Project Site

along Garvey Avenue is unusable as much of it is obstructed by the supplemental retaining wall and the soils behind it. Concrete barriers were placed on other portions of the sidewalk adjacent to the Project Site which also obstruct the sidewalk.

Monterey Park General Plan Land Use and Zoning Designations

The General Plan Land Use designation for the Site is High Density Residential. The zoning designation of the Site is High-Density Residential (R-3). The High-Density Residential land use and zoning designations allow a broad range of dwelling unit types, which may be attached or detached at a density of up to 25 units per acre.¹

Site Access

Primary regional access is provided by Interstate 710 (I-710), which runs in a north-south direction approximately 1.1 miles west of the Project Site. In addition, Interstate 10 (I-10), which runs in an east-west direction, is 0.65 mile north of the Project Site.

Primary local street access is provided by West Garvey Avenue, which is a two-way street with two lanes travelling in both the east and west direction. This street is a designated truck route and is classified as a Minor Arterial by the City.²

Grading and Retaining Walls

The overall elevation of the Project Site would be lowered to soften the appearance of the existing slopes on the Project Site and reduce the length of the retaining walls on the Project Site. The Project Site would be graded and approximately 112,000 cubic yards of soil and debris would be excavated and hauled off the Project Site.

Two new retaining walls would be installed in order to help stabilize the slope, a lower retaining wall below the houses and an upper retaining wall above the houses. The new lower retaining wall would be set back from the property line to provide an area for landscaping. This retaining wall would be a pile-and-tieback wall, anchored in stable layers of earth, combined with a graded 2:1 slope. The retaining wall would range from less than two feet tall at its lowest point to about 40 feet at its tallest point. The elevation at the top of the retaining wall at its highest point would be approximately 521 feet. This is about nine feet lower in elevation than the top of the original hillside retaining wall and about 34 feet lower than the top of the existing hillside retaining wall on the upper portion of the Project Site. The new lower retaining wall would be approximately 16,900 SF in size.

1 City of Monterey Park, *General Plan: Land Use Element*, <http://www.montereypark.ca.gov/265/Residential-Land-Use>, accessed March 5, 2020.

2 *Monterey Park General Plan*, Figure C-2, Master Circulation Plan, July 2001.



View of Project Site hill from West Garvey Avenue looking north



View of Project Site hill from West Garvey Avenue looking south

SOURCE: Google Earth - 2019; Meridian Consultants - 2019

FIGURE 5



View looking east from top of Project Site



View of blocked sidewalk along Project side of Garvey Avenue

SOURCE: Google Earth - 2019; Meridian Consultants - 2019

FIGURE 6

The new upper retaining wall is designed to stabilize the existing slope to allow development to proceed. The new retaining wall is anticipated to be a maximum of about 41 feet tall and would be a soil nail type wall, anchored in stable layers of earth.

The residences may include enhanced foundations, with deeper footings, and shallow and deep caissons as required by the soils condition on each lot. The Project would include installation of a catch basin with a filter insert located toward the bottom of the private access road. The stormwater would feed into a filter, then travel under the sidewalk and discharge onto Garvey Avenue.

Open Space

Approximately 55,000 SF of open space would be provided with the Project. This includes the area above the upper retaining wall located in Lot B as shown in **Figure 4**. The existing vegetation above the upper retaining wall would remain.

Vehicular Circulation

Project Site access would be provided from a gated private driveway from West Garvey Avenue. The driveway would be approximately 0.25 mile long and would be contain a cul-de-sac at the other end.

Landscaping

The Project includes trees, shrubs, and groundcover planted along West Garvey Avenue to further stabilize the slope along with hydroseeding with a grass and a native wildflower mix over the graded slopes. The trees along West Garvey Avenue would be planted approximately 25 feet apart. Creeping fig would also be planted at the base of the wall to grow up the wall.

Additional landscaping would be installed along the private driveway, the front yards of the homes, and other common areas. Trees would be planted between the driveway and the upper retaining wall as shown in **Figure 7: Landscape Plan Lower** and **Figure 8: Landscape Plan Upper**.

Residences

The Project includes 16 proposed single-family residences, as shown in **Figure 9: Site Plan**, ranging from 2,432 SF to 5,666 SF. All units would be two stories with a basement as shown in **Figure 10: Project Rendering View from the North** and **Figure 11: Project Rendering View from the South**. Lot 1 would contain a five-bedroom, five-bathroom unit; Lots 2 through 6 would contain six-bedroom, five-bathroom units; Lots 7 through 15 would contain six-bedroom, 6.5 bathroom units; and Lot 16 would contain a two-bedroom, three-bathroom unit.

There would be a total of seven different floor plans: floor plans A through G. There would be one unit with floor plan A, which can be seen in **Figure 12: Unit A Floor Plan**; five units with floor plan B, which can be seen in **Figure 13: Unit B Floor Plan**; four units with floor plan C, which can be seen in **Figure 14: Unit C Floor Plan**; one unit with floor plan D, which can be seen in **Figure 15: Unit D Floor Plan**; two units with floor plan E, which can be seen in **Figure 16: Unit E Floor Plan**; one unit with floor plan E2, which can be seen in **Figure 17: Unit E2 Floor Plan**; one unit with floor plan F, which can be seen in **Figure 18: Unit F Floor Plan**; and one unit with floor plan G, which can be seen in **Figure 19: Unit G Floor Plan**.

The houses would contain modern textures and materials such as cement, wood, glass, and stone as shown in **Figure 20: Typical Building Materials Unit B Example** and **Figure 21: Typical Building Materials Unit E Example**. House colors would typically be dark brown and shades of grey.

The elevations of the proposed residences are shown in **Figure 22** through **Figure 25**. As shown, the maximum height of the proposed residences is 35' 3."

Construction

Grading and installation of the Project Site improvements would occur over approximately three years, with construction of the 16 residences expected to be completed within three years following completion of the Project Site improvements. Grading of the lower portion of the Site and construction of the lower retaining wall is anticipated to begin in the 1st quarter of 2021 and be completed within 18 months. These activities, some of which would occur concurrently, include site clearing and demolition, which would occur over two months; grading over approximately 12 months; construction of the retaining wall and ground anchors over approximately five months; and landscaping over one month. Approximately 75,000 total cubic yards of soil will be excavated and hauled off the lower portion of the Site during the 12-month grading period.

Grading of the upper portion of the Project Site, construction of the upper retaining wall, utilities, private driveway, and other Project Site improvements, is anticipated to begin in the 4th quarter of 2022 and be completed within 18 months. The construction of the residences would occur over the three following years, resulting in completion of development by the 3rd quarter of 2027. While many of these activities would also run concurrently, grading and construction of the upper retaining wall would occur over approximately 14 months, installation of the utilities would occur over approximately two months, the private street would be constructed over approximately two months. Approximately 37,000 total cubic yards of soil would be excavated and hauled off the Project Site during the 14-month grading and retaining wall construction period. The soil export would take place periodically, and not continuously, throughout this 14-month period, totaling approximately 120 total days (four months).

Construction debris that can be recycled would be hauled to facilities in the San Gabriel Valley located approximately 15 miles from the Project Site in Irwindale or Monrovia, and the soil and any debris that could not be recycled would be hauled to Scholl Landfill, also approximately 15 miles from the Project Site. Regardless of where the soil and debris are being hauled, the haul route would be east on Garvey Avenue to the I-10 Freeway.

Construction activities would be performed in accordance with applicable Monterey Park Municipal Code (MPMC) regulations, which permit construction activities between 7:00 AM and 7:00 PM on weekdays and 9:00 AM and 6:00 PM on Saturdays, Sundays, and holidays. Project Site deliveries and staging of all equipment and materials would be organized in the most efficient manner possible within the Project Site to mitigate any temporary impacts to the neighborhood and surrounding traffic. Any temporary traffic lane closures, if required, would be reviewed, and approved by the City to ensure conformance with City standards.

Approval Actions

In order to implement the Project, the Applicant is requesting the City approve the following actions:

- Specific Plan: Approval of the Specific Plan for the 1688 West Garvey Avenue Residential Project. The Specific Plan includes development standards and design guidelines to guide the development of the proposed single-family residences on the Project Site.
- Zone Change: Zone change from zone R-3 (High Density Residential) to 1688 Garvey Specific Plan.
- Vesting Tentative Tract Map: Approval of the VTTM for the 17-Lot subdivision for residential and open space purposes.
- Development Agreement: Approval of the Development Agreement for the proposed property.

Surrounding land uses and setting: Briefly describe the project's surroundings:

The Project Site is bordered by West Garvey Avenue on the north and east and Abajo Drive to the east and south as shown in **Figure 26: Surrounding Uses**. St. Steven's Serbian Orthodox Church is located north of the Site and Garvey Avenue, with single-family residences located north of the church. The Abajo del Sol senior apartment complex is located east of the Project Site between Abajo Drive and S. Fremont Ave. Auto repair uses are located between South Fremont Avenue, Garvey Avenue, and Monterey Pass Road. Single-family residences are located west of the Project Site.

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

None.

Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to PRC Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Letters notifying tribal representatives of the Proposed Project and the opportunity to consult were mailed on July XX, 2020. No responses were received requesting consultation.

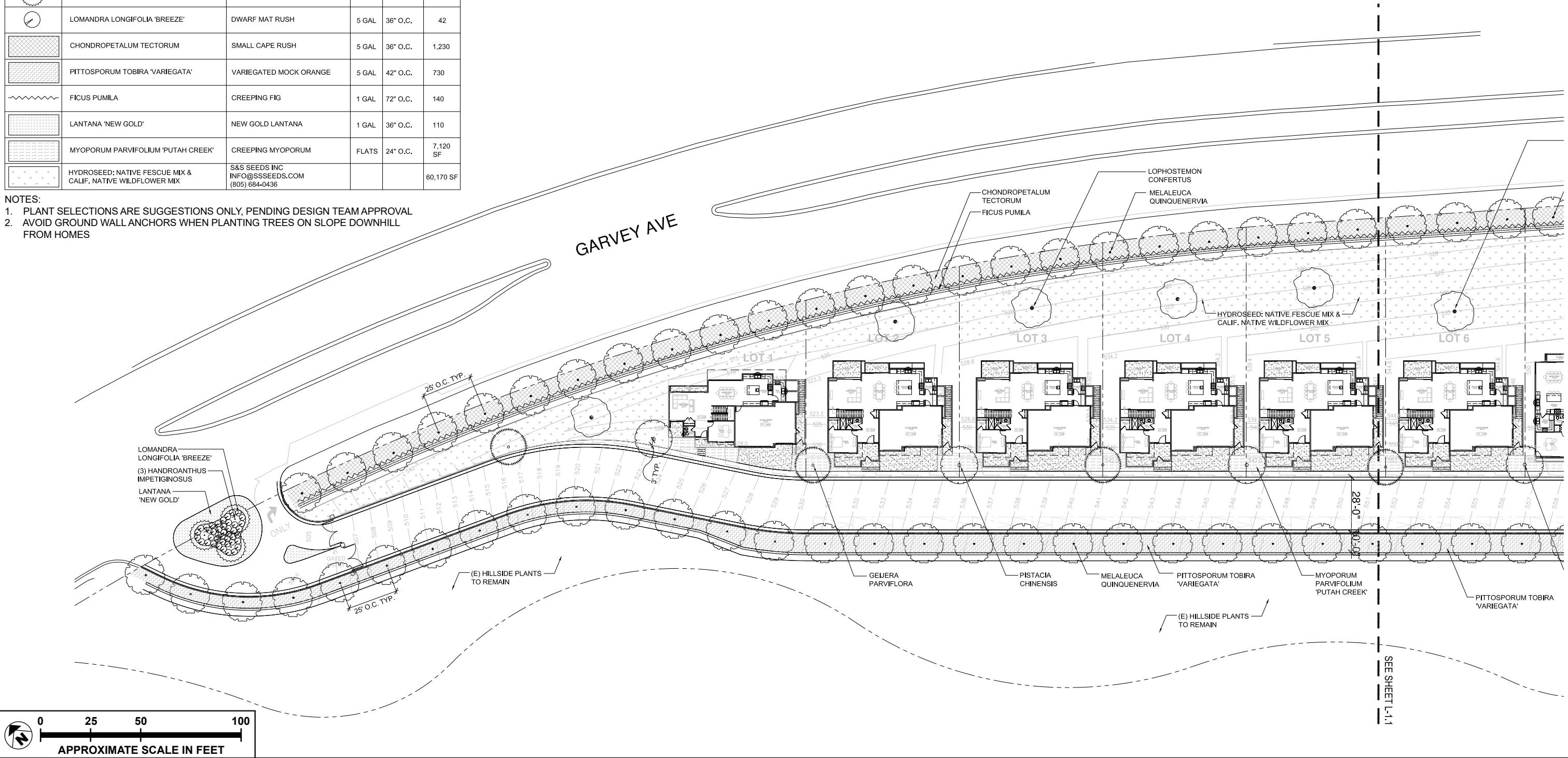
Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and Project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 20803.3.2) Information may also be available from the California Native American Heritage commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office Historical Preservation. Please also note that PRC Section 20892.3(c) contains provisions specific to confidentiality.

PLANTING LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
	MELALEUCA QUINQUENERVIA	PAPERBARK TREE	36" BOX	25' O.C.	83
	LOPHOSTEMON CONFERTUS (TRISTANIA CONFERTA)	BRISBANE BOX	36" BOX	PER PLAN	14
	PISTACIA CHINENSIS	CHINESE PISTACHE	36" BOX	PER PLAN	10
	GEJERA PARVIFLORA	AUSTRALIAN WILLOW	36" BOX	PER PLAN	10
	HANDROANTHUS IMPETIGINOSUS	PINK TRUMPET TREE	36" BOX	PER PLAN	3
	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH	5 GAL	36" O.C.	42
	CHONDROPETALUM TECTORUM	SMALL CAPE RUSH	5 GAL	36" O.C.	1,230
	PITTOSPORUM TOBIRA 'VARIEGATA'	VARIEGATED MOCK ORANGE	5 GAL	42" O.C.	730
	FICUS PUMILA	CREEPING FIG	1 GAL	72" O.C.	140
	LANTANA 'NEW GOLD'	NEW GOLD LANTANA	1 GAL	36" O.C.	110
	MYOPORUM PARVIFOLIUM 'PUTAH CREEK'	CREEPING MYOPORUM	FLATS	24" O.C.	7,120 SF
	HYDROSEED: NATIVE FESCUE MIX & CALIF. NATIVE WILDFLOWER MIX	S&S SEEDS INC INFO@SSSEEDS.COM (805) 684-0436			60,170 SF

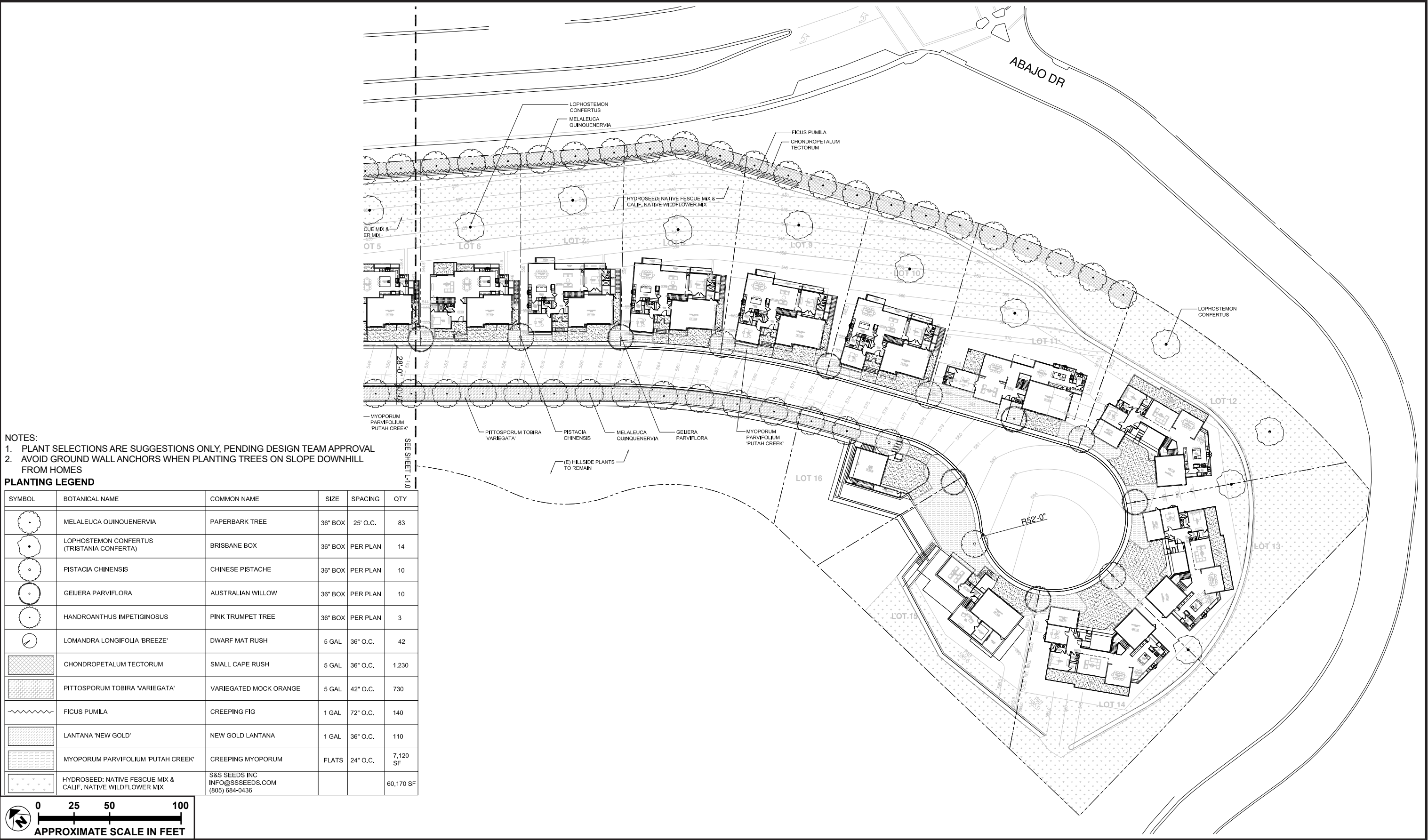
NOTES:

1. PLANT SELECTIONS ARE SUGGESTIONS ONLY, PENDING DESIGN TEAM APPROVAL
2. AVOID GROUND WALL ANCHORS WHEN PLANTING TREES ON SLOPE DOWNHILL FROM HOMES



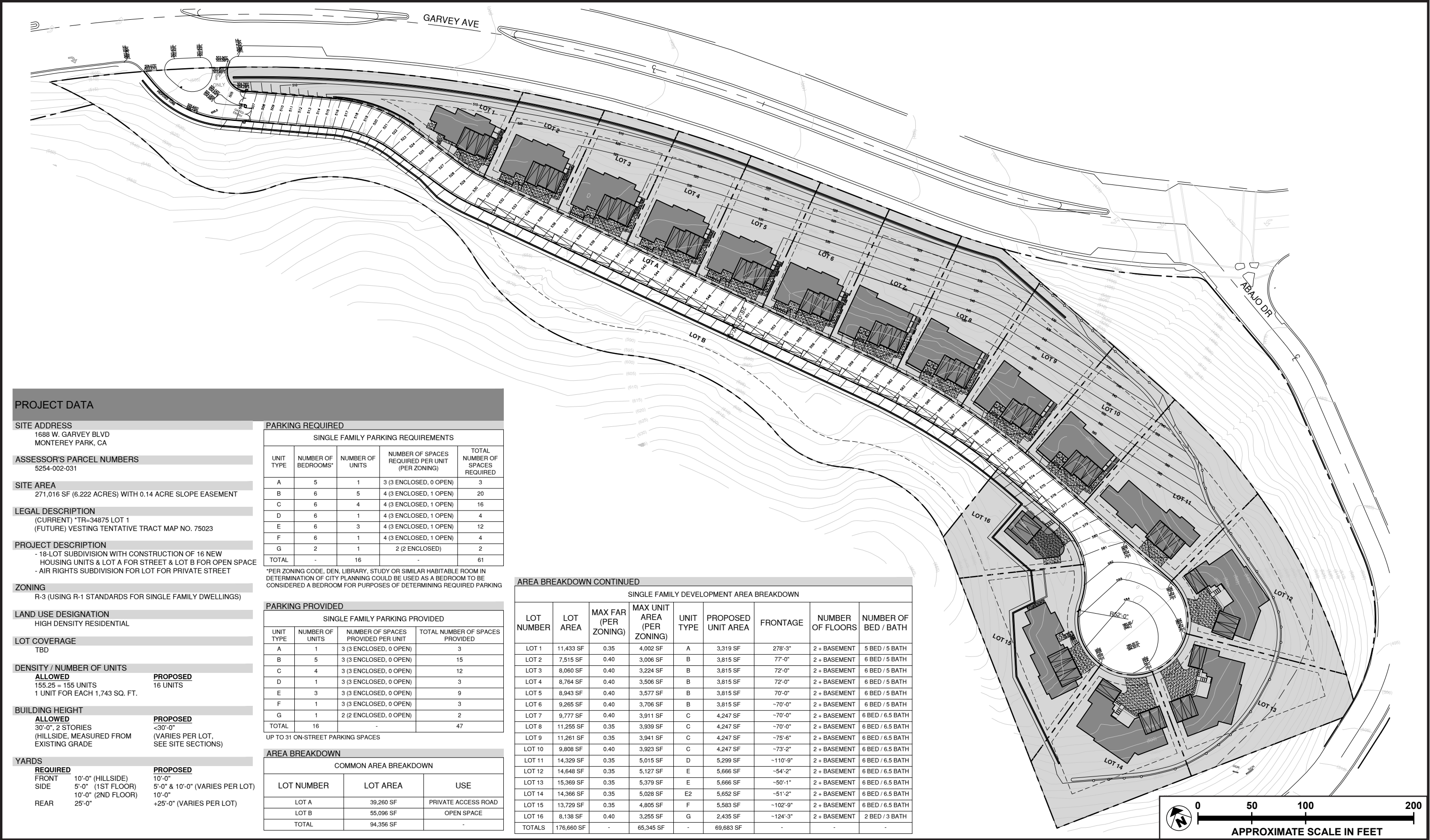
SOURCE: Orange Street Studio - February 6, 2020

FIGURE 7



SOURCE: Orange Street Studio - February 6, 2020

FIGURE 8



SOURCE: SLSD Inc. - January 2020

FIGURE 9



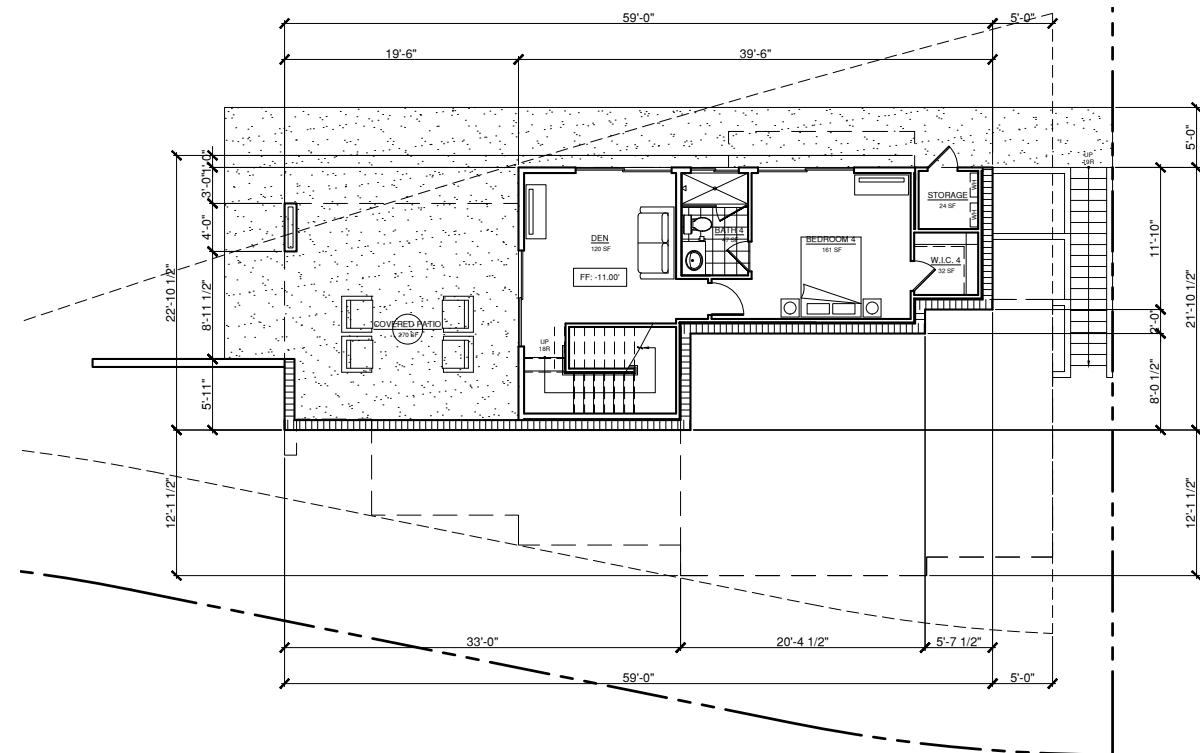
SOURCE: SLSD Inc. - January 2020

FIGURE 10

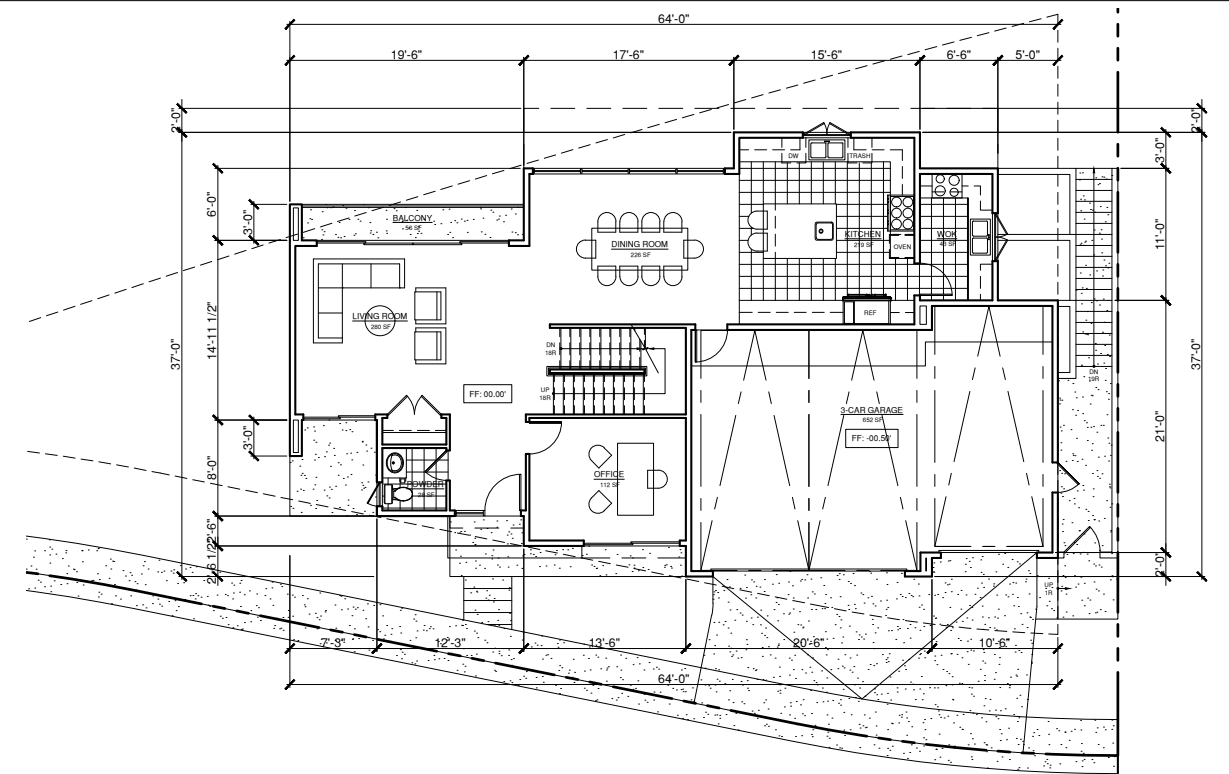


SOURCE: SLSD Inc. - January 2020

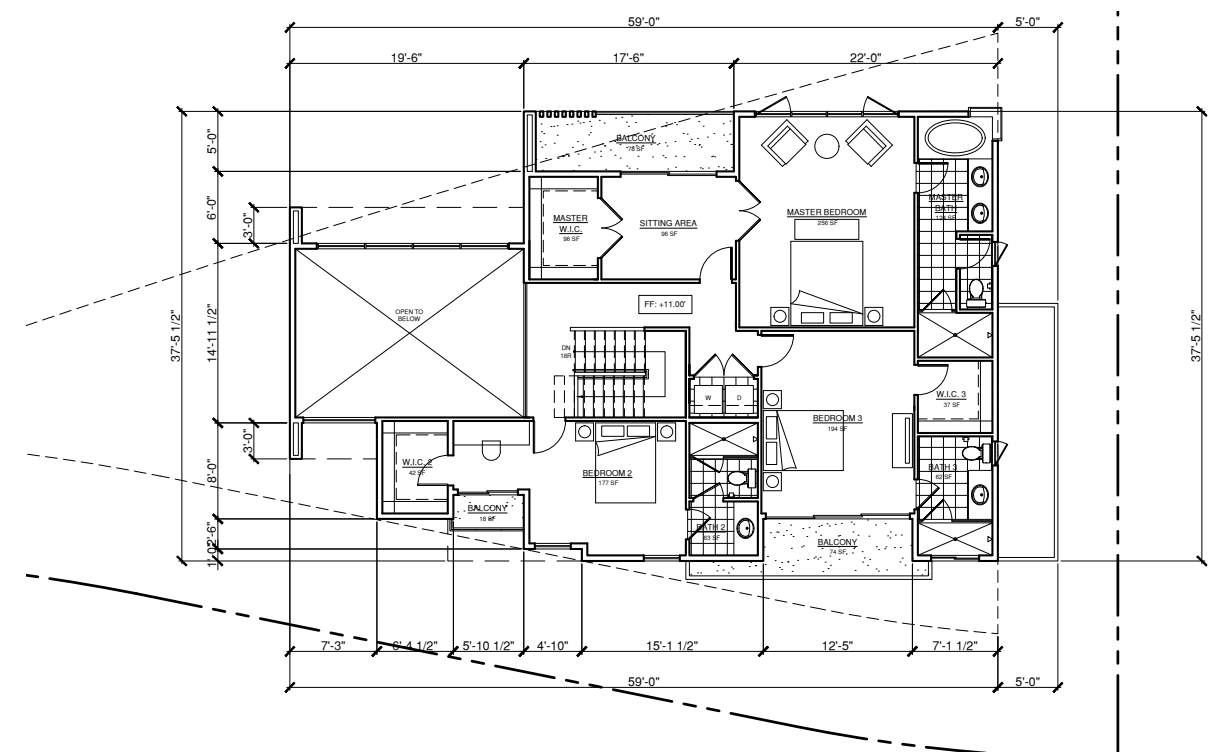
FIGURE 11



BASEMENT FLOOR PLAN
566 SF LIVING

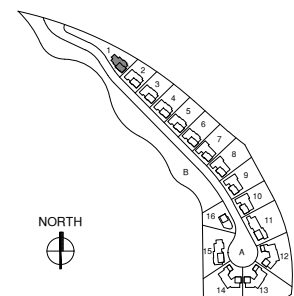


1ST FLOOR PLAN
1,101 SF LIVING
652 SF GARAGE

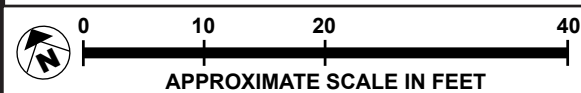


2ND FLOOR PLAN
1,652 SF LIVING

SITE KEY

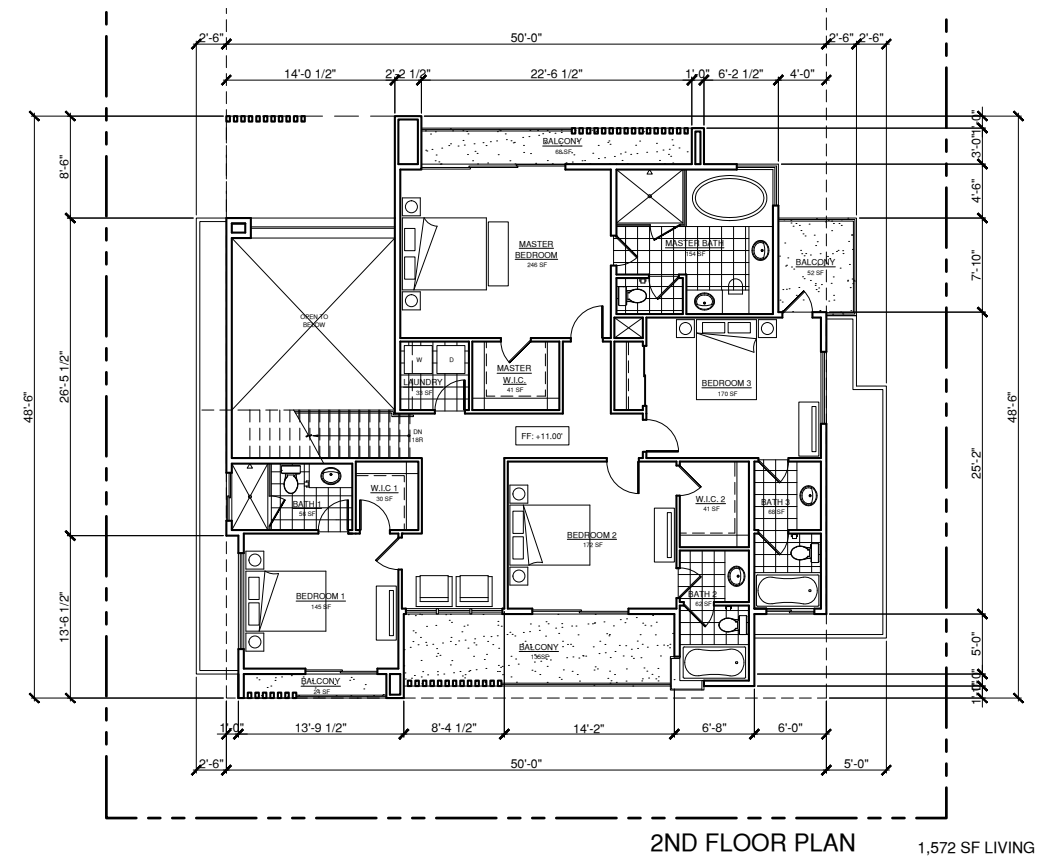
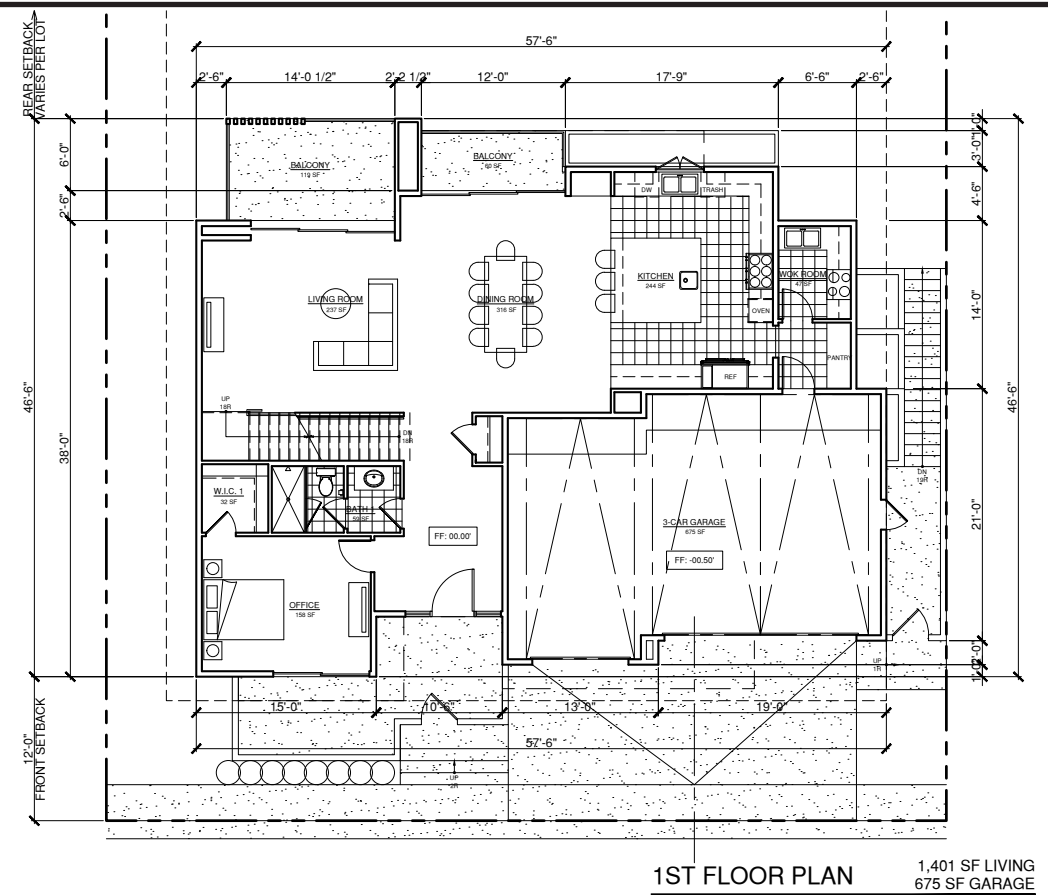
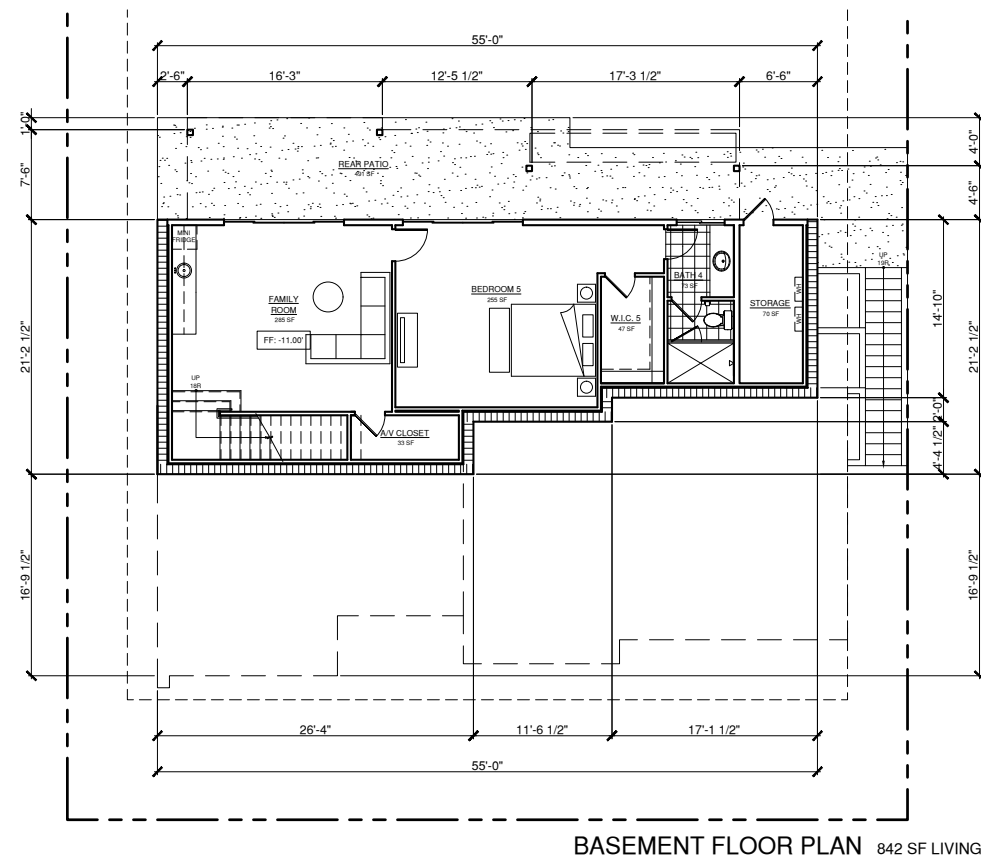


TYPE A FLOOR PLANS - 3,319 SF

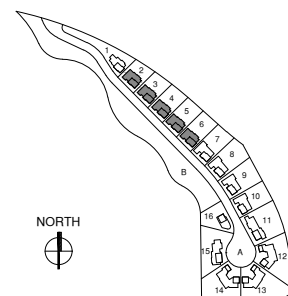


SOURCE: SLSD Inc. - 2020

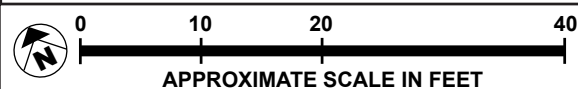
FIGURE 12



SITE KEY

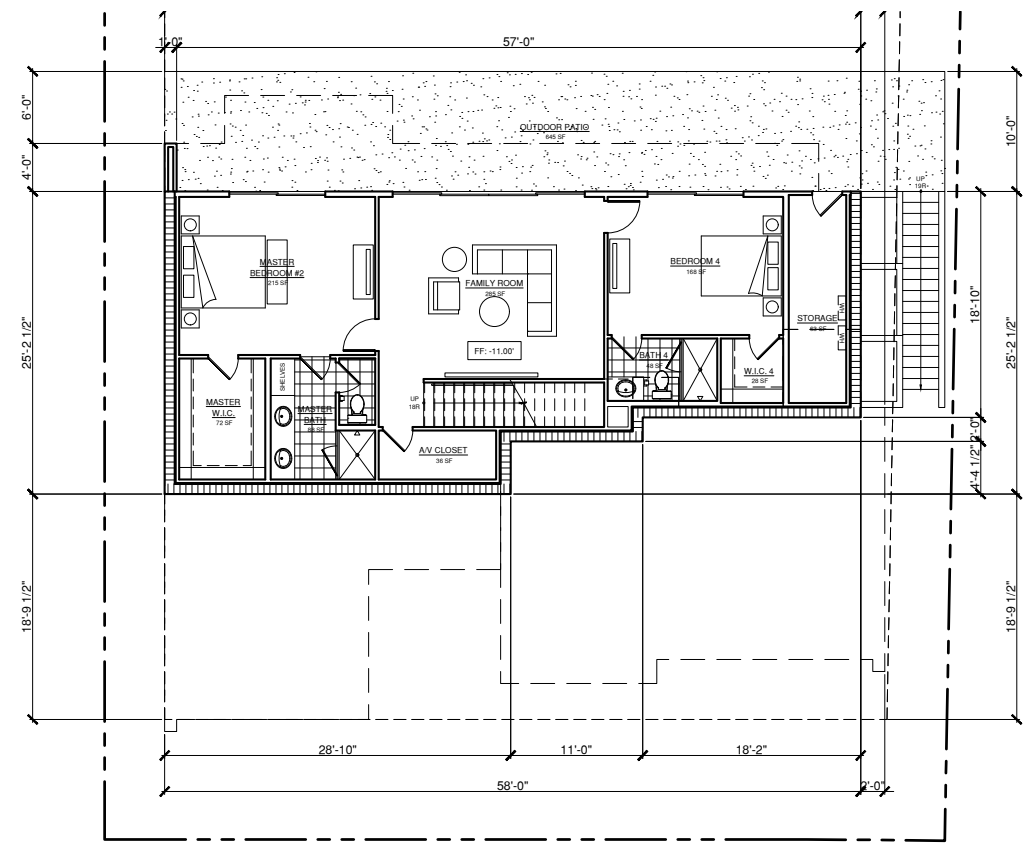


TYPE B FLOOR PLANS - 3,815 SF

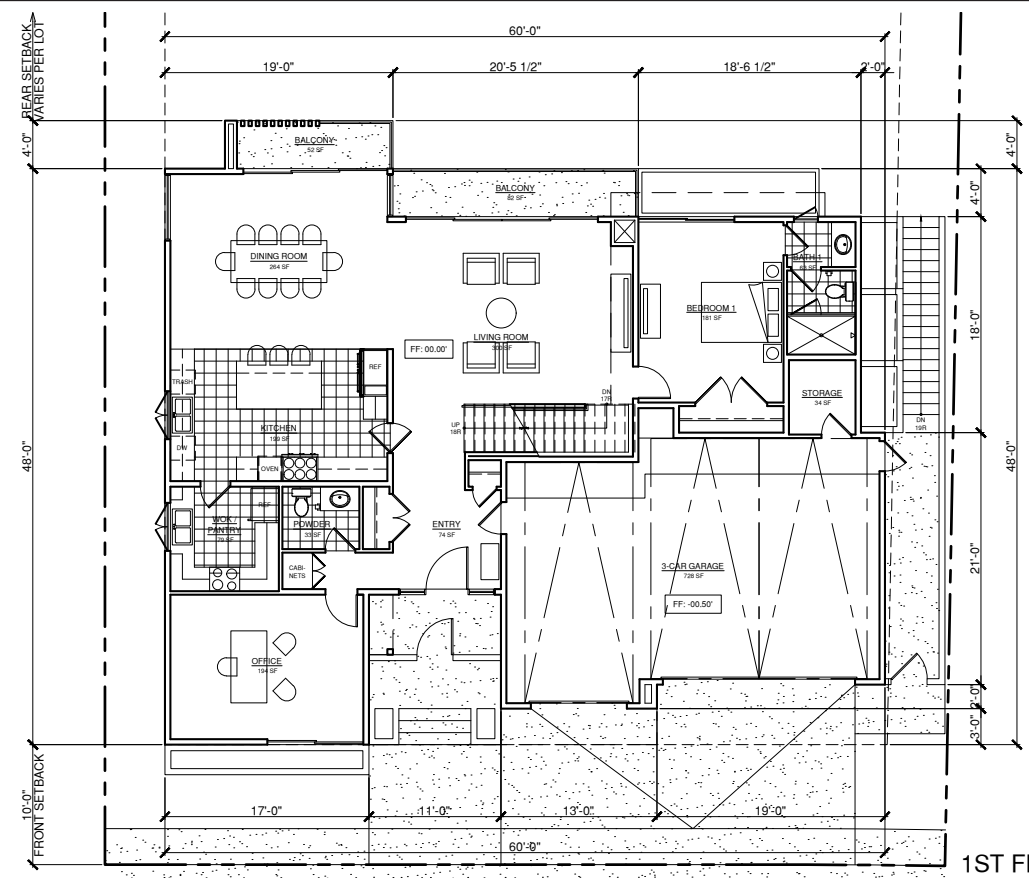


SOURCE: SLSD Inc. - 2020

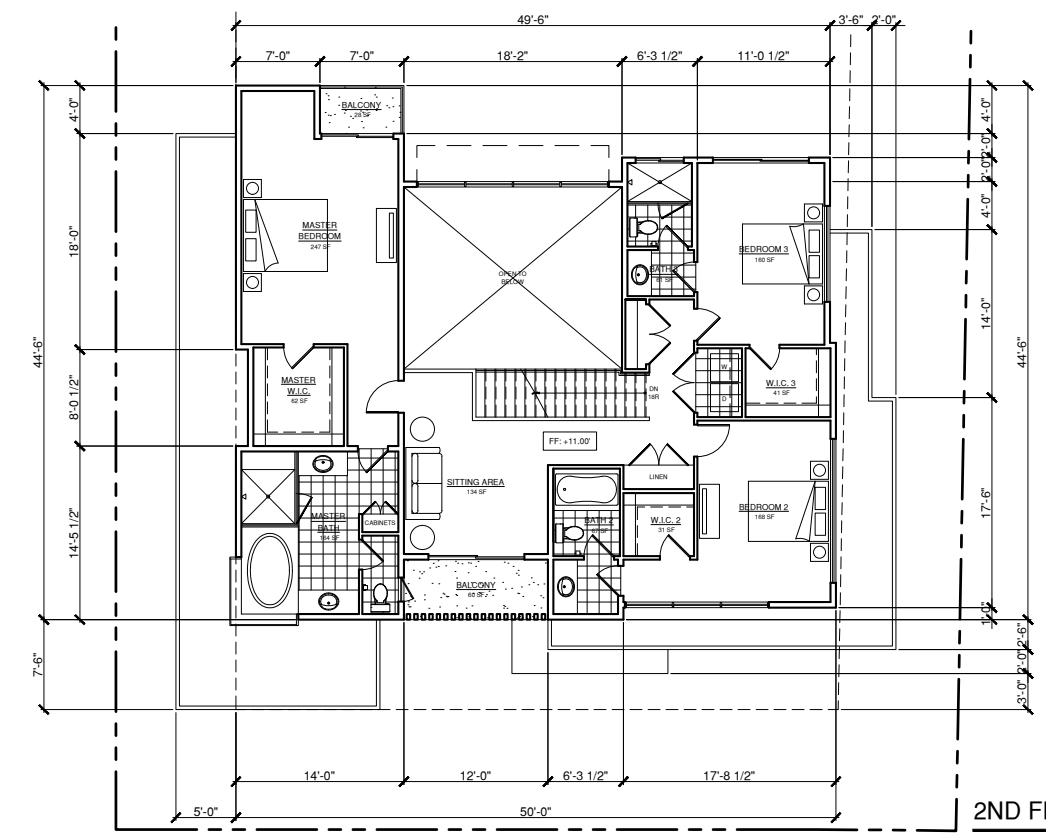
FIGURE 13



BASEMENT FLOOR PLAN
1,109 SF LIVING

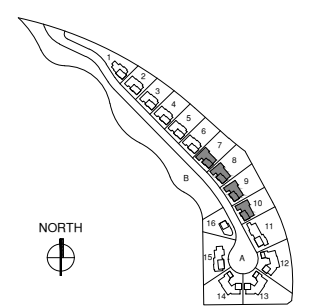


1ST FLOOR PLAN
1,620 SF LIVING
728 SF GARAGE

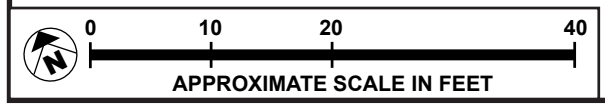


2ND FLOOR PLAN
1,518 SF LIVING

SITE KEY

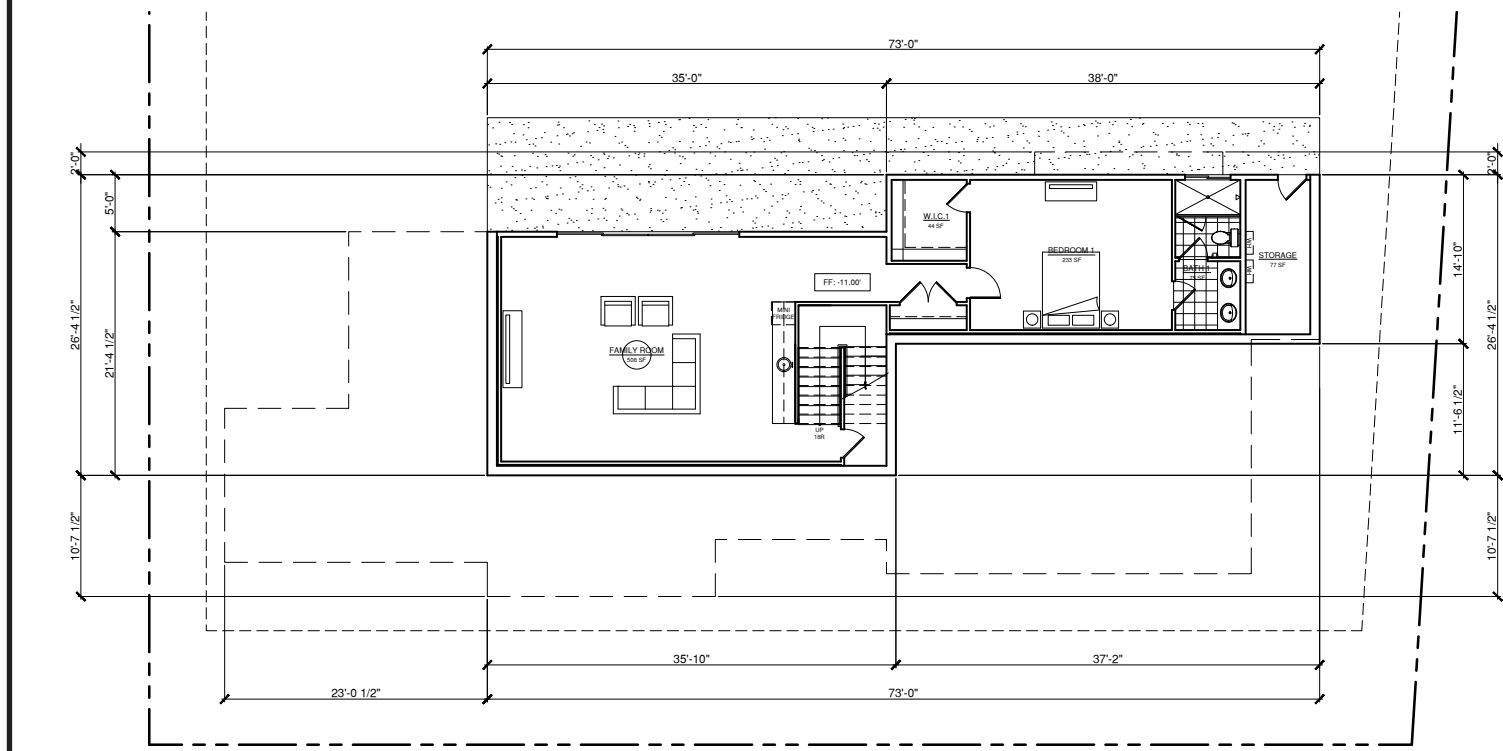


TYPE C FLOOR PLANS - 4,247 SF

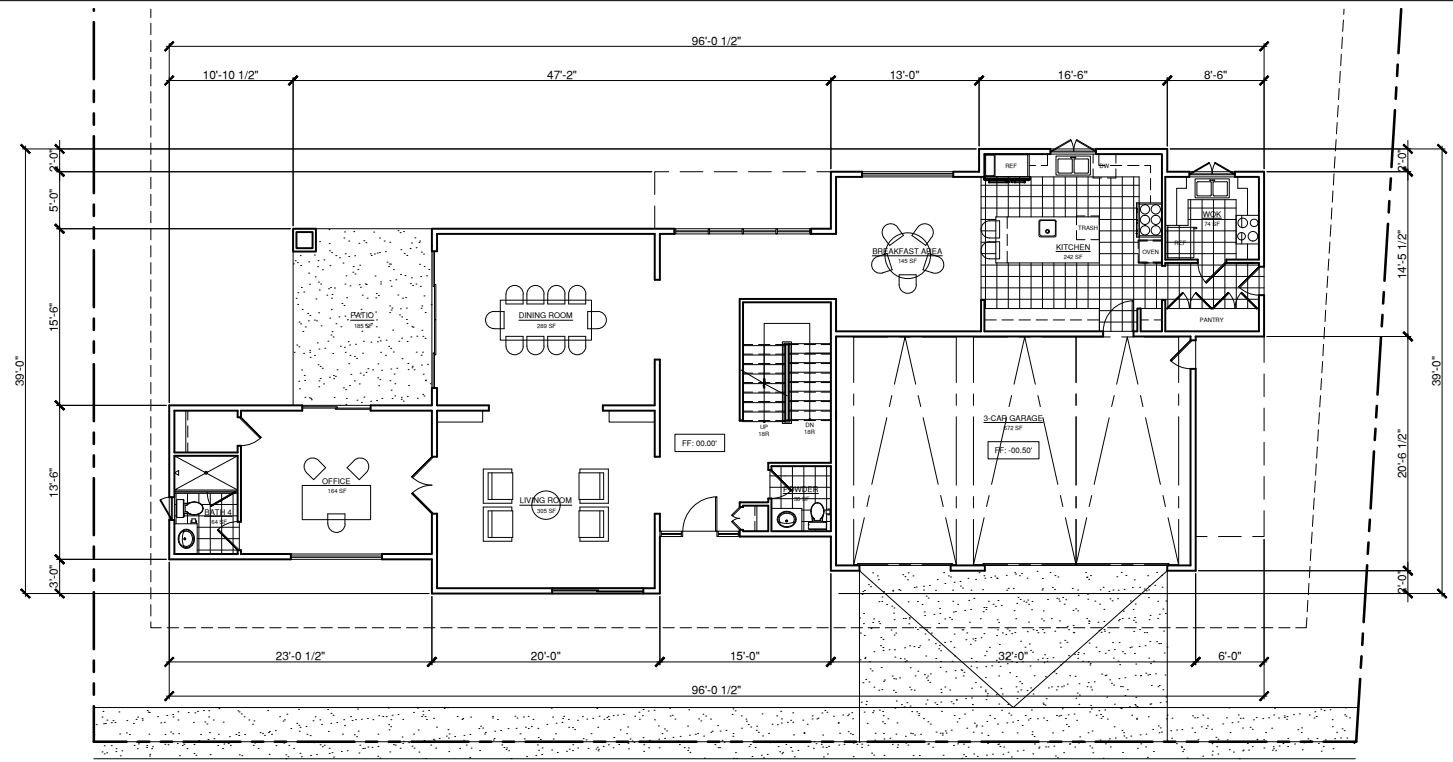


SOURCE: SLSD Inc. - 2020

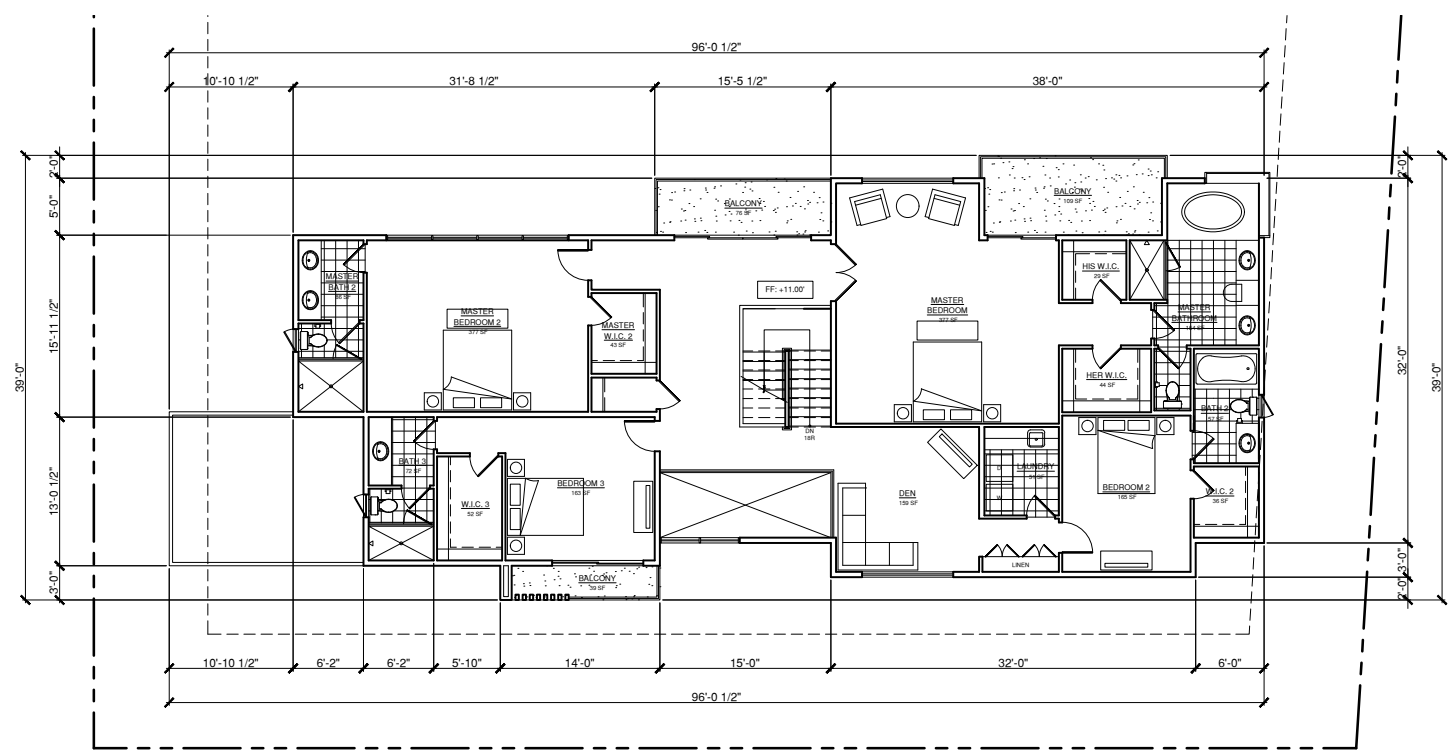
FIGURE 14



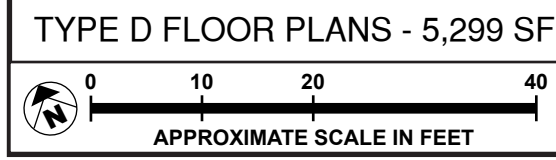
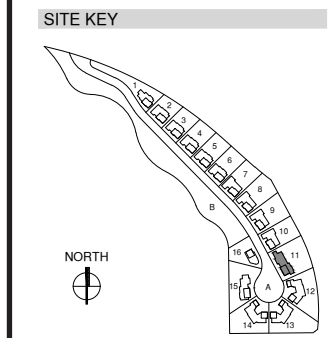
BASEMENT FLOOR PLAN
1,136 SF LIVING



1ST FLOOR PLAN
1,844 SF LIVING
672 SF GARAGE



2ND FLOOR PLAN
2,319 SF LIVING



SOURCE: SLSD Inc. - 2020

FIGURE 15

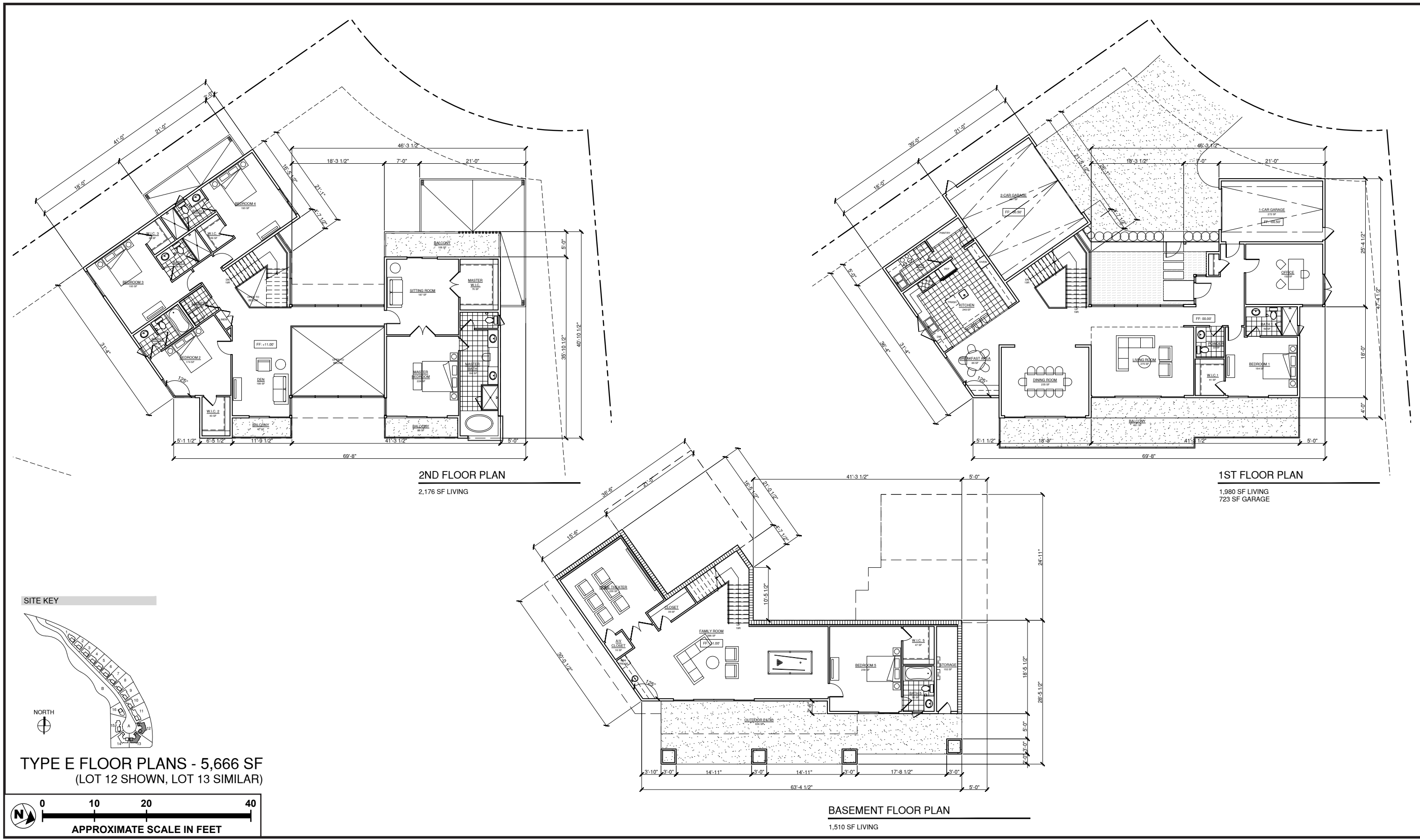
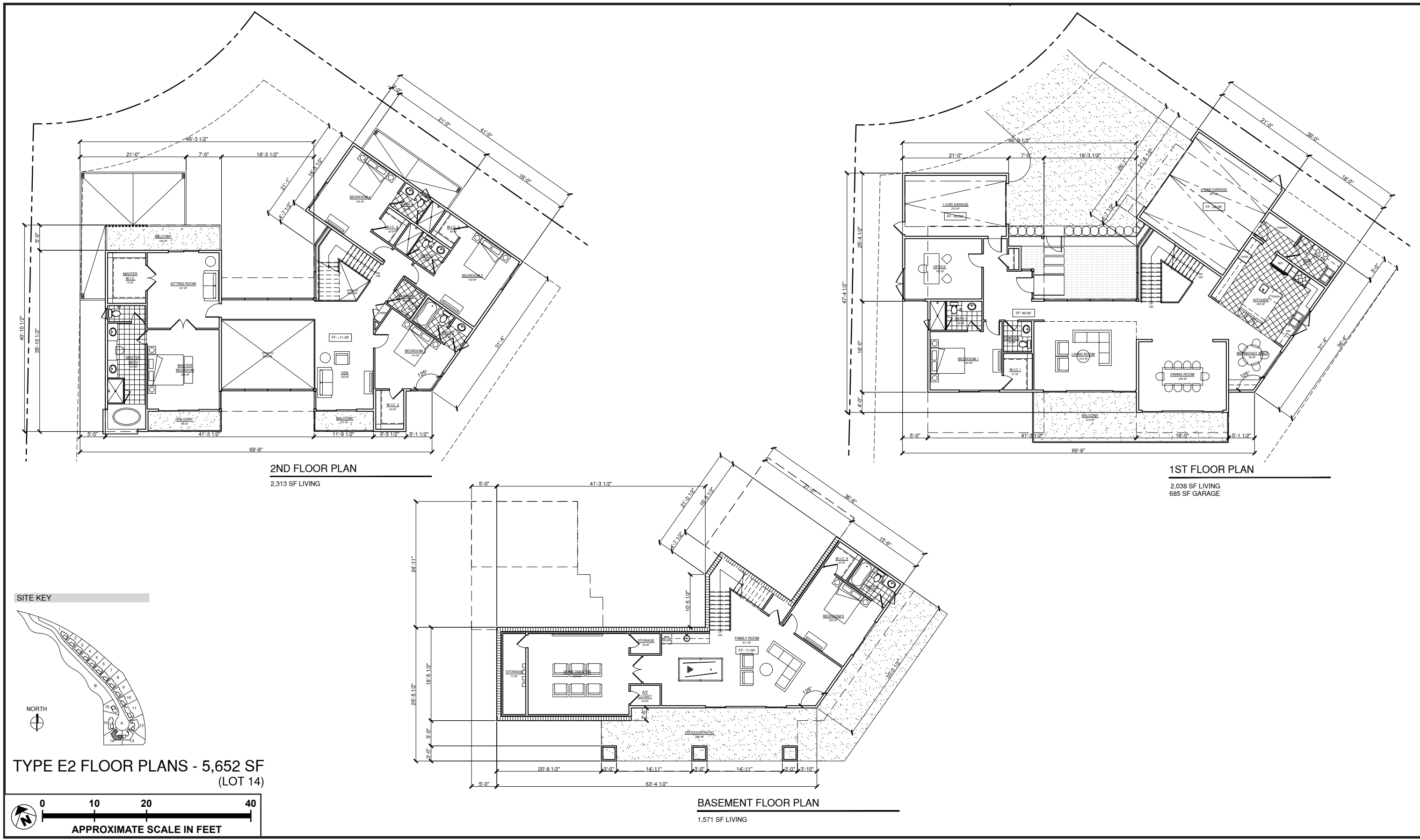


FIGURE 16



SOURCE: SLSD Inc. 2020

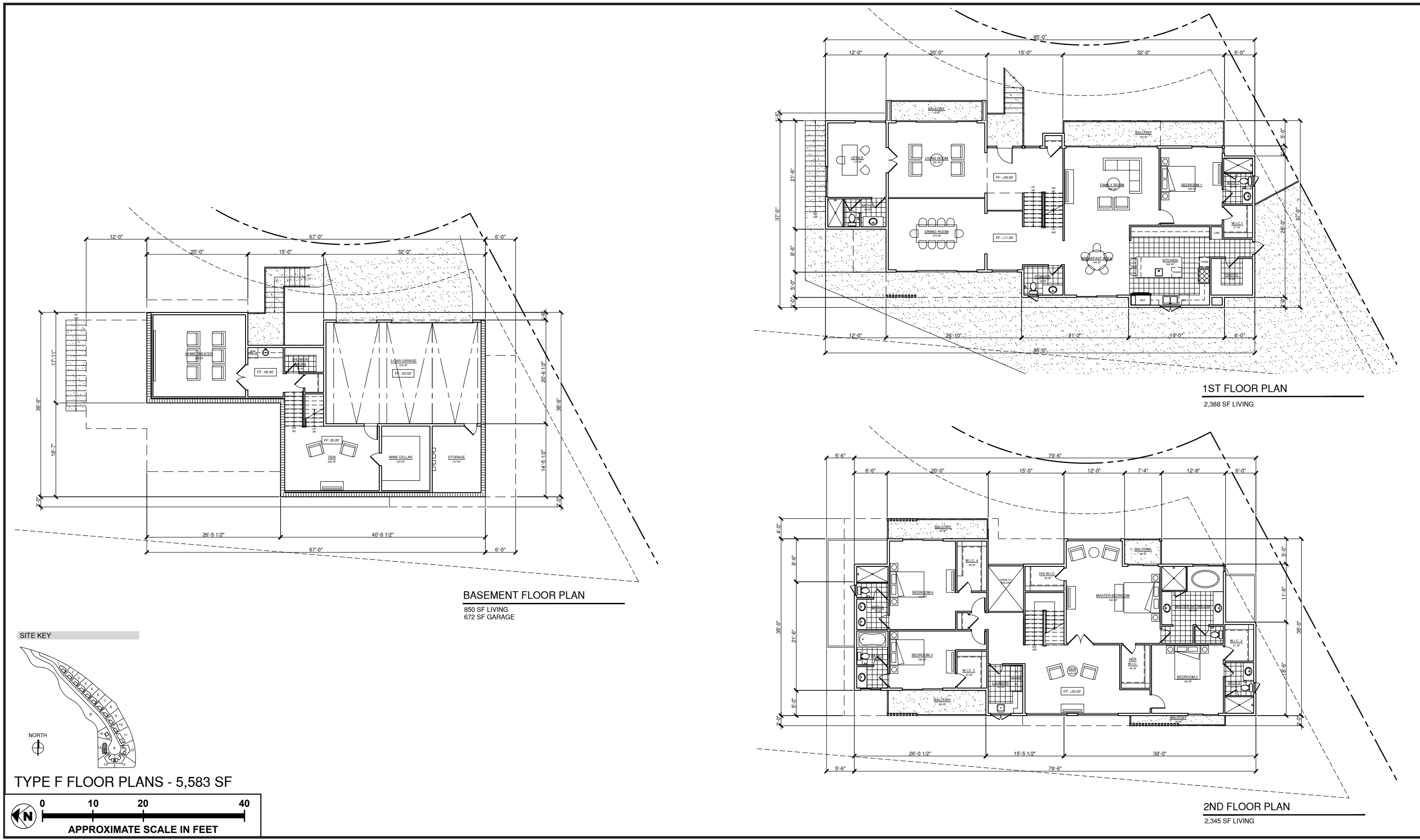
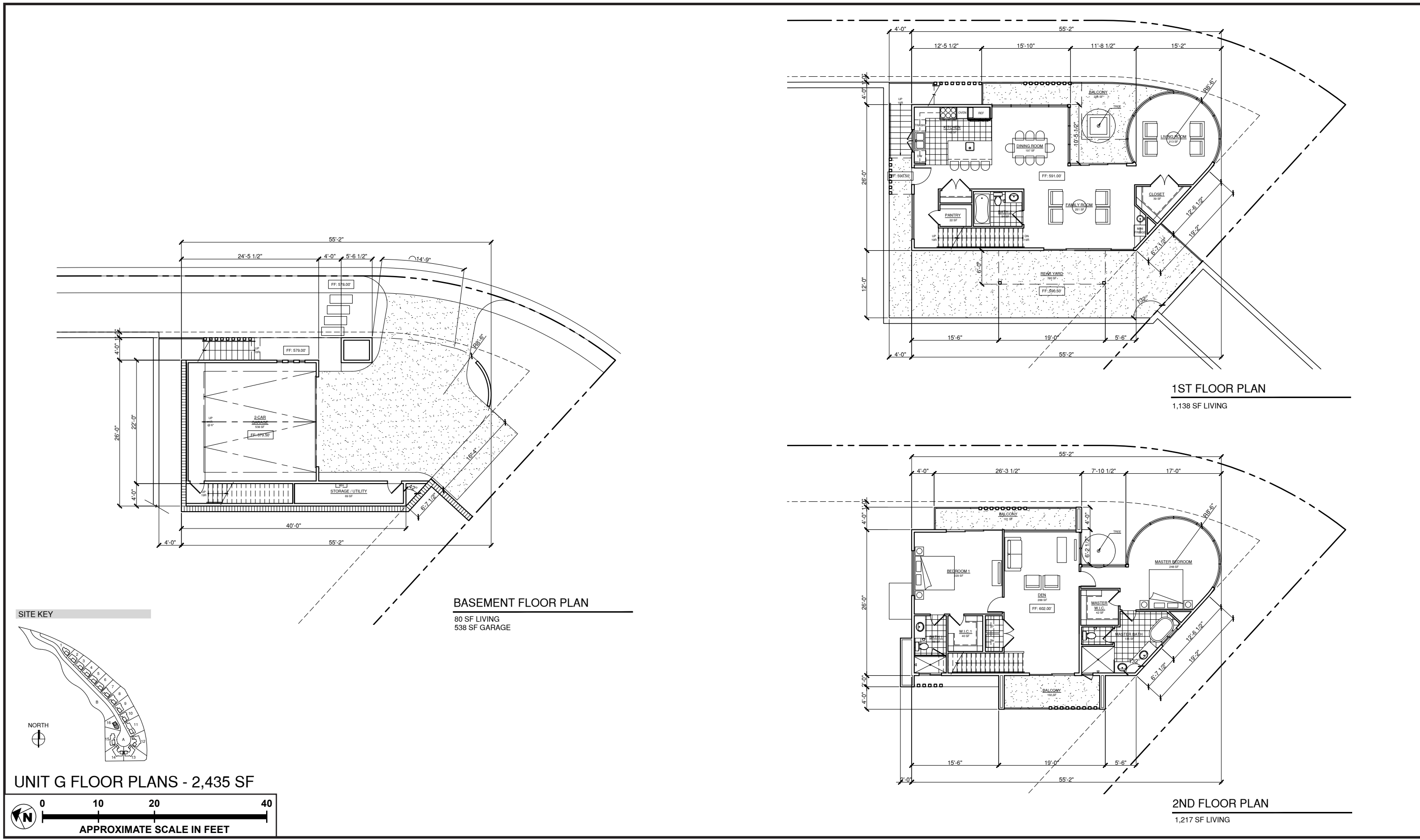


FIGURE 18



SOURCE: SLSD Inc. 2020

FIGURE 19



FRONT ELEVATION TYPICAL

- ① SWISS COFFEE EXTERIOR PLASTER SMOOTH FINISH
- ② BROWN FIBER CEMENT SIDING
- ③ GREY TEXTURED STONE VENEER
- ④ SECTIONAL GARAGE DOOR
- ⑤ DARK BRONZE ALUMINUM THERMALLY CONTROLLED WINDOWS & PATIO DOORS
- ⑥ DARK GREY FLAT CANOPY
- ⑦ VERTICAL WOOD SLATS
- ⑧ GLASS PANEL BALCONY WITH STAINLESS STEEL RAILING
- ⑨ LIGHT GREY FIBER CEMENT PANELS



REAR ELEVATION TYPICAL

- ① SWISS COFFEE EXTERIOR PLASTER SMOOTH FINISH
- ② BROWN FIBER CEMENT SIDING
- ③ GREY TEXTURED STONE VENEER
- ④ SECTIONAL GARAGE DOOR
- ⑤ DARK BRONZE ALUMINUM THERMALLY CONTROLLED WINDOWS & PATIO DOORS
- ⑥ DARK GREY FLAT CANOPY
- ⑦ VERTICAL WOOD SLATS
- ⑧ GLASS PANEL BALCONY WITH STAINLESS STEEL RAILING
- ⑨ LIGHT GREY FIBER CEMENT PANELS

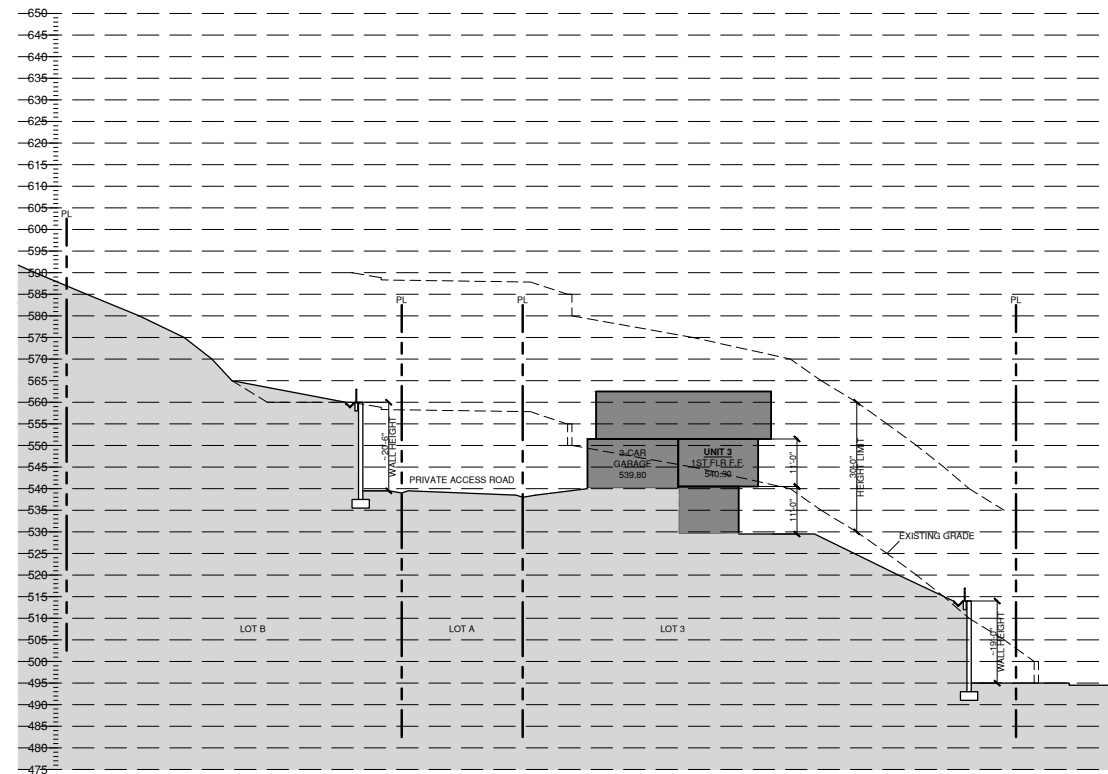
SOURCE: SLSD Inc. 2020

FIGURE 20

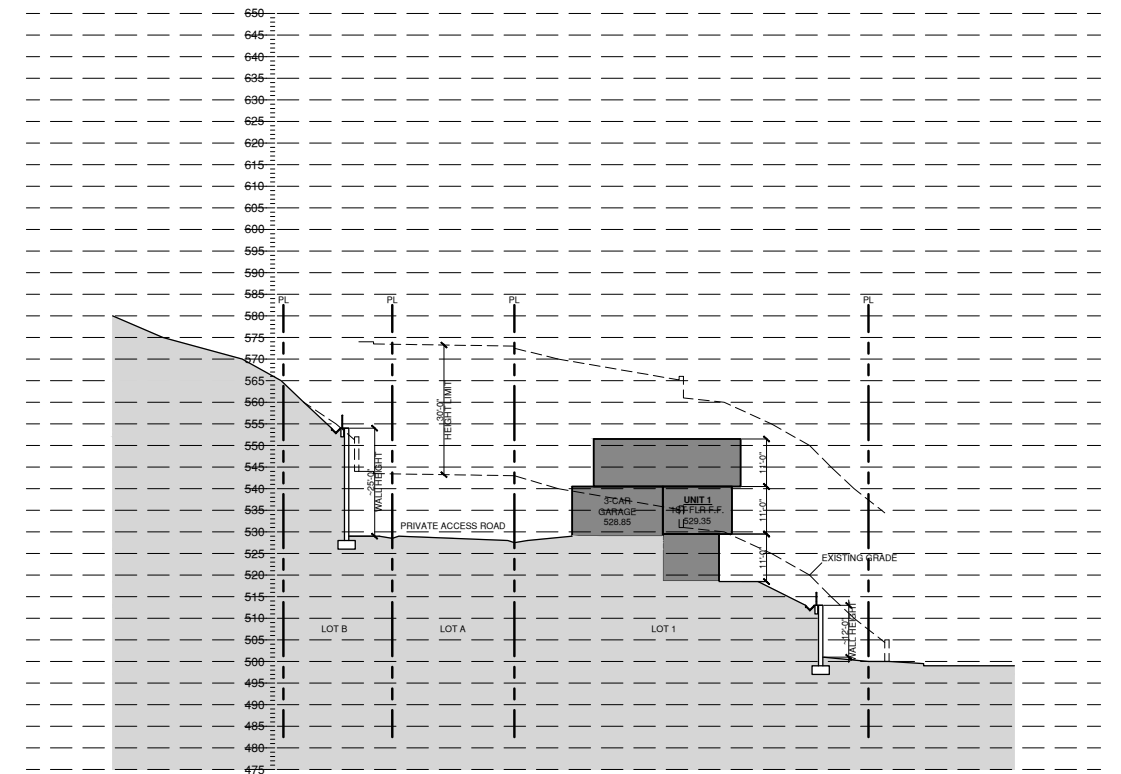


SOURCE: SLSD Inc. 2020

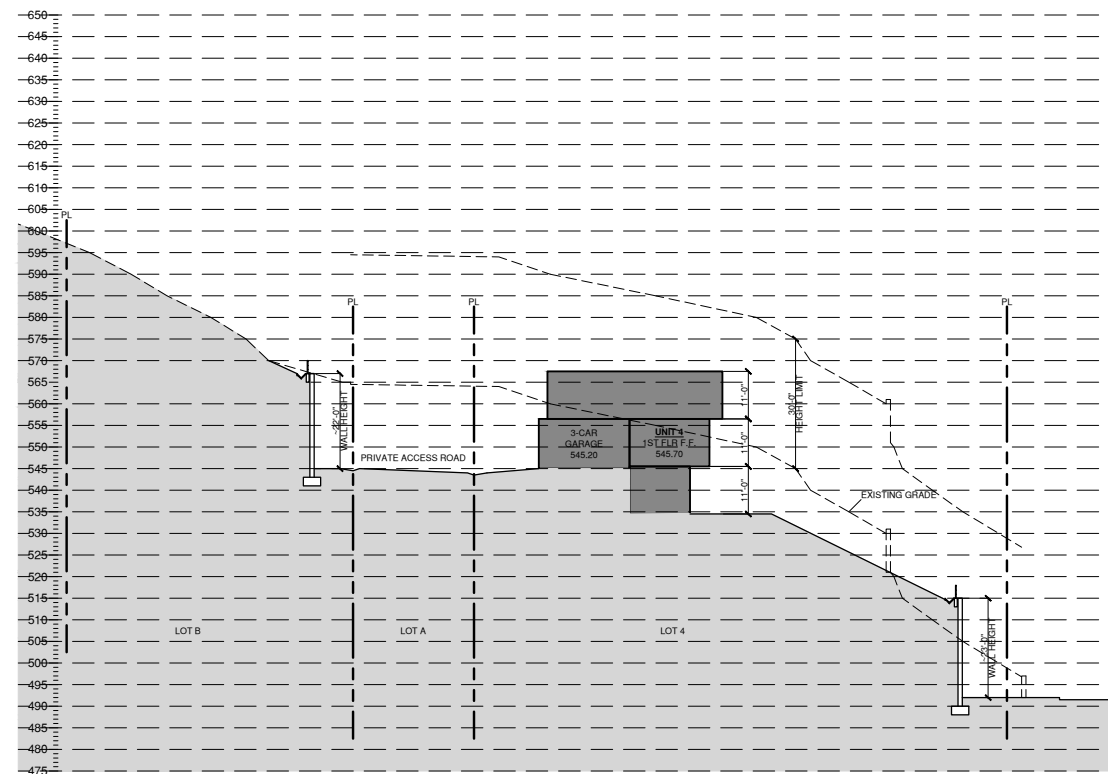
FIGURE 21



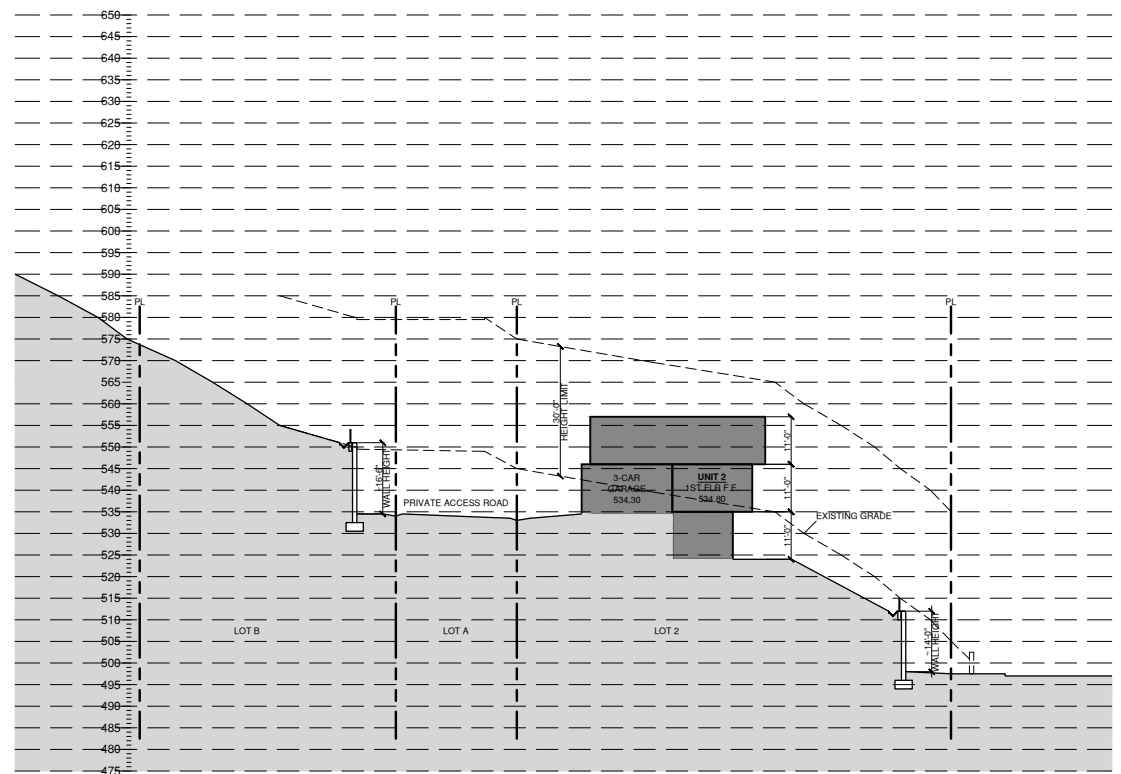
SECTION 3-3
SCALE: 1" = 20'-0"



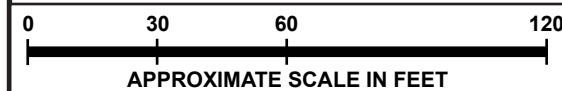
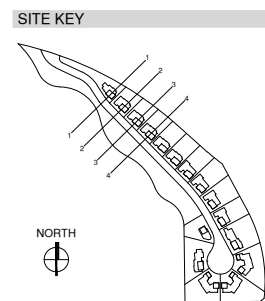
SECTION 1-1
SCALE: 1" = 20'-0"



SECTION 4-4
SCALE: 1" = 20'-0"

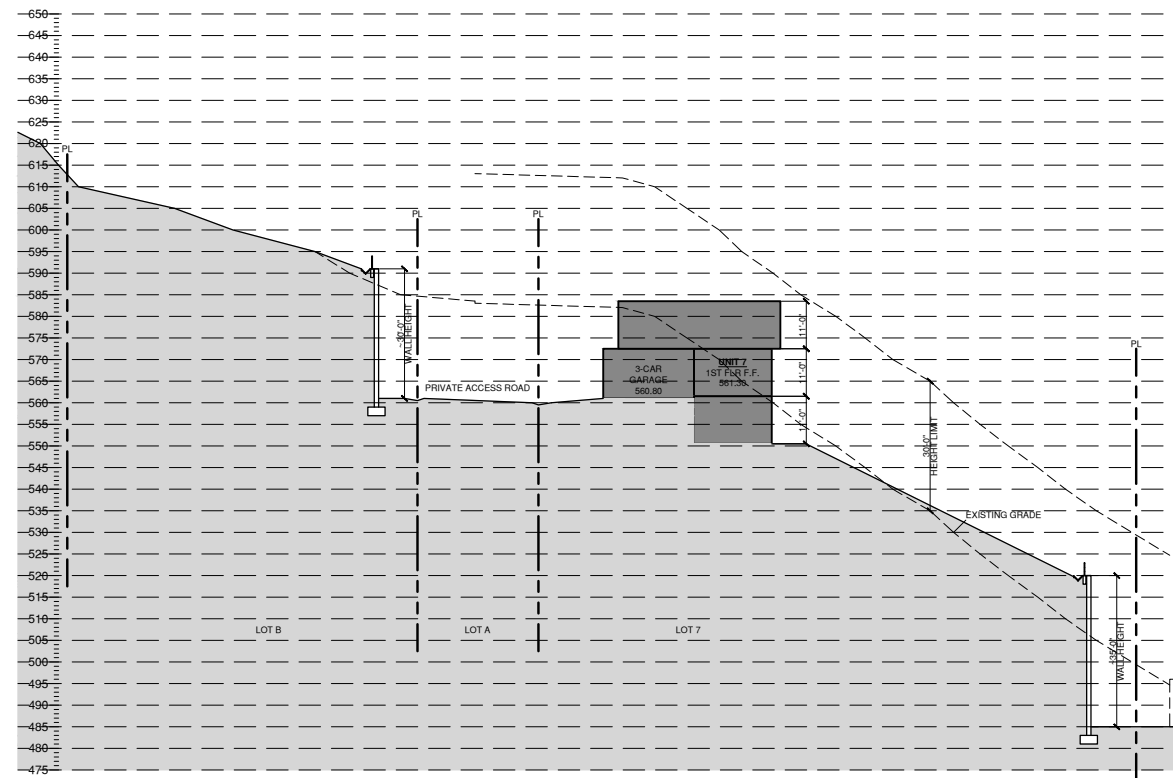


SECTION 2-2
SCALE: 1" = 20'-0"



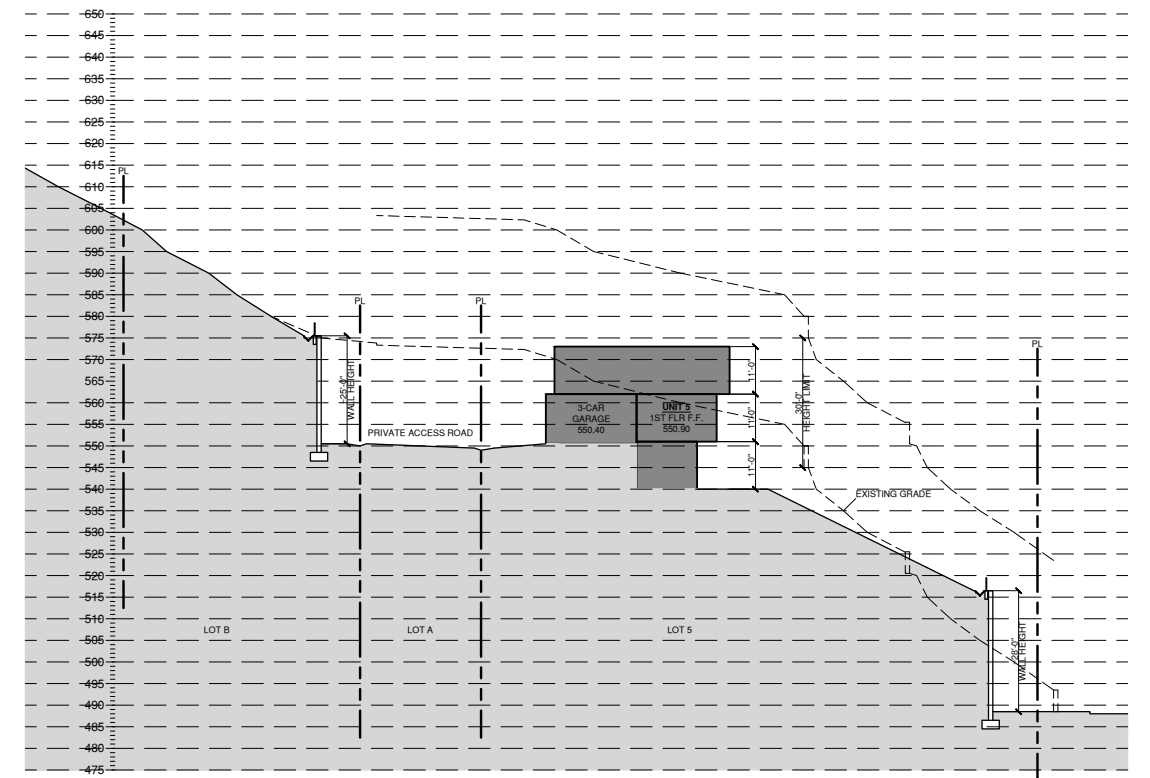
SOURCE: SLSD Inc. 2020

FIGURE 22



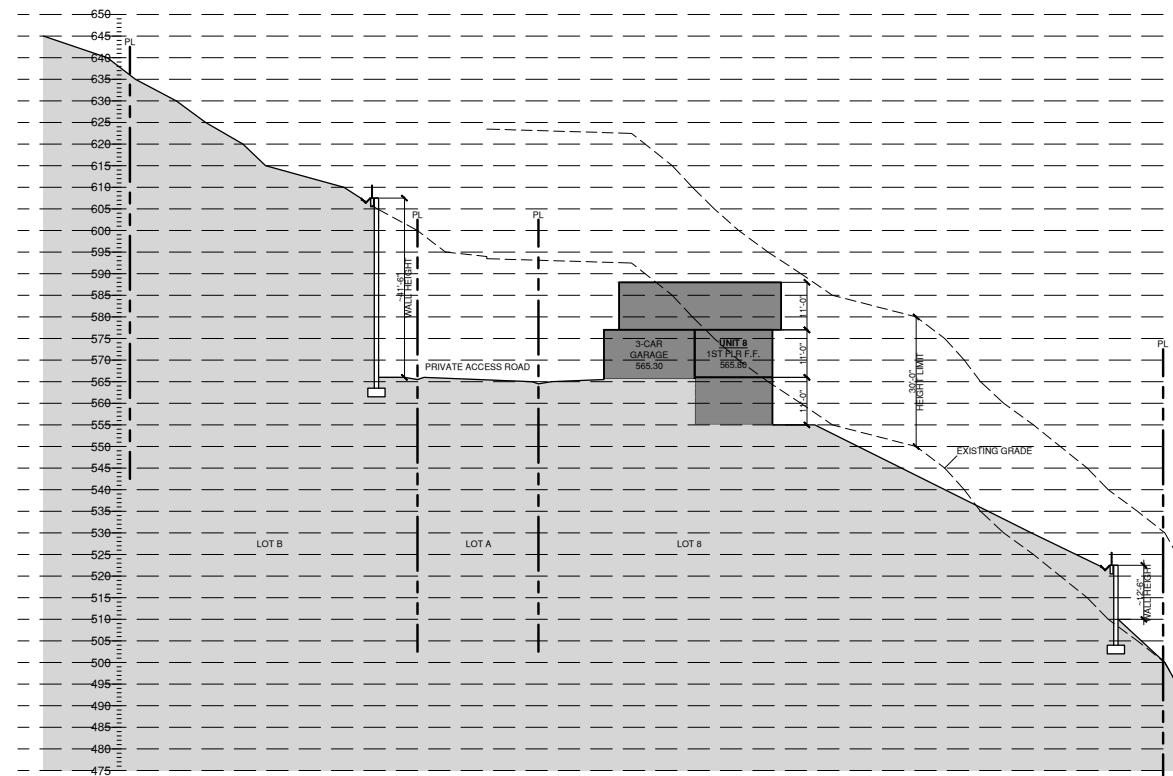
SECTION 7-7

SCALE: 1" = 20'-0"



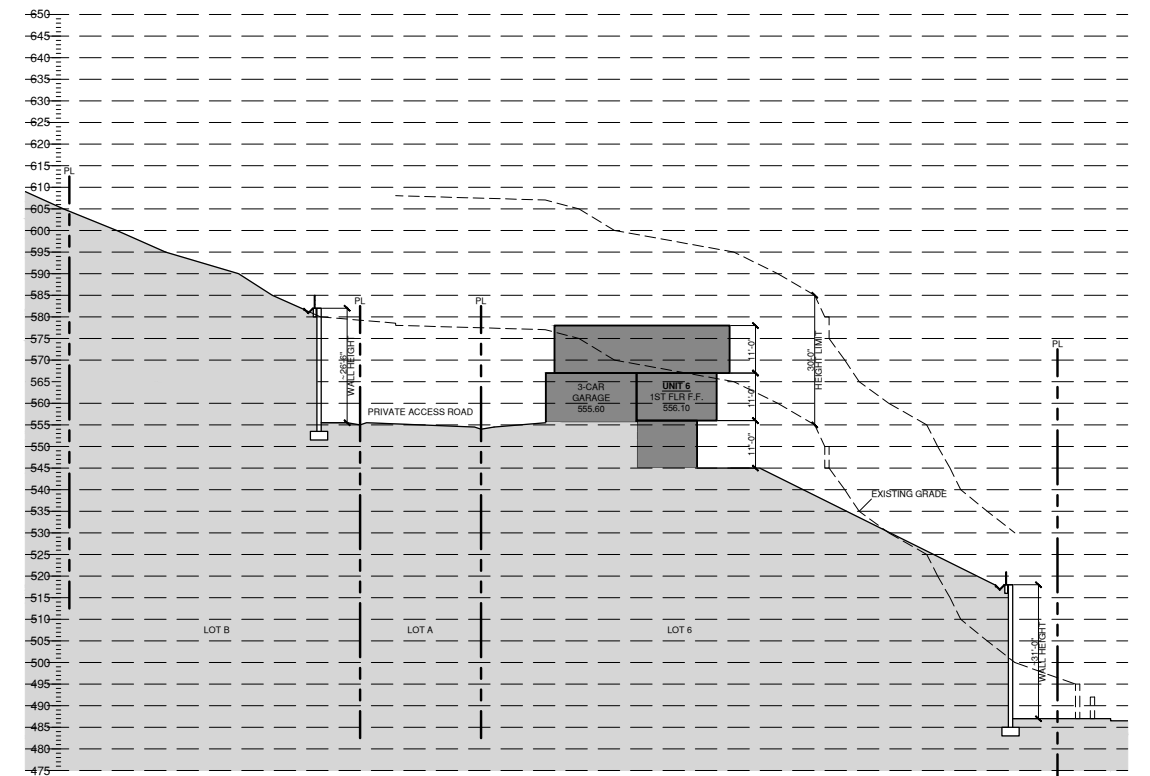
SECTION 5-5

SCALE: 1" = 20'-0"



SECTION 8-8

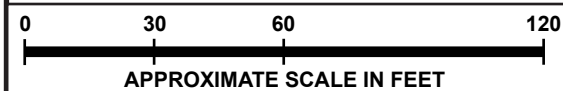
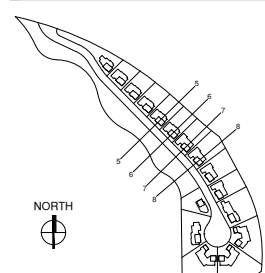
SCALE: 1" = 20'-0"



SECTION 6-6

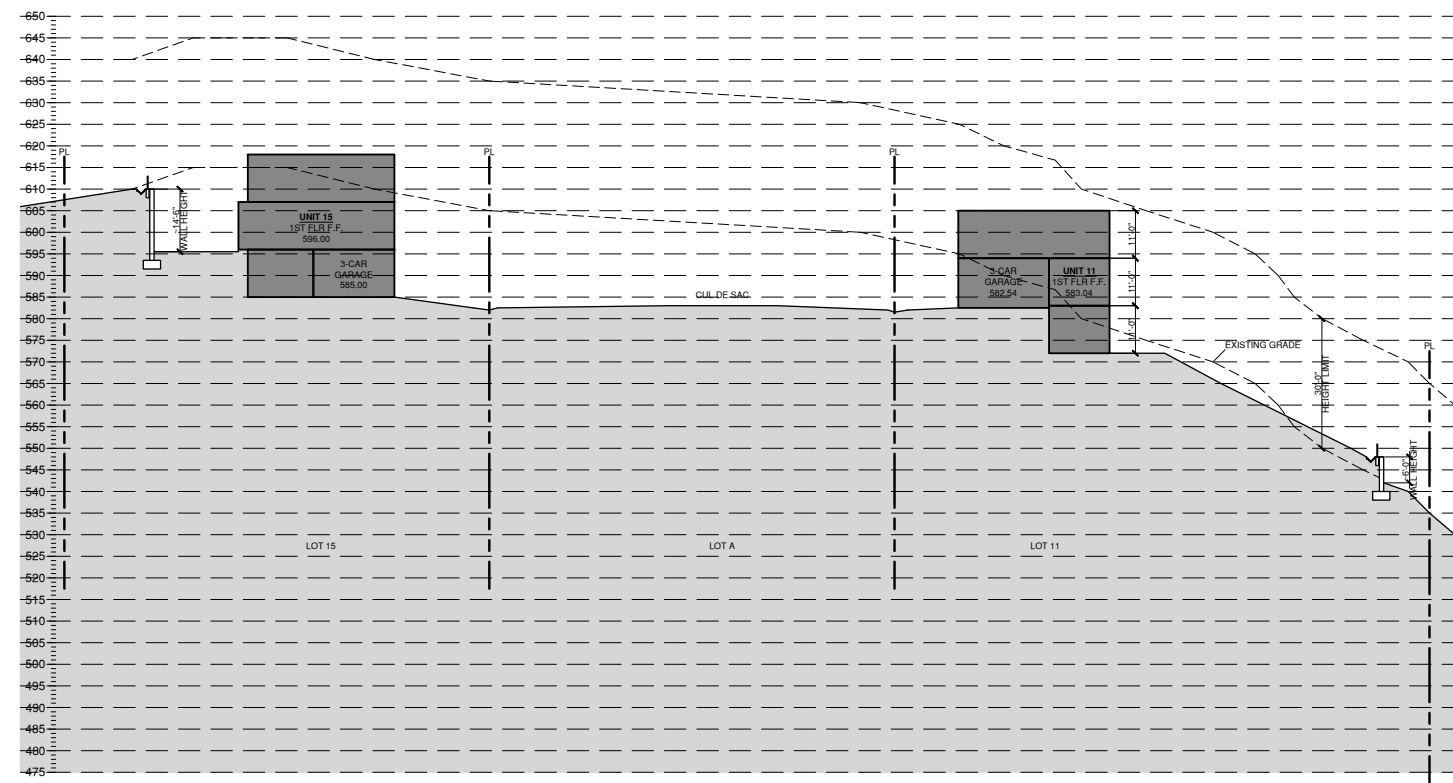
SCALE: 1" = 20'-0"

SITE KEY



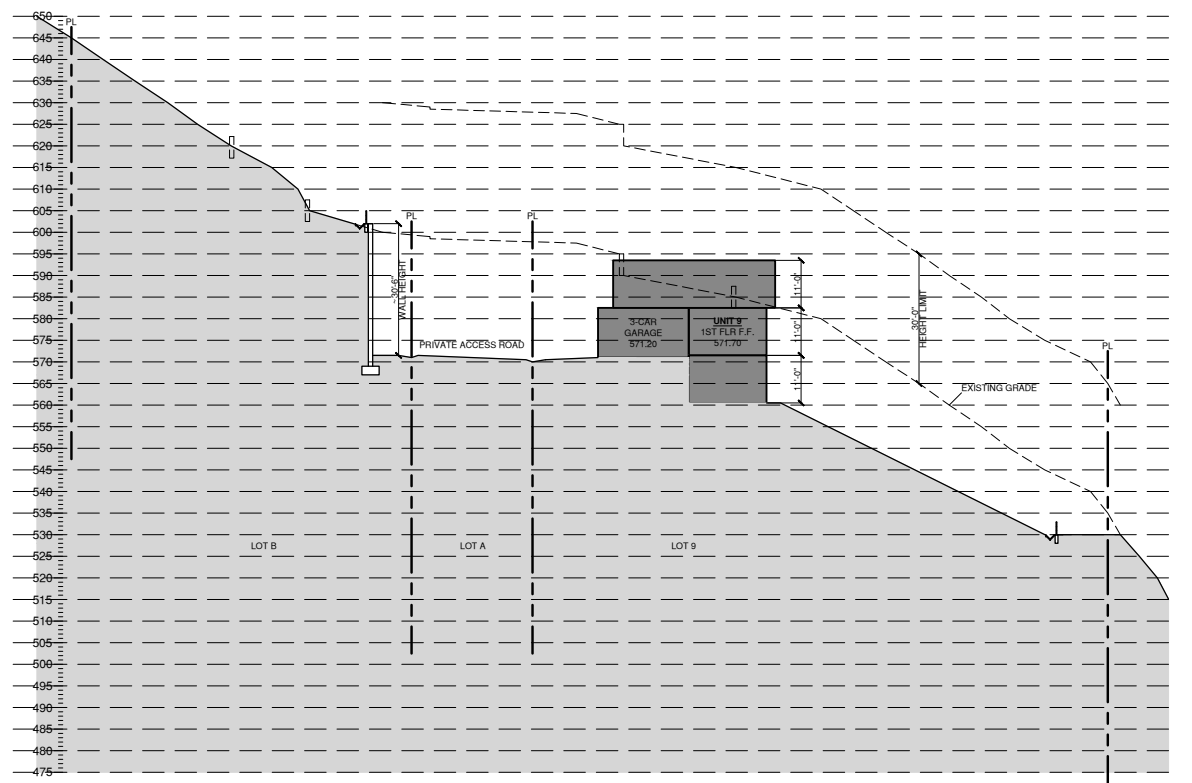
SOURCE: SLSD Inc. 2020

FIGURE 23



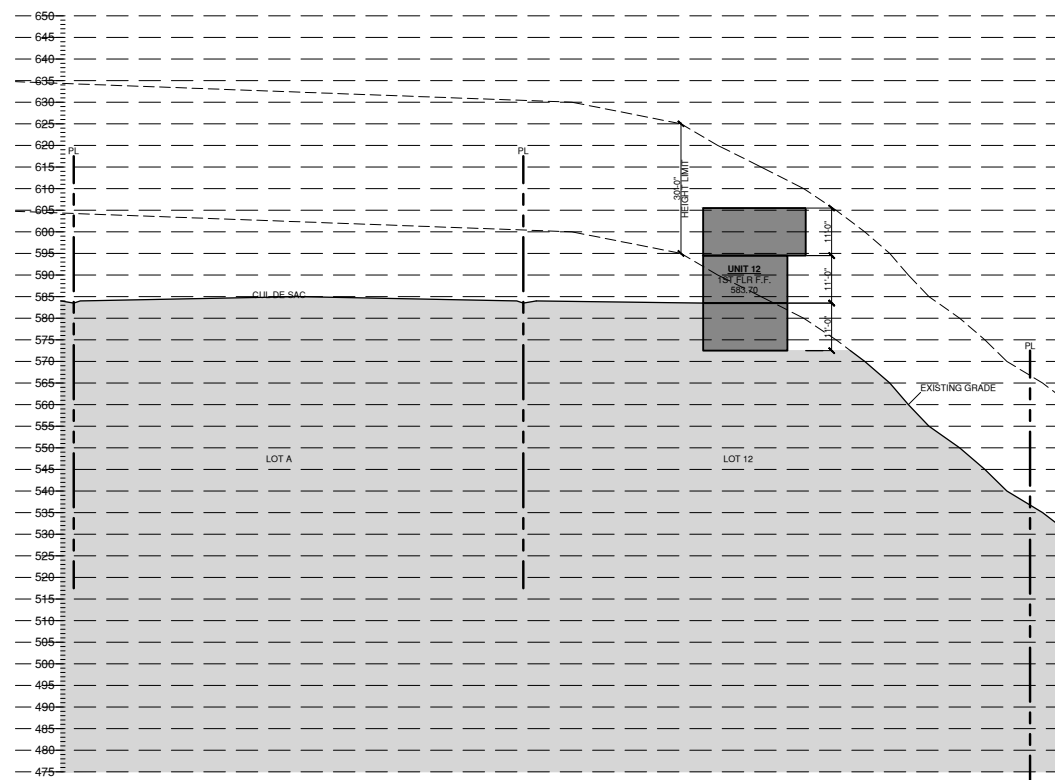
SECTION 11-11

SCALE: 1" = 20'-0"



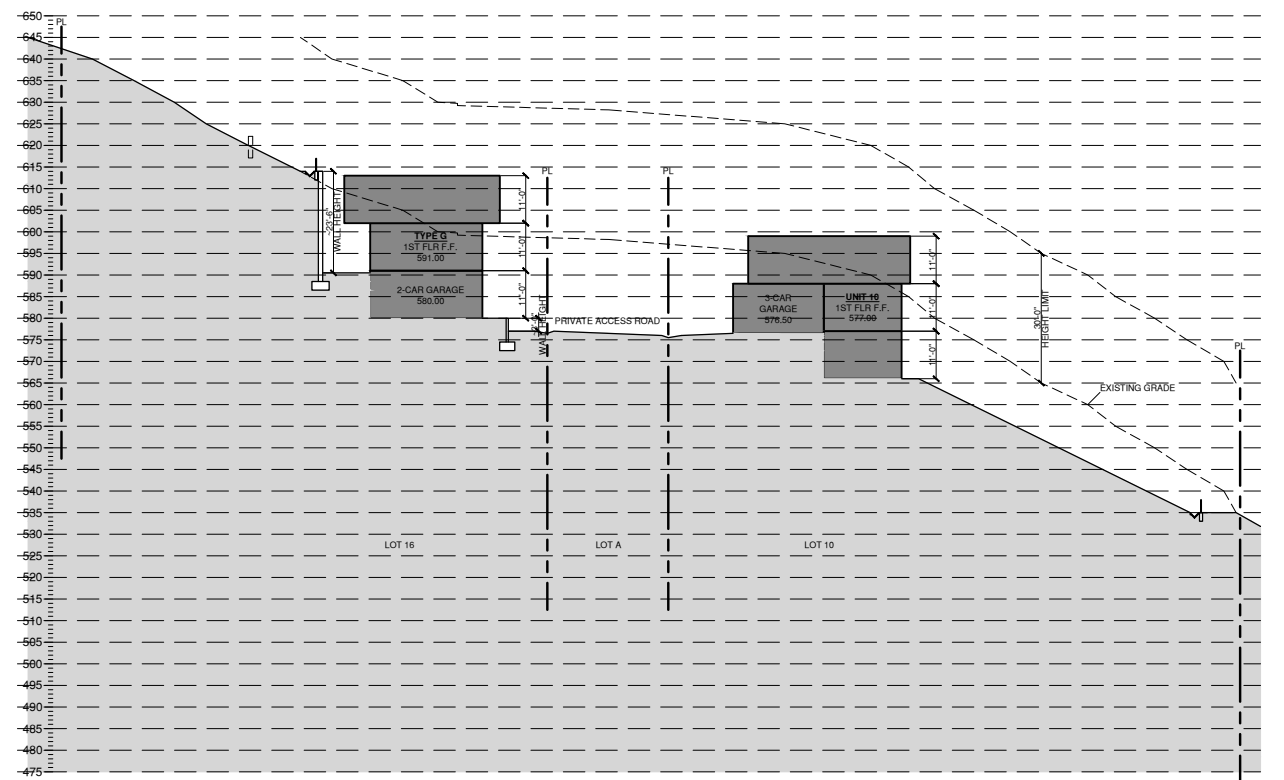
SECTION 9-9

SCALE: 1" = 20'-0"



SECTION 12-12

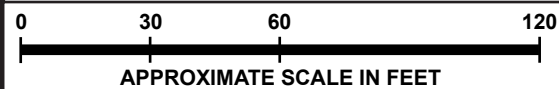
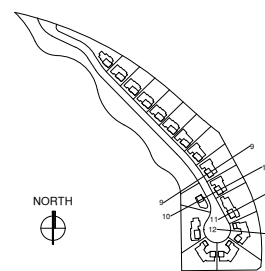
SCALE: 1" = 20'-0"



SECTION 10-10

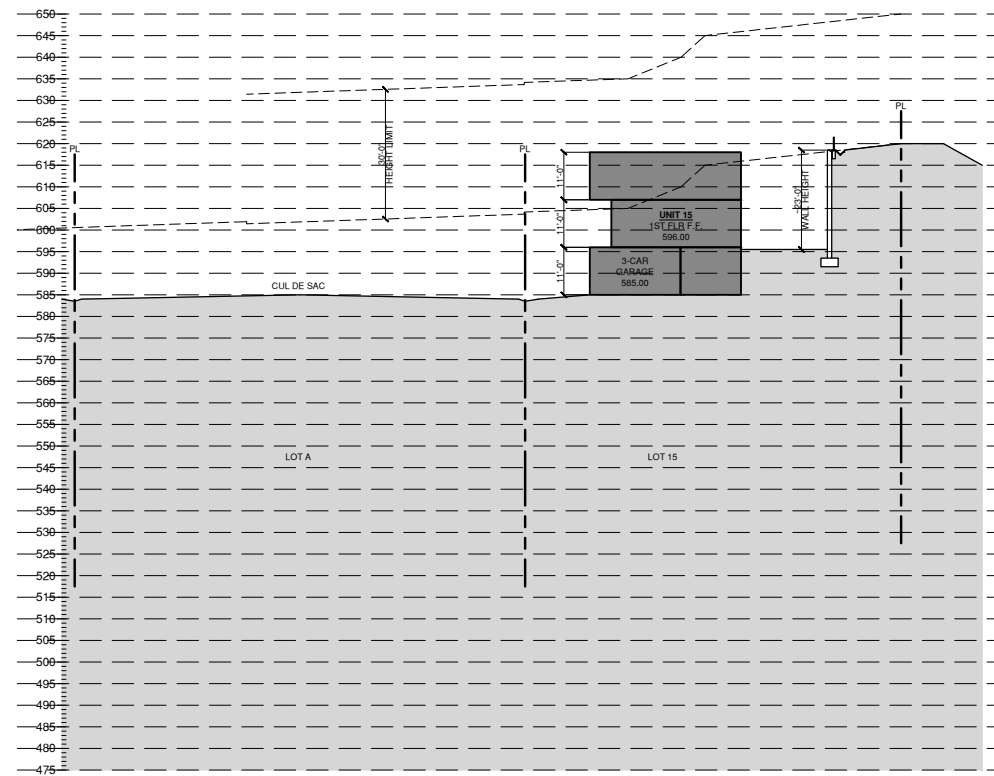
SCALE: 1" = 20'-0"

SITE KEY



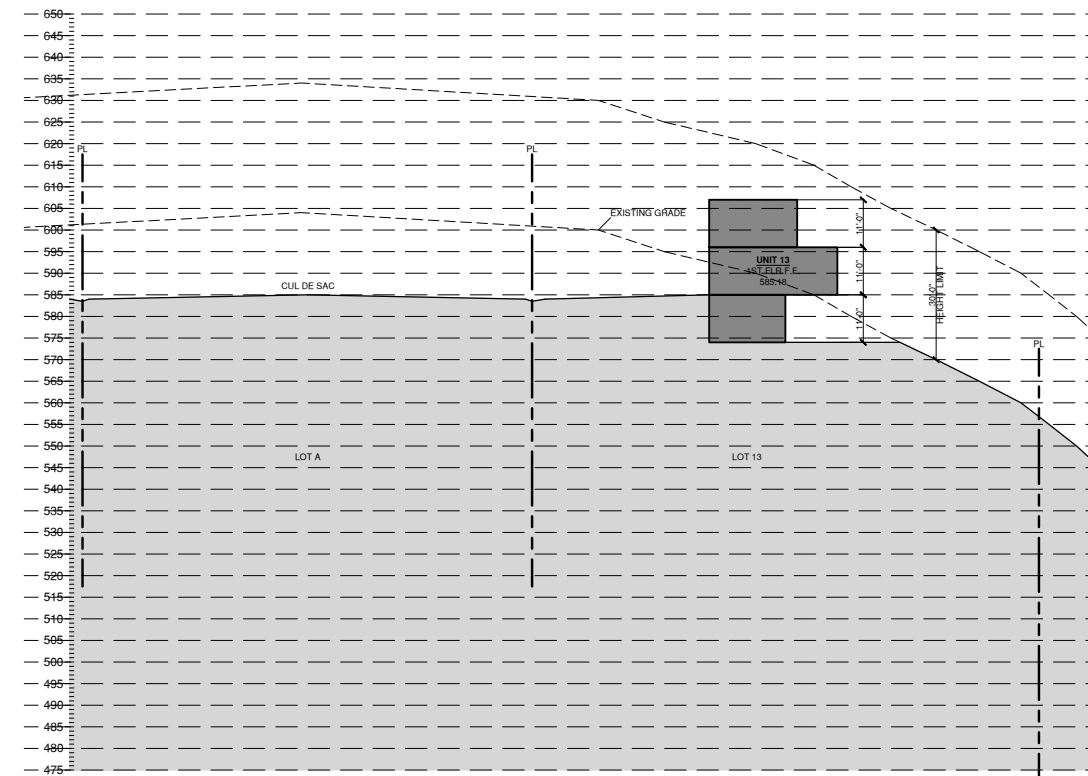
SOURCE: SLSD Inc. 2020

FIGURE 24



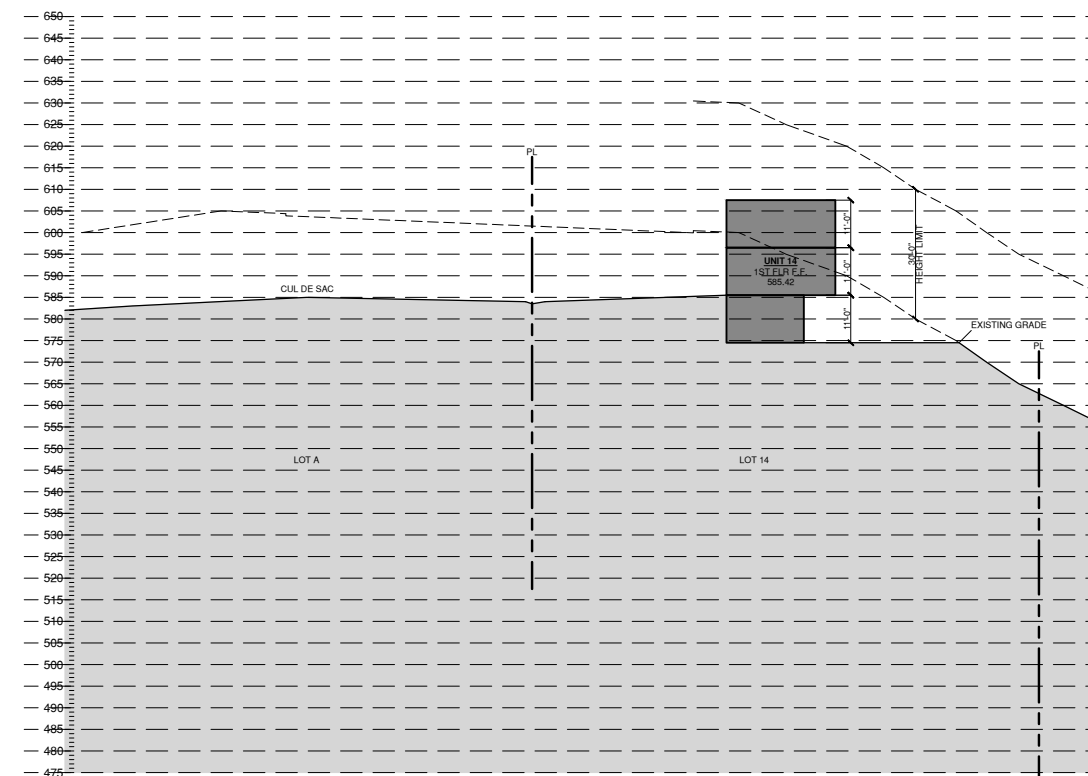
SECTION 15-15

SCALE: 1" = 20'-0"



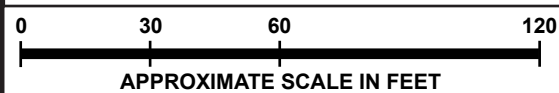
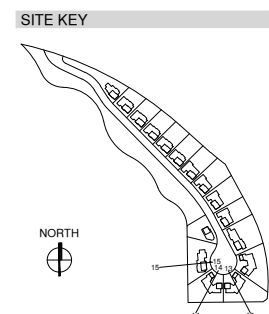
SECTION 13-13

SCALE: 1" = 20'-0"



SECTION 14-14

SCALE: 1" = 20'-0"



SOURCE: SLSD Inc. 2020

FIGURE 25



SOURCE: Google Earth - 2020

FIGURE 26

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

☒	Aesthetics	☐	Agriculture and Forestry	☒	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Energy
☒	Geology/Soils	☐	Greenhouse Gas Emissions	☐	Hazards & Hazardous Materials
☐	Hydrology/Water Quality	☒	Land Use Planning	☐	Mineral Resources
☒	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	☒	Transportation	☒	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	☒	Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

☐	I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☐	I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☒	I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the Proposed Project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the Proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required.

Signature

Jon Turner, Acting City Planner

Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a. the significance criteria or threshold, if any, used to evaluate each question; and
 - b. the mitigation measure identified, if any, to reduce the impact to less than significant

INITIAL STUDY CHECKLIST

1. AESTHETICS

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Except as provided in Public Resources Code (PRC) Section 21099, would the Project:				
a. Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	☒
c. In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☒	☐	☐	☐
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact Analysis

a. Have a substantial adverse effect on a scenic vista?

Potentially Significant Impact. The Monterey Park General Plan does not designate any scenic vistas within the City.³ The Project Site is, however, visible from major streets in the area including Garvey Avenue and Fremont Avenue. Development of the Project has the potential to affect views of the Project Site from these public streets and other locations in the surrounding area. Further analysis is required to determine the significance of these effects.

Mitigation Measures: Further analysis is required.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

No Impact. The Project Site has been previously graded and improved with a street for residential development but does not contain any existing buildings. Vegetation on the Project Site includes mostly native trees and shrubs on the upper portion, with a small mix of nonnative weeds and remnant landscape species. The lower portion of the Project Site is largely covered by plastic sheeting with some nonnative

³ City of Monterey Park, *General Plan: Resources Element*, <http://www.montereypark.ca.gov/514/Parks-Recreation>, accessed on March 3, 2020.

weedy species. These existing site features are not scenic resources. The nearest scenic highway is Interstate 210 (I-210) north of the City of Pasadena,⁴ approximately six miles north of the Project Site, which is eligible for listing as a scenic highway. Views to and from I-210 are obstructed by the local topography and existing development. For these reasons, no impacts to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway would occur.

Mitigation Measures: No mitigation measures are necessary.

- c. **In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

Potentially Significant Impact. The Project Site is located in an urbanized area and is currently zoned for high density residential development. Further analysis of the Project's consistency with applicable zoning is required to determine the significance of these effects.

Mitigation Measures: Further analysis is required.

- d. **Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?**

Less than Significant Impact. Sources of light and glare currently existing within the area surrounding the Project Site are related to the existing streets and residential and commercial buildings. Currently, the Project Site does not contain any nighttime lighting.

Minimal security lighting would be used during construction. Upon Project completion, the Project lighting would be similar in intensity, character, and coverage as existing light sources in the surrounding residential neighborhoods. The Project would include light sources typical of residential uses such as lighting along walkways and driveways, along landscaped areas, and exterior residential lighting. The Proposed Project would be required to conform to MPMC § 21.10.090, which regulates lighting.

Additionally, as shown in **Figure 20** and **Figure 21**, a majority of building materials would consist of plaster, cement, wood, and thermally controlled windows which would all result in minimal glare. As such, impacts to day or nighttime views in the area would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

4 Caltrans, Scenic Highways, *Scenic Highway System Lists*, <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>, accessed March 3, 2020.

2. AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the Project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forestland (as defined in PRC Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forestland or conversion of forestland to nonforest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to nonagricultural use, or conversion of forestland to nonforest use?	☐	☐	☐	☒

Impact Analysis

- a. **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?**

No Impact. The Project Site was previously graded and improved for residential development. No farmland or farming activity occurs on or near the Project Site. According to the California Department of Conservation "Los Angeles County Important Farmland 2016" map, no portion of the Project Site is

designated as Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance.⁵ As such, no impacts on prime farmland, unique farmland, or farmland of statewide importance would occur with the implementation of the proposed housing development.

Mitigation Measures: No mitigation measures are necessary.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project Site is currently zoned High-Density Residential (R-3)⁶ and is not zoned for agricultural use, used for agriculture, or subject to a Williamson Act contract. There are no designated agricultural land uses or Williamson Act contracts adjacent to, or near the Project Site. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. The Project Site is not designated or zoned for forest or timberland. The Project Site is in an urbanized area of the City and surrounding land uses consist of, residential, industrial, and commercial uses. There are no forest lands or timberlands designated or protected by the City of Monterey Park General Plan.⁷ The Project Site is zoned as High-Density Residential (R-3)⁸ and would not conflict with any areas zoned for forest or timberland. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

d. Result in the loss of forest land or conversion of forest land to nonforest use?

No Impact. The Project Site does not include forest land and is not located near any forest land. For this reason, no impacts would occur.

5 California Department of Conservation, Division of Land Resource Protection, Los Angeles County Important Farmland 2016, map (July 2017), accessed February 2020, available at <https://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx>.

6 City of Monterey Park, Zoning Map, https://www.montereypark.ca.gov/DocumentCenter/View/7097/EXZO_2013-082417?bidId=, accessed March 2020.

7 City of Monterey Park, *Land Use and Urban Design Element*, Adopted December 5, 2019.

8 City of Monterey Park, *Zoning Map*, https://www.montereypark.ca.gov/DocumentCenter/View/7097/EXZO_2013-082417?bidId=, accessed March 2020.

Mitigation Measures: No mitigation measures are necessary.

- e. **Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to nonagricultural use, or conversion of forestland to nonforest use?**

No Impact. As previously noted, the Project Site does not contain any farmland or forestland; therefore, no such land would be converted. Neither the Project Site, nor nearby properties, are currently utilized for agricultural or forestry uses. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

3. AIR QUALITY

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the Project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or State ambient air quality standard?	☒	☐	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☒	☐	☐	☐

Impact Analysis

a. Conflict with or obstruct implementation of the applicable air quality plan?

Potentially Significant Impact. The South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin (Basin). As such, SCAQMD's 2016 Air Quality Management Plan (AQMP) is the applicable air quality plan for the Proposed Project.⁹ To that end, the SCAQMD, a regional agency, works directly with the Southern California Association of Governments (SCAG), County transportation commissions and local governments, and cooperates actively with all State and federal government agencies to develop rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

To fulfill its commitments as a metropolitan planning organization (MPO) under the Sustainable and Climate Protection Act, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS).¹⁰ Projects that are consistent with the population forecasts identified in the Growth Management chapter of the RTP/SCS, forms the basis of the land use and transportation control portions of the AQMP. According to the SCAG estimates, the 2012 population within

9 South Coast Air Quality Management District (SCAQMD), "Final 2016 Air Quality Management Plan" (2016), <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf>.

10 SCAG, 2016 – 2040 RTP/SCS, adopted April 2016.

the City is 61,300 residents. The population projections used to estimate emissions in the 2016 AQMP for year 2040 estimated a population of 65,000 by the year 2040.¹¹ Further analysis is required to evaluate the Project's consistency with applicable air quality plans.

Mitigation Measures: Further analysis is required.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?

Potentially Significant Impact. Given that the Basin is currently in State nonattainment for ozone, PM₁₀, and PM_{2.5},¹² related projects could exceed an air quality standard or contribute to an existing or projected air quality exceedance. The SCAQMD neither recommends quantified analyses of cumulative construction or operational emissions, nor does it provide separate methodologies or thresholds of significance to be used to assess cumulative construction impacts. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed using the same significance criteria as those for project-specific impacts. Therefore, individual development projects that generate construction-related or operational emissions that exceed the SCAQMD recommended daily thresholds for project specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the South Coast Air Basin (SCAB) is in nonattainment. Furthermore, SCAQMD states that "projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."¹³ If an individual project generates less than significant construction or operational emissions, then the project would not generate a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment. Further analysis is required of the Project's potential increase to PM₁₀ and PM_{2.5}.

Mitigation Measures: Further analysis is required.

c. Expose sensitive receptors to substantial pollutant concentrations?

Potentially Significant Impact. Project construction activities and operations, as described previously, may increase air emissions above current levels. Also, concentrations of pollutants may have the potential to impact nearby sensitive receptors. Sensitive receptors are defined as schools, residential homes, hospitals, resident care facilities, daycare centers, or other facilities that may house individuals with health

11 SCAG, 2016 – 2040 RTP/SCS Appendix – Current Context, Demographics & Growth Forecast, adopted April 2016.

12 California Air Resources Board (CARB), *Area Designation Maps/State and National*, <http://www.arb.ca.gov/desig/adm/adm.htm>.

13 SCAQMD, *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*, August 2003.

conditions that would be adversely impacted by changes in air quality. Further analysis of the Project's potential impact on sensitive receptors is required.

Mitigation Measures: Further analysis is required.

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Potentially Significant Impact. A significant impact could occur if a project generated objectionable odors that adversely affect sensitive receptors. Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. As the operation of the Project involves no elements related to these types of activities, no odors are anticipated. However, during the construction phase for the Project, activities associated with the operation of construction equipment, the application of asphalt, the application of architectural coatings, and other interior and exterior finishes may produce discernible odors typical of most construction sites. Further analysis is required to assess the potential for odors during construction.

Mitigation Measures: Further analysis is required.

4. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐
c. Have a substantial adverse effect on State or federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan?	☐	☐	☐	☒

Impact Analysis

A Biological Constraints Analysis (Analysis) was conducted for the Project by Biological Assessment Services in November 2019 and summarized the results of a previous Biological Constraints Analysis prepared for the Project Site on June 13, 2017, both reports can be found in **Appendix A: Biological Constraints Analysis**. Two site visits were conducted as part of the Analysis, one on May 18, 2017 and one on November 18, 2019. The conditions in 2019 were very similar to the site conditions in 2017.

Of the twenty-four wildlife species listed in the California Natural Diversity Database as sensitive and occurring in the nine-quad area surround the Project Site, two birds are likely to occur on the Project Site

on rare occasions and would visit the Project Site as transients during migration: the Lawrence's goldfinch and summer tanager. Two other bird species generally considered sensitive and on the list of sensitive bird species maintained by the County of Los Angeles are likely to occur on the Project Site and may nest there. These are the oak titmouse and the Nuttall's woodpecker. Several of the snakes listed as sensitive and occurring in the area probably occupied the Project Site historically. But since the Project Site has been surrounded by development for nearly a century it is unlikely that these snakes are present now. The one exception might be the San Bernardino ring-necked snake (*Diadophis punctatus*), which has a small range and might survive in a habitat patch as small as that remaining on the Project Site.

Of the 43 plant species listed in the California Natural Diversity Database or California Native Plant Society's Rare Plant Inventory as sensitive and occurring in the nine-quad area surround the Project Site, four have even a limited likelihood of occurring on the Project Site. These are Weed's intermediate mariposa lily (*Calochortus weedii* var. *intermedius*), Lewis' evening primrose (*Camissoniopsis lewisii*), Brand's star phacelia (*Phacelia stellaris*), and white rabbit-tobacco (*Pseudognaphalium leucocephalum*). The Project Site is within the range of each of these species and presently supports nominally appropriate habitat, which is coastal sage scrub. However, the coastal sage scrub habitat present on the Project Site is not naturally occurring as it is an artifact of a revegetation effort. The natural habitat of the Project Site would be like that of the relatively undisturbed upper slopes, consisting of oak and toyon dominated woodland and chaparral, and thus these residents of coastal sage scrub that require thin and sandy soils are not likely present on-site.

No species listed as Rare, Threatened, or Endangered by the State or federal governments were found on the property or are thought likely to occur there. Two birds species considered locally sensitive, the oak titmouse and Nuttall's woodpecker, are likely to occur on the Project Site.

- a. **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

Less than Significant Impact. Special status species include those listed as endangered or threatened under the federal Endangered Species Act or California Endangered Species Act; species otherwise given certain designations by the California Department of Fish and Game; and plant species listed as rare by the California Native Plant Society.

No species listed as Rare, Threatened, or Endangered by the State or federal governments were found on the property or are thought likely to occur there. As discussed above, two bird species considered locally

sensitive--the oak titmouse and the Nuttall's woodpecker--have a high likelihood to occur on the Project Site. All bird species are protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. As such, the Project would be required to comply with the requirements of the MBTA and California Department of Fish and Wildlife (CDFW) to ensure no illegal take of these birds occurs. Additionally, the Project would be required to comply with Mitigation Measures **MM BIO-1** through **MM BIO-3**, which require that preconstruction surveys for nesting birds be conducted prior to construction, and if birds are found on the Project Site, that proper buffers and setbacks are maintained to further ensure no illegal take occurs. With this mitigation, impacts would be less than significant.

Mitigation Measures: Impacts would be less than significant with the following Mitigation Measures incorporated:

- BIO – 1:** Conduct pre-construction surveys for nesting birds if vegetation removal or grading is initiated during the nesting season from January 1 through September 30. A qualified wildlife biologist shall conduct weekly pre-construction bird surveys no more than 30 days prior to initiation of grading to provide confirmation on the presence or absence of active nests in the vicinity (at least 300 to 500 feet around the individual construction site, as access allows). The last survey should be conducted no more than three days prior to the initiation of clearance/construction work. If active nests are encountered, clearing and construction in the vicinity of the nests shall be deferred until the young birds have fledged and there is no evidence of a second attempt at nesting. Nest detection and avoidance may be difficult or impossible on adjacent private properties. In these cases, appropriate nest avoidance strategies may be determined by a qualified biological monitor who is on site if land clearance is scheduled during nesting season.
- BIO – 2:** A minimum buffer of 300 feet (500 feet for raptor nests) or as determined by a qualified biologist shall be maintained during construction depending on the species and location. The perimeter of the nest-setback zone shall be fenced or adequately demarcated with staked flagging at 20-foot intervals, and construction personnel and activities restricted from the area. Construction personnel should be instructed on the sensitivity of the area.
- BIO – 3:** A survey report by the qualified biologist documenting and verifying compliance with the mitigation and with applicable State and federal regulations protecting birds shall be submitted to the City. The qualified biologist shall serve as a construction monitor during those periods when construction activities would occur near active nest areas to ensure that no inadvertent impacts on these nests would occur.

- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

Less than Significant Impact. There are no definable stream courses or riparian habitat elements present on the Project Site. Therefore, no permits or interactions with the agencies that regulate impacts to jurisdictional waters of the U.S. or State are required. Additionally, the Project Site is not located in or near a regional or local habitat conservation plan as designated by the State or County. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

- c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

No Impact. There are no wetlands (as defined by Section 404 of the Clean Water Act) or waterways of any kind located on or near the Project Site. There are no definable stream courses or riparian habitat elements present. Therefore, no permits or interactions with the agencies that regulate impacts to jurisdictional waters of the U.S. or State are required.

Therefore, no impacts would occur to protected wetlands.

Mitigation Measures: No mitigation measures are necessary.

- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Less than Significant Impact. The areas around the Project Site have all been previously disturbed and are vegetated with landscaping typical of residential and commercial uses. Additionally, as noted above, not many wildlife species are expected to occur on the Project Site. Two bird species are likely to occur on the Project Site on rare occasions and would visit the Site as transients during migration: the Lawrence's goldfinch and summer tanager. Two other bird species generally considered sensitive and on Los Angeles County's list of sensitive bird species, the oak titmouse and the Nuttall's woodpecker, are likely to occur on the Project Site and may nest there. Several snake species listed as sensitive and occurring in the area probably occupied the Project Site historically. But since the Project Site has been surrounded by development for nearly a century, it is unlikely that these snakes are present now. The one exception might be the San Bernardino ring-necked snake (*Diadophis punctatus*); this species has a small range and might

survive in a habitat patch as small as that remaining on the Project Site. However, due to the previous ground disturbance and surrounding development, the likelihood of these species to occur on the Project Site is low. Furthermore, because the Project Site is not located adjacent or near to any natural open space areas, the Project Site would not be used as a migratory wildlife corridor. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant Impact. The Monterey Park General Plan and Municipal Code do not include protection for any biological resources, including trees, on private property.¹⁴

Mitigation Measures: No mitigation measures are necessary.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

No Impact. The Project Site is not located within a Habitat Conservation Plan or Natural Community Conservation Plan, according to the U.S. Fish and Wildlife Service.¹⁵ In addition, there are no other local, regional, or State conversation plans that apply to the Project Site. As such, there would be no conflicts with conservation plans and no impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

14 City of Monterey Park Municipal Code, *Chapter 9.63 Property Damage*, http://qcode.us/codes/montereypark/?view=desktop&topic=6-6_31-6_31_020, accessed March 5, 2020.

15 U.S. Fish and Wildlife Service's *HCP/NCCP Planning Areas in Southern California Map*, https://www.fws.gov/carlsbad/HCPs/documents/hcp_inrmp_20150127.pdf, accessed March 5, 2020.

5. CULTURAL RESOURCES

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Impact Analysis

On May 3, 2017 Applied EarthWorks, Inc. (Æ) conducted a cultural resource literature review and records search at the South Central Coastal Information Center (SCCIC) which can be found in **Appendix B: Cultural Resources Literature Review and Records Search**. This search was limited to resources and reports within a 0.25-mile radius of the Project area. The objective of this records search was to determine whether any prehistoric or historical cultural resources have been previously recorded within the Project Site and surrounding areas. Additional sources consulted during the cultural resource literature review and records search include the Office of Historic Preservation Archaeological Determinations of Eligibility and the Office of Historic Preservation Directory of Properties in the Historic Property Data File.

Results of the cultural resource records search indicate that while the Project Site has not been previously surveyed for cultural resources, at least two investigations have been conducted within 0.25-mile of the Project area since 2007. During those investigations, two cultural resources (one prehistoric archaeological resource and one built-environment resource) were identified including the Mojave Road, which consists of a network of prehistoric trails used by Native Americans to get across the Mojave Desert, and the St. Thomas More Catholic Church located at 2510 South Fremont Street. The Mojave Road is a California Registered Historical Landmark. The St. Thomas More Catholic Church was evaluated for significance based on the National Register of Historic Places (NRHP) in 2007 and was not recommended as eligible for listing on the NRHP; the resource does not appear to have been evaluated for listing on the California Register of Historical Resources (CRHR).

a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?

No Impact. The Project Site was previously approved for residential development and graded. The Project Site was undisturbed prior to this grading taking place. Neither of the resources found within the 0.25 mile area of the Project Site, in particular the St. Thomas More Catholic Church, would be modified by the Project. The Project construction would not include any alterations to these historical sites. As there are no historical resources on the Project Site, and nearby historical resources would not be modified or altered by the Proposed Project, no impacts to historical resources would occur.

Mitigation Measures: No mitigation measures are necessary.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?

Less than Significant Impact. As discussed above, a cultural resource literature review and records search disclosed one known archaeological resource (the Mojave Road) within a 0.25-mile radius around the Project Site. There are no known cultural resources present on the Project Site. Thus, the potential for an impact to previously undisturbed archaeological features is low, however, there is always a potential to reveal buried deposits during construction activities. Should archaeological resources be encountered during grading activities, the Project would be required to comply with existing regulations, including California PRC Section 21083.2, which specifies protocol if archaeological resources are discovered during excavation, grading, or construction activities. With regulatory compliance, any potential archaeological impacts of the Project would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

c. Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact. The Project Site is not a formal cemetery and is not adjacent to a formal cemetery, the nearest being the Resurrection Cemetery, located at 966 Potrero Grande Drive approximately four miles southeast of the Project Site. Therefore, uncovering or disturbing human remains would be unlikely.

The Project Site is not known to contain human remains interred outside formal cemeteries, nor is it known to be located on a burial ground; however, in accordance with the State Health and Safety Code Section 7050.5 and PRC Section 5097.98, should human remains be discovered during construction, work would immediately stop and the Monterey Park Police Department (MPPD) would be contacted. If the remains were found to be Native American, the MPPD would have 24 hours to notify the NAHC. The NAHC

would immediately notify the person it believes to be the most likely descendent of the deceased Native American. The most likely descendent would have 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods. Should the descendent not make recommendations within 48 hours, the owner would reinter the remains in an area of the property secure from further disturbance; or should the owner not accept the descendant's recommendations, the owner or the descendent may request mediation by the NAHC. As such, with regulatory compliance, impacts to human remains would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

6. ENERGY

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Impact Analysis

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact. The Proposed Project would result in the development of 16 single-family residences. The Proposed Project would consume electricity and natural gas during construction and operation. In 2018, Los Angeles County residential uses used approximately 21,044,973,883 Kilowatt-hours (kWh) of electricity¹⁶ and 110,752,055,040,000 British thermal units (BTU) of natural gas.¹⁷ Construction impacts associated with the installation of on-site utility connections would include trenching and related construction activities which would be temporary. During construction of the Project, electricity would be required to serve construction trailers, power tools, tool sheds, work and storage areas, and other facilities associated with development activities. Existing off-site infrastructure would not need to expand or be developed to provide electrical service to the Project during construction. Overall, electricity consumption required during construction would be temporary, with a majority of the construction being completed around the 2nd quarter of 2024, and the construction of the homes being completed by 3rd quarter of 2027. Installation would be completed in accordance with City and provider standards. Therefore, the Project would not result in an increase in demand for electricity during construction that would exceed available distribution infrastructure capabilities and result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

16 California Energy Commission, Electricity Consumption by County, <http://www.ecdms.energy.ca.gov/elecbycounty.aspx>. Accessed May 2020.

17 California Energy Commission, Gas Consumption by County, <http://www.ecdms.energy.ca.gov/gasbycounty.aspx>. Accessed May 2020.

Natural gas is not expected to be used on the Project Site during the construction as construction equipment is generally powered by gasoline, diesel, or electricity. Natural gas used on-site would therefore be limited to the minor amounts of natural gas released during the installation and upgrade of natural gas facilities.

Project construction would consume energy in the form of petroleum-based fuels associated with use of off-road construction vehicles and equipment on the Project Site, construction worker travel to and from the Project Site, and delivery and haul truck trips (e.g., for deliveries of construction supplies and materials). The Project would utilize approximately 330,882 gallons of petroleum oil (13,525 gallons of gasoline and 317,358 gallons of diesel) throughout construction. For purposes of comparison, the Energy Information Administration (EIA) forecasts a national oil supply of 20.47 million barrels (mb) per day in 2021, which is the first year of construction for the Project.¹⁸ This equates to approximately 7,472 mb per year or 313,805 million gallons (mg) per year. The Project would account for approximately 0.0001% of the projected annual oil supply in 2021.¹⁹

As shown in **Table 6-1: Project Electricity and Natural Gas Consumption**, the energy usage during operation of the Project (refer to **Appendix C: CalEEMod Outputs**) is anticipated to consume 135,673 kWh/year, which is approximately 0.0006% of the 2018 residential electricity consumption in the County of Los Angeles. Additionally, the amount of natural gas the Project is anticipated to consume is 439,593,000 BTU/year, which is approximately 0.0004% of the 2018 residential natural gas consumption in the Los Angeles County. The Project would represent a small amount of electricity and natural gas usage within the County.

Table 6-1
Project Electricity and Natural Gas Consumption

Consumption Type	Project Consumption ^a	Los Angeles County Residential Consumption (2018)	Percentage Consumed
Electricity	135,673 kWh/year	21,044,973,883 kWh/year	0.0006%
Natural Gas	439,593,000 BTU/year	110,752,055,040,000 BTU/year	0.0004%

Source: California Energy Commission, *Electricity Consumption by County*, <http://www.ecdms.energy.ca.gov/elecbycounty.aspx>. Accessed May 2020 and California Energy Commission, *Gas Consumption by County*, <http://www.ecdms.energy.ca.gov/gasbycounty.aspx>. Accessed May 2020.

Note: ^a**Appendix C: CalEEMod Outputs**

18 U.S. Energy Information Administration, *Annual Energy Outlook 2020: Table 11. Petroleum and Other Liquids Supply and Disposition*, accessed June 2020, <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=11-AEO2020&cases=ref2020&sourcekey=0>.

19 330,882 gallons/ 313,805 mg = 0.0001%.

Additionally, the buildings would be designed to meet current code requirements, they would comply with applicable provisions of Title 24 and the California Green Building Standards Code (CALGreen) to reduce energy demand.²⁰ Measures to meet these performance standards typically include high-efficiency building systems, efficient lighting features, higher than standard rated insulation, and double-glazed windows. The Proposed Project install energy efficient appliances and would comply with these standards and would not result in the wasteful or inefficient use of energy resources. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Less than Significant Impact. State plans adopted for the purposes of promoting energy efficiency include the California Renewable Portfolio Standard, the Clean Energy and Pollution reduction Act of 2015 (CA Senate Bill 350), the California Air Resources Board’s “In-Use Off- Road Diesel Fueled Fleets Regulation” and “Advanced Clean Cars Program,” California’s Energy Efficiency Standards for Residential and Nonresidential Buildings, located at Title 24, Part 6 of the California Code of Regulations and commonly referred to as “Title 24,” and the California Green Building Standards Code, which is Part 11 of the California Code of Regulations, is commonly referred to as the CALGreen Code. The Proposed Project would result in the development of 16 single-family residences. Construction of the Proposed Project would consume energy from off-road construction equipment and on-road vehicular travel from vendor trucks, haul trucks, and construction-employee commuting. Additionally, electricity would be required to deliver water to the Project Site for water for dust control. During operation of the Proposed Project, energy would be consumed for a variety of purposes including electricity consumption for lighting, appliances, HVAC equipment, water supply and delivery; natural gas consumption for cooking and water heating; and transportation fuel consumption from motor vehicles driving to and from the Project Site.

The Proposed Project would be required to comply with the aforementioned plans including the energy standards in the California’s Energy Efficiency Standards found in Title 24 California Energy Code and with the California Green Building Standards Code.²¹ The City has prepared the City of Monterey Park Climate Action Plan (CAP) that outlines a roadmap to reducing community greenhouse gas (GHG) emissions and

20 California Energy Commission, *2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings (December 2018)*, accessed May 2020, <https://ww2.energy.ca.gov/2018publications/CEC-400-2018-020/CEC-400-2018-020-CMF.pdf>.

21 California Energy Commission, *2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings (December 2018)*, accessed May 2020, <https://ww2.energy.ca.gov/2018publications/CEC-400-2018-020/CEC-400-2018-020-CMF.pdf>.

promoting economic growth based on clean technology and sustainable practices.²² The primary purpose of the CAP is to set forth a comprehensive strategy to address GHG emissions related to land use, transportation, building design, energy use, water demand, and waste generation. The CAP focuses GHG-reducing efforts to areas that would have the greatest environmental benefit, have the least financial cost (or even savings), and preserve the character of the community. The CAP provides strategies and programs for government facilities, businesses, and residents that can lead to a reduction of GHG emissions from daily activities. The CAP includes the following five categories of GHG reduction strategies: (1) building efficiency; (2) increased renewable energy generation; (3) land use; (4) transportation; and (5) water conservation/waste disposal. As described in **Table 8-1** below, the Proposed Project would be consistent with the Climate Action Plan. Therefore, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

²² City of Monterey Park, *Climate Action Plan*, January 2012.

7. GEOLOGY AND SOILS

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☒	☐	☐	☐
b. Result in substantial soil erosion or the loss of topsoil?	☒	☐	☐	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☒	☐	☐	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☒	☐	☐	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Impact Analysis

- a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

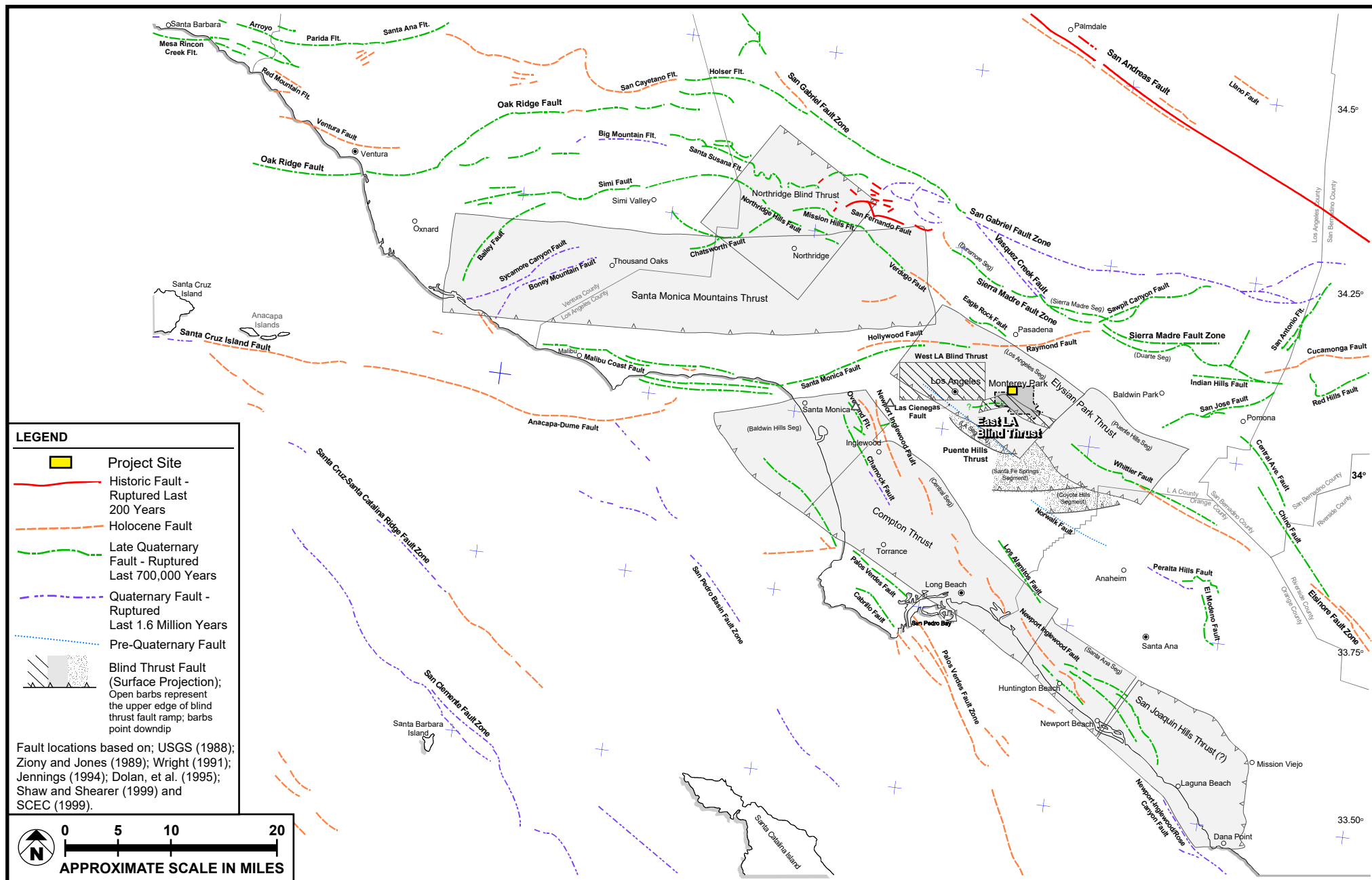
Less than Significant Impact. The City is located in a seismically active region as is the entire Los Angeles Basin. In 1972, the Alquist-Priolo Earthquake Zoning Act was passed in response to the damage sustained in the 1971 San Fernando Earthquake.²³ The Alquist-Priolo Earthquake Fault Zoning Act was adopted to prevent the construction of buildings used for human occupancy on the surface trace of active faults.²⁴ A list of cities and counties subject to the Alquist-Priolo Earthquake Fault Zones is available on the State's Department of Conservation website. The City is unaffected by the Alquist-Priolo Earthquake Fault Zone Act since no known fault traces are found within the City. Monterey Park is still located in an area that is surrounded by active and blind thrust faults, however, none of these faults intersect the Project Site, as shown in **Figure 7-1: Regional Fault Map**. Faults located near the City include the Sierra Madre Fault Zone, Norwalk Fault, Raymond Fault, Santa Monica Fault, Newport-Inglewood Fault, Las Cienegas Fault, and the Whittier-Elsinore Fault. In addition, the City is underlain by the following blind thrust faults: the Puente Hills thrust, the Elysian Park Earthquake faults thrust, and the East Los Angeles thrust.²⁵ However, the Applicant would need to conform to the standard conditions outlined by the California Building Code (CBC), as adopted by the MPMC, regarding the construction of earthquake resistant buildings. Adherence to the CBC would reduce impacts to a less than significant level.

Mitigation Measures: No mitigation measures are necessary.

23 California Department of Conservation, *Earthquake Fault Map*, <https://earthquake.usgs.gov/education/geologicmaps/apfaults.php>. Accessed March 2020.

24 Ibid.

25 City of Monterey Park General Plan, *Safety and Community Services Element, Geological & Seismic Hazards*, <http://www.montereypark.ca.gov/470/Geological-Seismic-Hazards>, Accessed March 2020.



SOURCE: <http://www.montereypark.ca.gov/470/Geological-Seismic-Hazards> (figure SCS-2), July 2001

FIGURE 7-1

ii. Strong seismic ground shaking?

Less than Significant Impact. As described above, the City lies within a region with several active faults and several blind thrust faults. These faults are capable of producing ground shaking from an earthquake. These northwest dipping low, angle faults include the Puente Hills thrust, the Elysian Park Earthquake faults thrust, and the East Los Angeles thrust (shallowest to deepest).²⁶ However, there are no active faults known to exist in the vicinity. According to the General Plan, a major earthquake produced along any of the regional fault systems has the potential to produce strong ground shaking in the City. The Project Site would likely experience strong seismic ground shaking during its design life, given the proximity to major faults in the Southern California Region.

All building construction associated with the Project would be subject to the City's existing construction regulations, including the CBC as adopted by MPMC, in order to minimize any potential impacts from strong seismic ground shaking. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction is a process by which sediments below the water table temporarily lose strength and behave as a viscous liquid rather than a solid. Liquefaction typically occurs in areas where the soils below the water table are composed of poorly consolidated, fine to medium-grained, primarily sandy soil. In addition to the requisite soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to induce liquefaction.

As shown in **Figure 7-2: Liquefaction and Landslide Susceptibility Zones**, the Project Site is not located within an area mapped as potentially liquefiable.²⁷ As previously mentioned, the CBC includes requirements for soils and foundations, structural design, building materials, and structural testing and inspections to address potential geologic hazards specific to a site. Additionally, the proposed residential units would include enhanced foundations, with deeper footings, and shallow and deep caissons as required by the soils condition on each lot. The Project would be designed and constructed in accordance with CBC requirements, therefore, potential impacts associated with seismic-related ground failure, including liquefaction, would be reduced to a less than significant level.

Mitigation Measures: No mitigation measures are necessary.

²⁶ City of Monterey Park General Plan, *Safety and Community Services Element, Geological & Seismic Hazards*, <http://www.montereypark.ca.gov/470/Geological-Seismic-Hazards>, Accessed March 2020.

²⁷ State of California Department of Conservation, *Regulatory Maps: Los Angeles Quadrangle*, GIS Data.

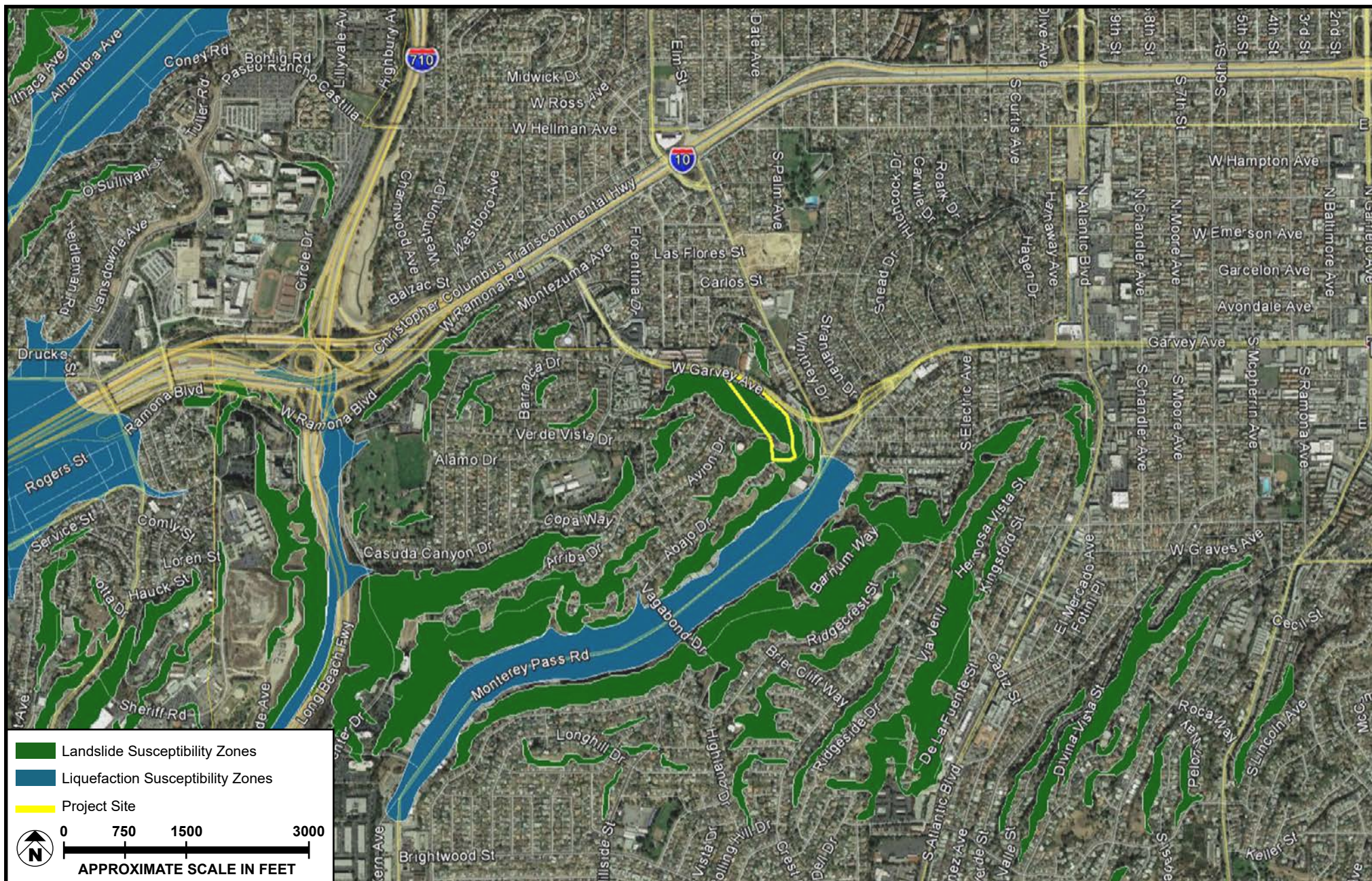


FIGURE 7-2

iv. Landslides?

Potentially Significant Impact. Monterey Park lies within a geologic region referred to as the Los Angeles Basin. The geology forming the basin is complex, comprised on several mountain ranges and hill formations and intervening valleys. Geologic formations underlying the City consist largely of ancient marine and river deposits characterized by sandy and day-like soils. On the level ground in northeast Monterey Park, these soil types do not pose any significant development constraints. In hillside areas, however, the soils can be unstable and susceptible to sliding.²⁸

The Proposed Project development would include 16 single-family homes which would include enhanced foundations, with deeper footings, and shallow and deep caissons as required by the soils condition on each lot. Additionally, all building construction associated with the Project would be subject to the City's existing construction regulations including, the CBC as adopted by MPMC, in order to minimize any potential impacts from landslides.

However, as shown in **Figure 7-2**, a majority of the Project is located within an area susceptible to landslides, and as previously mentioned, the slope on Garvey Avenue previously failed after the Project Site was previously graded for residential development. New geotechnical studies have been conducted, and a new retaining wall is proposed based on these studies designed to stabilize the existing slope. The Project would include complete removal of the existing retaining walls on the lower portion of the Project Site, grading of the existing slope, and would installation of a new retaining wall with tiebacks to retain the slope. Due to the existing conditions on the Project Site, further analysis of slope stability, including the potential for landslides, is required.

Mitigation Measures: Further analysis is required to determine appropriate mitigation.

b. Result in substantial soil erosion or the loss of topsoil?

Potentially Significant Impact. The Project Site is underlain by a soil profile of clay loam at the surface, followed by clay, clay loam, and sandy loam as far as almost five feet below surface.²⁹ These soils have a wind erodibility rating of 6; with 1 being most susceptible and 8 being least susceptible.³⁰

28 City of Monterey Park General Plan, *Safety and Community Services Element, Geological & Seismic Hazards*, <http://www.montereypark.ca.gov/470/Geological-Seismic-Hazards>, Accessed March 2020.

29 U.S. Department of Agriculture Soil Conservation Service, *Web Soil Survey*, <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed March 2020.

30 Ibid.

As discussed previously, the slope on Garvey Avenue failed after the Project Site was previously graded for residential development. Erosion has been occurring on the site and plastic sheeting, sandbags and other measures have been implemented to control erosion.

The proposed removal of the existing retaining walls, grading of the Project Site, and construction of new retaining walls would temporarily increase the potential for erosion during construction, and further analysis is required for this reason.

Mitigation Measures: Further analysis is required to determine appropriate mitigation.

- c. **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?**

Potentially Significant Impact. As discussed in Response 7(a)(iii) above, the Project Site would not be subject to liquefaction. However, as stated in Response 7 (a)(iv) above, further analysis is required to address potential impacts related to landslides. Further analysis also is required to address potential impacts related to lateral spreading, subsidence, and collapse.

Mitigation Measures: Further analysis is required to determine appropriate mitigation.

- d. **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

Potentially Significant Impact. During inclement weather and/or excessive landscape watering, moisture infiltrates the soil and causes the soil to heave (expansion). When drying occurs the soils would shrink (contraction). Repeated cycles of expansion and contraction of soils can cause pavement, concrete slabs on grade and foundations to crack. According to the General Plan, the City is underlain by sandy and clay-like soils. On level ground, these soil types do not pose any significant development constraints while in hillside areas, the soils can be unstable and susceptible to sliding.³¹

The Project would be constructed on a hillside area, on soils which are unstable and susceptible to sliding. The Project would include complete removal of the existing retaining walls on the lower portion of the Project Site, grading of the Project Site, and installation of a new retaining wall with tiebacks to retain the

31 City of Monterey Park General Plan, *Safety and Community Services Element, Geological & Seismic Hazards*, <http://www.montereypark.ca.gov/470/Geological-Seismic-Hazards>, Accessed March 5, 2020.

slope. Since the slope would be altered, further analysis of slope stability is required given the characteristics of the soil on the Project Site.

Mitigation Measures: Further analysis is required to determine appropriate mitigation.

- e. **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

No Impact. The Project Site is located in a developed portion of the City and is served by a wastewater collection, conveyance, and treatment system operated by the City. No septic tanks or alternative disposal systems are proposed. Thus, impacts would not occur.

Mitigation Measures: No mitigation measures are necessary.

- f. **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Less than Significant Impact. A significant impact would occur if incompatible land uses or development adversely affected paleontological resources by excavating native undisturbed soils thereby hindering the paleontological resources ability to yield information on the evolutionary relationships and developmental trends among organisms, living or extinct.

The City's General Plan designates the Project Site as High Density Residential and the zoning designation of the Project Site is also High-Density Residential (R-3). The High-Density Residential zoning allows a broad range of dwelling unit types which may be attached or detached. The Project Site is not a part of any other Focus Area or Specific Plan.³² The Project would remain with existing designations and would not cause an incompatible land use. Additionally, the potential for an impact to previously undisturbed paleontological resources or geologic features is low due to the fact that the Project Site was previously graded. As such, the Project would not excavate native undisturbed soils. However, should paleontological resources be encountered during excavation activities, requirements of the California PRC Section 21083.2 would be followed. With regulatory compliance, any potential paleontological impacts of the Project would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

32 City of Monterey Park, *General Plan: Land Use Element*, <http://www.montereypark.ca.gov/266/Focus-Areas>, accessed March 5, 2020.

8. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Impact Analysis

- a. **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less than Significant Impact.

CEQA Guidelines section 15064.4 states that lead agencies shall have discretion to determine, in the context of a particular project, whether: (1) to use a model or methodology to quantify a project's greenhouse gas emissions; and/or (2) to rely on a qualitative analysis or performance-based standards. Section 15064.4 further states that a lead agency should consider specific factors, among others, when assessing the significance of GHG emission on the environment, including: (a) the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting; (b) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (c) the extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of GHGs. CEQA Guidelines section 15064.4 does not establish a threshold of significance. Lead agencies have the discretion to establish significance thresholds.

Due to the complex physical, chemical, and atmospheric mechanisms involved in global climate change, no basis exists for concluding that the Project's very small and essentially temporary (primarily from construction) increase in emissions could cause a measurable increase in global GHG emissions necessary to force global climate change. CEQA Guidelines Section 15130(f) clarifies that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis. Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project will comply with an approved plan or mitigation program that provides specific requirements to avoid or substantially lessen the

cumulative problem within the geographic area of the project. Examples of such programs include “plans or regulations for the reduction of greenhouse gas emissions.”

In the absence of any adopted, numeric threshold, this analysis evaluated the significance of the Project’s potential GHG emissions consistent with CEQA Guidelines section 15064.4(b)(2). As such, a significant impact would occur if the Project conflicts with the applicable policies and/or regulations outlined in the Monterey Park Climate Action Plan and SCAG’s 2016-2040 RTP/SCS.

The California Emissions Estimator Model, known as CalEEMod, is the CARB–approved computer program model recommended by SCAQMD for use in the quantification of air quality emissions, including GHG emissions. CalEEMod was developed under the auspices of SCAQMD, with input from other California air districts. CalEEMod utilizes widely accepted models for emissions estimates combined with appropriate data that can be used if site-specific information is not available. For example, CalEEMod incorporates USEPA-developed emission factors; CARB’s on-road and off-road equipment emission models, such as EMFAC and OFFROAD; and studies commissioned by other California agencies, such as the CEC and CalRecycle. CalEEMod’s calculations also incorporate by default the 2016 Title 24 standards. Project development would generate GHG emissions from a number of individual sources during both construction and postconstruction (operational) use of the buildings and related activities (e.g., landscape maintenance).

CalEEMod version 2016.3.2 was used to quantify the Project’s GHG emissions. CalEEMod provides a platform to calculate both construction emissions and operational emissions from a land use development project. The following GHG emission sources covered by CalEEMod model include:

- One-time construction emissions associated with grading, utility installation, building, application of architectural coatings (e.g., paint), and paving from emission sources that include both off-road construction equipment and on-road mobile equipment associated with workers and the delivery of construction materials to the Project site. Construction emissions associated with dust control and disposal of waste at landfills were also included.
- Operational emissions associated with the occupancy of development, such as on-road mobile vehicle traffic generated by the land uses; off-road emissions from landscaping equipment; energy (i.e., electricity and natural gas) and water usage in the buildings; vegetation removal; and emissions from emergency generators.

Construction

Construction activity impacts are relatively short in duration, they contribute a relatively small portion of the total lifetime GHG emissions of a project. The combustion of fossil fuels in construction equipment results in GHG emissions of CO₂ and smaller amounts of CH₄ and N₂O. Emissions of GHG would also result

from the combustion of fossil fuels from haul trucks and vendor trucks delivering materials, and construction worker vehicles commuting to and from the Project Site. Typically, light-duty and medium-duty automobiles and trucks would be used for worker trips and heavy-duty trucks would be used for vendor trips. The vast majority of motor vehicles used for worker trips rely on gasoline as an energy source while motor vehicles used for vendor trips would primarily rely on diesel as an energy source. In addition, GHG emissions-reduction measures for construction equipment are relatively limited. Therefore, in its *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Thresholds*, the SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime so that GHG reduction measures address construction GHG emissions as part of the operational GHG reduction strategies.

Construction assumptions used in the analysis of GHG emissions conservatively assume that the Project would be constructed with the most intensive activities occurring on a daily basis. The total emissions from construction of the Project are shown in **Table 8-1: Construction Annual Greenhouse Gas Emissions**. As recommended by SCAQMD, the total GHG construction emissions were amortized over the 30-year lifetime of the Project (i.e., total construction GHG emissions were divided by 30 to determine annual construction emissions estimate that can be added to the Project's operational emissions) in order to determine the Project's annual GHG emissions inventory.³³ Total GHG emissions from the construction activities are 3,312 MTCO₂e. The total GHG emissions were amortized over 30-year project lifetime at 110 MTCO₂e per year.

Table 8-1
Construction Annual Greenhouse Gas Emissions

Year	MTCO ₂ e
2021	1,392
2022	589
2023	422
2024	245
2025	266
2026	265
2027	133
Overall Total	3,312
30-Year Annual Amortized Rate	110

Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations.
MTCO₂e = metric tons of carbon dioxide equivalent

33 SCAQMD Governing Board Agenda Item 31, December 8, 2008.

Operation

Emissions from mobile and area sources and indirect emissions from energy and water use, wastewater, as well as waste management would occur every year after buildout. This section addresses operational GHG emissions.

Area Sources

The area source GHG emissions included in this analysis result primarily from natural gas fireplaces with additional emissions from landscaping-related fuel combustion sources, such as lawn mowers. GHG emission due to natural gas combustion in buildings other than from fireplaces are excluded from area sources since they are included in the emissions associated with building energy use.

Consumer products are various solvents used in non-industrial applications which emit Reactive Organic Gases (ROGs) during their use. Consumer products include cleaning supplies, kitchen aerosols, cosmetics, and toiletries. All land use buildings are assumed to be repainted at a rate of 10 percent of area per year. This is based on the assumptions used by SCAQMD. However, CalEEMod does not consider architectural coatings and consumer products to be sources of GHG.

The GHG emissions for the Project were calculated using CalEEMod. All fireplaces were assumed to be natural gas burning, based on SCAQMD Rule 445. CalEEMod defaults were used for landscape maintenance emissions. Area source emissions are shown in **Table 8-2: Area Source Greenhouse Gas Emissions**. As shown in **Table 8-2**, Project emissions would result in approximately 4 MTCO₂ per year from area sources.

Table 8-2
Area Source Greenhouse Gas Emissions

Source	Unmitigated MTCO ₂ e per year
Architectural Coating	0
Consumer Products	0
Hearth	3
Landscaping	<1
TOTAL	4

Source: *Appendix C: CalEEMod Outputs*

Energy Sources

GHGs are emitted as a result of activities in buildings when electricity and natural gas are used as energy sources. Combustion of any type of fuel emits CO₂ and other GHGs directly into the atmosphere; when this occurs in a building, it is a direct emission source associated with that building. GHGs are also emitted during the generation of electricity from fossil fuels. When electricity is used in a building, the electricity generation typically takes place off-site at the power plant; electricity use in a building generally causes emission in an indirect manner.

Estimated emissions from the combustion of natural gas and other fuels from the implementation of the Project are calculated using the CalEEMod emissions inventory model, which multiplies an estimate of the energy usage by applicable emissions factors chosen by the utility company. GHG emissions from electricity use are directly dependent on the electricity utility provider. In this case, GHG intensity factors for Southern California Edison were selected in CalEEMod. Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building, such as plug-in appliances. CalEEMod calculates energy use from systems covered by Title 24 (e.g., heating, ventilation, and air conditioning [HVAC] system, water heating system, and lighting system); energy use from lighting; and energy use from office equipment, appliances, plug-ins, and other sources not covered by Title 24 or lighting.

Energy source emissions are shown in **Table 8-3: Energy Source Greenhouse Gas Emissions**. As shown in **Table 8-3**, the Project would result in 43 MTCO₂e per year for electricity and 24 MTCO₂e per year for natural gas. Therefore, the total energy source emissions for the Project would be 67 MTCO₂e per year.

Table 8-3
Energy Source Greenhouse Gas Emissions

Land Use	Electricity	Natural Gas
	Unmitigated MTCO ₂ e per year	Unmitigated MTCO ₂ e per year
Parking Lot	1	0
Single Family Housing	42	24
TOTAL	43	24

Source: **Appendix C: CalEEMod Outputs**

Notes: Parking included for off-street parking associated with the Project.

Mobile Sources Emissions

Vehicle trips generated by growth within the Project Site vicinity would result in operational emissions through the combustion of fossil fuels. CO₂ emissions were determined based on the trip rate from the

Traffic Study.³⁴ Specifically, each single-family home would generate 9.44 vehicle trips per day. The City is served by multiple transit operators, with the Metro Transit Bus Stop 70 located adjacent to the Project Site. The Project's mobile source emissions would result in 188 MTCO₂e per year (see **Appendix C: CalEEMod Outputs**).

Solid Waste Emissions

Solid waste generation and associated emissions are calculated based on the square footage of the Project Area, using default data found in CalEEMod for the proposed land uses. Disposal of organic waste in landfills can lead to the generation of CH₄, a potent GHG. By generating solid waste, the Project would contribute to the emission of fugitive CH₄ from landfills, as well as CO₂ and N₂O from the operation of trash collection vehicles. As shown in **Table 8-4: Solid Waste Source Greenhouse Gas Emissions**, GHG emissions resulting from solid waste would be 9 MTCO₂ per year.

Table 8-4
Solid Waste Source Greenhouse Gas Emissions

Land Use	Unmitigated MTCO ₂ e per year
Single Family Housing	9
TOTAL	9

Source: **Appendix C: CalEEMod Outputs**

Water Consumption and Wastewater Emissions

California's water conveyance system is energy intensive, with electricity used to pump and treat water. The Project would result in indirect GHG emissions due to water consumption and wastewater generation. Water consumption and wastewater generation, and their associated emissions, are calculated based on the square footage of the Project Site, using CalEEMod data. As shown in **Table 8-5: Water Source Greenhouse Gas Emissions**, the Project's water, and wastewater GHG emissions would be 8 MTCO₂ per year.

Table 8-5
Water Source Greenhouse Gas Emissions

Land Use	Unmitigated MTCO ₂ e per year
Single Family Housing	8
TOTAL	8

Source: **Appendix C: CalEEMod Outputs**

Note: Entire site used for calculations.

34 Ganddini Group Inc., 1688 West Garvey Avenue Project Traffic Analysis, April 30, 2020.

Total Emissions

As shown in **Table 8-6: Operational Greenhouse Gas Emissions**, the Project would result in a total of 386 MTCO₂e per year. It is important to note, the Project would incorporate energy and water efficiency design features to enhance efficiency in all aspects of the buildings' life cycle. These designs would increase the buildings' energy efficiency, water efficiency, and overall sustainability. The Project would meet Title 24 energy requirements consistent with residential features. As mentioned previously, CalEEMod calculates by default energy use from systems covered by Title 24 (e.g., heating, ventilation, and air conditioning [HVAC] system, water heating system, and lighting system); energy use from lighting; and energy use from office equipment, appliances, plug-ins, and other sources not covered by Title 24 or lighting. As such, no additional mitigation regarding Title 24 standards was included in the greenhouse gas emission calculations for the Project.

Table 8-6
Operational Greenhouse Gas Emissions

Source	Unmitigated MTCO ₂ e per year
Construction (amortized)	110
Area	4
Energy	67
Mobile (trips)	188
Waste	9
Water	8
TOTAL	386

Source: **Appendix C: CalEEMod Outputs**

Note: Abbreviation: MTCO₂e = metric tons of carbon dioxide emissions.

The City has prepared the *City of Monterey Park Climate Action Plan (CAP)*, which outlines a roadmap to reducing community GHG emissions and promoting economic growth based on clean technology and sustainable practices.³⁵ The primary purpose of the CAP is to set forth a comprehensive strategy to address GHG emissions related to land use, transportation, building design, energy use, water demand, and waste generation. The CAP focuses GHG-reducing efforts to areas that would have the greatest environmental benefit, have the least financial cost (or even savings), and preserve the character of the community. The CAP provides strategies and programs for government facilities, businesses, and residents that can lead to a reduction of GHG emissions from daily activities. As described below, the Project would

³⁵ City of Monterey Park, *Climate Action Plan*, January 2012.

be consistent with the City's goals and actions to further reduce the generation and emission of GHGs from both public and private activities pursuant to the applicable portions of the Climate Action Plan. As such, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. As discussed above, currently neither the State nor the City have established CEQA significance thresholds for GHG emissions. CAPCOA suggests making significance determinations on a case-by-case basis when no significance thresholds have been formally adopted by a lead agency.

The City adopted a CAP in January 2012 as a comprehensive strategy to address GHG emissions related to land use patterns, transportation, building design, energy use, water demand, and waste generation. The CAP moves from business-as-usual growth and current development practices to a more sustainable model of growth and development. The CAP is designed to support California's climate change objectives and emissions-reduction goals by achieving a "fair share" reduction in GHG emissions. The CAP includes the following five categories of GHG reduction strategies: (1) building efficiency; (2) increased renewable energy generation; (3) land use; (4) transportation; and (5) water conservation/waste disposal. Project consistency with the applicable CAP programs is summarized in **Table 8-7: Consistency with Monterey Park Climate Action Plan Programs.**

Table 8-7
Consistency with Monterey Park Climate Action Plan Programs

Program	Description	Consistency
<i>Building Efficiency Measures</i>		
E1. Efficiency Requirements for New Development	The City, in coordination with the California Building Standards Commission and the California Energy Commission, will adopt energy efficiency regulations for new construction projects that comply with the 2008 California Green Building Code Tier 1 energy efficiency standards. The Tier 1 energy efficiency standards require a building's energy performance to exceed Title 24 standards by 15% for both residential and nonresidential development.	Consistent. The Project would utilize energy efficiency measures including EnergyStar appliances, EnergyStar utilities for energy efficient lighting, and the HVAC systems would be designed in compliance with CalGreen Code to maximize energy efficiency cause by heat loss and gain and would comply with the 2019 Title 24 standard requirements for energy efficiency, which exceed those of the 2008 Title 24 specifications that the CAP requires in Measure E1.

Program	Description	Consistency
E3. Appliance Upgrades	The City will partner with Southern California Edison, the Southern California Gas Company, and the Metropolitan Water District to provide to increase awareness about rebate and incentive programs, the efficiencies that may be gained from Energy-Star-rated appliances, and the cost savings associated with Energy Star appliances.	Consistent. The Project would utilize energy efficiency measures including utilizing EnergyStar appliances and would comply with the 2019 Title 24 standard requirements for energy efficiency.
E4. Smart Meters	Emerging energy management systems or Smart Meters are currently being stalled by Southern California Edison as a means to improve how electricity consumption is managed. These Smart Meters will eventually provide utility customers with access to detailed and instantaneous energy use and cost information, new pricing programs based on peak-energy demand, and the ability to program home appliances and devices to respond to cost, comfort, and convenience.	Consistent. The Project's utility provider would be Southern California Edison, which would install smart meters upon development.
Transportation Measures		
T1.1. Lower Cost of Riding Transit	The City currently provides discounts to older adults on the purchase of transit passes, which are accepted locally and by regional transit providers. Pending funding availability, the City will expand the program to provide discounts to resident, such as students, or increase the subsidy in order to further promote transit use. City-wide VMT could be reduce 1 percent by 2020.	Consistent. The cost of riding transit is a citywide objective, but the Project would support its implementation because the Project would be located immediately adjacent to Metro Transit Bus Stop 70 on West Garvey Avenue, thus promoting alternative modes of travel.
T1.2. Promote Use of Transit Network	The majority of the City's residents work outside of Monterey Park and most of those working in the City from other areas. The City will develop marketing or outreach programs to promote increased use of the Spirit Bus and other transit options. The potential VMT reduction with the implementation of this measure is 1 percent by 2020.	Consistent. The Project would be located immediately adjacent to Metro Transit Bus Stop 70 on West Garvey Avenue, thus promoting alternatives modes of travel.

Program	Description	Consistency
Water Conservation and Waste Reduction Measures		
W1. Conserving Water	The City, in partnership with the San Gabriel Valley Water District, will continue to develop pilot or demonstration projects related to water conservation. The City will continue to work with the San Gabriel Valley Water District to complete irrigation and revegetation of medians throughout Monterey Park with water-efficient irrigation equipment and native vegetation.	Consistent. The Project would include design features to support water conservation, including the use of low-flow appliances and water-efficient landscaping.
W2. Reducing Waste	This program allows the City to meet the 50 percent landfill diversion mandate required by State law while providing a service to residents and businesses. In addition to the Materials Recovery Facility (MRF) program, the City has additional waste diversion and recycling programs, ranging from backyard composting/smart gardening workshops to participation in County-wide Household Hazardous Waste collection events.	Consistent. The Project would be served by a solid waste collection and recycling service that may include mixed waste processing, and that yields waste diversion results comparable to source separation and consistent with citywide recycling targets.

Source: City of Monterey Park Climate Action Plan.

Consistency with SCAG 2016 RTP/SCS

The Project would be consistent with SCAG's 2016 RTP/SCS which focuses on creating viable communities with an emphasis on sustainability and integrated planning, and identifies mobility, economy, and sustainability as the three principles most crucial to the future of the region. The 2016 RTP/SCS focuses on reducing fossil fuel use by decreasing VMT, reducing building energy use, and increasing use of renewable sources. The Project would be consistent the energy efficiency policies emphasized in the 2016 RTP/SCS. Specifically, the Project would comply with applicable provisions of Title 24 and CALGreen to reduce energy demand and consumption of fossil fuels. Moreover, the Project Site would be located immediately adjacent to Metro Transit Bus Stop 70 on West Garvey Avenue, thus promoting alternative modes of travel which reduce VMT.

As discussed in the analysis of Potential Air Quality impacts above, projects that are consistent with the population forecasts identified in the Growth Management chapter of the 2016 RTP/SCS forms the basis of the land use and transportation control portions of the AQMP. According to SCAG, Monterey Park had a

2018 population of 62,240.³⁶ The population projections used to estimate emissions in the 2016 AQMP for year 2040 estimated a population of 65,000 by the year 2040. The Project would provide housing for approximately 49 persons and would yield less than one percent of the estimated increase in population under the conservative assumption that all 49 residents would be new residents of the City. As such, the Project would be consistent with the planned land uses and employment growth for Monterey Park and would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

36 Southern California Association of Governments, *Local Profiles Report 2019: Profile of the City of Monterey Park* (May 2019), accessed February 2020, <https://www.scag.ca.gov/Documents/SouthElMonte.pdf>.

9. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such plan has not been adopted, within 2 miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

Impact Analysis

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. Construction activities would involve the use of typical materials, such as vehicle fuels, paints, oils, transmission fluids, and solvents. The types and amounts of hazardous materials that would be used in connection with occupancy of the 16 proposed residences would be typical of residential uses, such as cleaning solutions, solvents, pesticides for landscaping, painting supplies, and petroleum products used in normal vehicles operations. These substances can be hazardous in high

concentrations; however, the routine and proper use of these standard construction and household products would not result in significant hazards due to small quantities of use. Impacts would be less than significant.

The proposed residential uses would not include the routine transportation, storage, production, use, or disposal of hazardous materials, or the use of pressurized tanks. Like the existing residential uses surrounding the Project Site, the types and amounts of hazardous materials that would be used would include typical household products (e.g., cleaning solutions, solvents, pesticides for landscaping, painting supplies, and petroleum products). The routine use and disposal of normal household products would not create a significant hazard to the public or the environment. As such, the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

Less than Significant Impact. The Project Site was previously approved for residential development and grading and site improvements were completed on a previously undisturbed site. According to the GeoTracker, State Water Resources Control Board (SWRCB)³⁷ and EnviroStor, Department of Toxic Substances Control (DTSC)³⁸ databases there are no active or former hazardous wastes or solid waste disposal sites on the Project Site. Should discovery of hazardous materials occur, compliance with regulations from Monterey Park Fire Department (MPFD), DTSC, SWRCB and other agencies would reduce any impacts to be less than significant. As such, implementation of the proposed residential development would not create or exacerbate a hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

37 State Water Resources Control Board (SWRCB), GeoTracker, <http://geotracker.waterboards.ca.gov/>, accessed on March 5, 2020.

38 California Department of Toxic Substances and Control (DTSC), EnviroStor, <http://www.envirostor.dtsc.ca.gov/public/>, accessed on March 5, 2020.

- c. **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Less than Significant Impact. The school nearest to the Project Site, Saint Thomas More School, is approximately 0.10 mile to the north. However, as discussed previously, any hazardous materials used by the Project during construction would comply with all necessary regulations and would be typical of the surrounding residential neighborhood after the proposed residences are occupied. As such, impacts to existing or proposed schools would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

- d. **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Less than Significant Impact Government Code Section 65962.5 refers specifically to a list of hazardous waste facilities compiled by the DTSC.³⁹ The Project Site is not included on the DTSC's hazardous waste facilities list.⁴⁰ As such, the implementation of the Project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

- e. **For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

No Impact. There are no public airports within two miles of the Project Site. The nearest airport, El Monte Airport, is approximately 8.8 miles northeast. As such, the implementation of the proposed housing development would not present a safety hazard to aircraft and/or airport operations at a public airport. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

39 CalEPA, *Cortese List: Section 65962.5(a)*, <https://www.calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/>, accessed on March 5, 2020.

40 Department of Toxic Substances Control, *Hazardous Waste and Substance Site List (CORTESE)* http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm, accessed on March 5, 2020.

f. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The City participates in the Standardized Emergency Management System (SEMS) that provides a framework for coordinating multiagency emergency responses. The City's SEMS incorporates mutual aid agreements, establishes lines of communication during emergencies, and standardizes incident command structures.⁴¹ The SEMS prepares City staff to react quickly and specifically to any hazardous materials accident, with the MPFD leading the response team. The SEMS includes provisions for the MPFD to maintain records of all hazardous materials stored and used at businesses in the community, thus ensuring appropriate response to any individual incident.⁴²

Primary local street access to the Project is provided by West Garvey Avenue, which is a two-way street with two lanes travelling in both the east and west direction. This street is a designated truck route and is classified as a Minor Arterial by the City.⁴³ Although construction activities may result in temporary road closures, under California Fire Code Section 503, as adopted by the MPMC, approved site plans and pre-construction plans for new developments shall be reviewed by the MPFD to ensure adequate access is provided and maintained.⁴⁴ As such, impacts to emergency response and evacuation plans would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

g. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The Project Site is in an urbanized area in the City. The Project Site is not located adjacent to, or near wildlands. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

41 City of Monterey Park, *General Plan: Safety & Community Services Element*, <http://www.montereypark.ca.gov/467/Related-Plans-Programs>, accessed March 5, 2020.

42 City of Monterey Park, *General Plan: Safety & Community Services Element*, <http://www.montereypark.ca.gov/490/Hazardous-Materials>, accessed March 5, 2020.

43 *Monterey Park General Plan*, Figure C-2, Master Circulation Plan, July 2001.

44 *Monterey Park Fire Department, Guidelines for Fire Department Access*, November 7, 2013.

10. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on or off site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impacts Analysis

- a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than Significant Impact. A project would normally have a significant impact on surface water quality if discharges associated with the project would create pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code (CWC) or would cause regulatory standards to be violated, as defined in the applicable National Pollution Discharge Elimination System (NPDES) stormwater permit or Water Quality Control Plan for the receiving water body.

The Project would connect to the existing wastewater infrastructure in the City and ultimately be treated at a wastewater treatment plant. Furthermore, the Project would comply with all surface water quality regulations issued by the Los Angeles Region Regional Water Quality Control Board's (LA RWQCB) and contained in the City of MPMC.

The following is a discussion of the potential impacts to water quality from construction of the Project and occupancy of the proposed residences.

Construction Impacts

Project-related construction activities could potentially violate applicable water quality standards if proper measures are not taken. Discharges from construction sites that could affect stormwater, including soil and sediment entering stormwater or carried off site by wind, would be regulated by the Statewide General Construction Permit issued by the State Water Resources Control Board.⁴⁵

The NPDES Construction General Permit (CGP) must be obtained before the City issues grading and/or building permits. The CGP permit must then be retained on-site and must be shown to an authorized enforcement officer upon request. In addition, as the Project is greater than one acre, a Stormwater Pollution Prevention Plan (SWPPP) is also required before issuance of a grading permit.⁴⁶ This SWPPP would include plans to implement best management practices (BMPs) designed to prevent the discharge of pollutants, erosion, and siltation during the Project's construction phase. With regulatory compliance, any potential impacts to water quality and waste discharge requirements from the Project during construction would be less than significant.

Operation Impacts

The Project includes development of 16 single-family residences on a hillside. The Project would include installation of a catch basin with a filter insert located toward the bottom of the private access road. The stormwater would feed into a filter, then travel under the sidewalk and discharge onto West Garvey Avenue. Additionally, LA RWQCB regulations require the preparation and implementation of a Standard Urban Stormwater Mitigation Plan (SUSMP).⁴⁷ The SUSMP would effectively prohibit non-storm water

45 State Water Resources Control Board (SWRCB), *2009-0009-DWQ Construction General Permit Fact Sheet*, https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_factsheet.pdf accessed May 2020.

46 *City of Monterey Park Municipal Code*, 6.30.050 "Control of pollutants for construction and new development." http://qcode.us/codes/montereypark/?view=desktop&topic=6-6_31-6_31_020, accessed March 5, 2020.

47 Los Angeles Regional Water Quality Control Board, *Standard Urban Storm Water Mitigation Plan for Los Angeles County and Cities in Los Angeles County*, http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/susmp/susmp_rbfinal.pdf, accessed March 5, 2020.

discharges, and reduce the discharge of pollutants from storm water conveyance systems.⁴⁸ Therefore, with regulatory compliance, operation-related impacts to water quality and waste discharge requirements would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. The City's Water System receives its water supply from local groundwater. The water is produced by 12 City-owned wells with a total capacity of 20 million gallons per day (mgd). On average, about 65% of the water used each year is supplied from local rainfall; the other 35% is imported from northern California and then percolated into the groundwater aquifers. The water is imported by the San Gabriel Valley Municipal Water District, a public agency, which the City is a member of. The Monterey Park Water System supplies an average of 10 mgd to its customers.⁴⁹

According to the City of Monterey Park 2015 Urban Water Management Plan (UWMP), the City's actual water use rate during Fiscal Year 2014-15 was 134 gallons per capita per day.⁵⁰ Given that the Project would result in a population increase of 49 residents (see discussion in **Section 14: Population**), the Project would require an average of 4,657 gallons per day (see **Appendix C: CalEEMod Outputs**) of water, or 5.22 acre-feet per year. The UWMP states that during an average year (2010) available supplies were 8,686 acre-feet. The Project would account for approximately 0.06 percent of the total supplies during an average year. As such, groundwater demanded by the Project would be incremental and would not result in depleting existing groundwater supplies. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or off-site?

Less than Significant Impact. Regulatory measures and agencies such as MPMC 6.30.050 and the LA RWQCB address on-site drainage through their permit programs. These permits require measures to

⁴⁸ Ibid.

⁴⁹ City of Monterey Park, *Water FAQs*, <http://www.montereypark.ca.gov/faq.aspx?TID=21>, accessed March 5, 2020.

⁵⁰ *City of Monterey Park 2015 Urban Water Management Plan*, <http://www.montereypark.ca.gov/DocumentCenter/Home/View/5763>, accessed March 5, 2020.

minimize or prevent erosion and reduce the volume of sediments and pollutants in a project's runoff and discharges based upon the size of the project site, as discussed under threshold a above.

Furthermore, the Project Site is located in an urbanized area, and no streams or river courses are located on or near the Project Site. The Project would include the construction of several retaining walls which would assist in the prevention of erosion. As such, the Project would not substantially alter the drainage pattern of the Project Site or area in a manner that would result in erosion, or siltation on or off the Project Site. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less than Significant Impact. Regulatory measures and agencies such as MPMC Section 6.30.050 and LA RWQCB address on-site drainage through their permit programs. Drainage controls to prevent runoff from leaving the Project Site must be utilized as required by the NPDES permit, SWPPP, SUSMP, and other applicable permits and plans. These controls may include, without limitation, the following: detention ponds, sediment ponds or infiltration pits; dikes, filter berms or ditches; and downdrains, chutes or flumes.⁵¹

Furthermore, the Project Site is located in an urbanized area, and no streams or river courses are located on or near the Project Site. Therefore, the Project would not result in a significant increase on Project Site runoff, or any changes in the local drainage patterns, which would result in flooding on or off the Project Site. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact. Under the NPDES stormwater permit issued to the County of Los Angeles and the City, the Project would be required to incorporate measures to minimize pollutant levels in stormwater runoff.⁵² The Project would include installation of a catch basin with a filter insert located

51 City of Monterey Park Municipal Code, 6.30.050 "Control of pollutants for construction and new development." http://qcode.us/codes/montereypark/?view=desktop&topic=6-6_31-6_31_020, accessed March 5, 2020.

52 City of Monterey Park, *General Plan: Resources Element*, <http://www.montereypark.ca.gov/512/Related-Plans-Programs>, accessed March 5, 2020.

toward the bottom of the private access road. The stormwater would feed into a filter, then travel under the sidewalk and discharge onto West Garvey Avenue. Additionally, as discussed in threshold c.ii. above, permits and plans including the NPDES stormwater permit, SWPPP, and SUSMP, require drainage controls to prevent runoff from leaving the Project Site. As such, with regulatory compliance, the Project would not create or contribute runoff water that would exceed the capacity of storm water drainage systems or provide substantial additional sources of pollution. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

iv. impede or redirect flood flows?

Less than Significant Impact. The existing drainage pattern would be improved as part of the Project to redirect stormwater away from buildings and doorways on the Project Site. According to the *City of Monterey Park General Plan*, the Project Site is located outside of all potential flood inundation areas.⁵³ As discussed in threshold a above, during Project construction activities, BMPs for minimizing soil erosion would be implemented. Impacts would be less than significant.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant Impact. According to the Federal Emergency Management Agency (FEMA) flood insurance rate map, the Project Site is not located within a designated flood zone (FEMA FIRM Map # 06037C1645F).⁵⁴ The flood hazards identified in the area involve Garvey Reservoir and the Laguna Basin. In the unlikely event of a conjectured catastrophic failure at Garvey Reservoir, properties to the north and south could be flooded. Failure of the north dam would create two flood zones, the undeveloped valley immediately east of the reservoir and properties to the north roughly between Alhambra and New Avenues to Garvey Avenue. If the south dam failed, the residential neighborhoods below and areas along the north side of the Pomona Freeway and near freeway under crossings would be affected. For the Laguna Basin, the inundation area is limited to the interchange of Long Beach Freeway (Interstate 710) and San Bernardino Freeway (Interstate 10). The nearest inundation area is 1.6 miles southeast of the Project Site. Thus, private property within the City, including the Project Site, is not threatened by this hazard.⁵⁵

53 City of Monterey Park, *General Plan: Safety & Community Services Element*, Figure SCS-4: Flood Inundation Areas <http://www.montereypark.ca.gov/DocumentCenter/View/5750>, accessed March 5, 2020.

54 Federal Emergency Management Agency, *Flood Insurance Rate Map # 06037C1645F*, effective September 26, 2008; <http://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30&extent=-118.15863939709469,34.0>, accessed March 5, 2020.

55 City of Monterey Park, *General Plan: Safety & Community Services Element*, <http://www.montereypark.ca.gov/475/Flood-Dam-Inundation-Hazards>, accessed March 5, 2020.

According to the *City of Monterey Park General Plan*, the Project Site is located outside of all potential inundation areas.⁵⁶ Additionally, the Project Site is also over 22 miles from the nearest ocean, the source of a potential tsunami. Furthermore, the Project Site is surrounded by urban development and on the crest of a hillside, away from areas which might be sources of mudflow. As such, implementation of the Project would not expose people or structures to significant risk involving inundation by water or mudflow. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The Project does not involve the introduction of new activities or features that could be sources of contaminants that would degrade groundwater quality. Moreover, the implementation of BMPs and compliance with all federal, State, and local regulations governing stormwater discharge would reduce the impacts of the Project on surrounding water quality. This would include compliance with the City's Low Impact Development (LID) ordinance, the primary purpose of which is to ensure that development projects manage runoff in a manner that captures rainwater and removes pollutants while reducing the volume and intensity of storm water flows. The Sustainable Groundwater Management Act (SGMA) requires the California Department of Water Resources (DWR) to establish initial groundwater basin priorities for the basins identified and defined in DWRs Bulletin 118 (Water Code §10722). Monterey Park's water supply comes from City owned production wells located outside the city limits. These wells are in the Main San Gabriel Groundwater Basin.⁵⁷ SGMA identifies the San Gabriel Main Basin as being exempt from establishing a Groundwater Management Plan (GMP).⁵⁸ The Project would not conflict with or obstruct implementation of any plans. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

56 City of Monterey Park, *General Plan: Safety & Community Services Element*, Figure SCS-4: Flood Inundation Areas <http://www.montereypark.ca.gov/DocumentCenter/View/5750>, accessed March 5, 2020.

57 City of Monterey Park, *Water Quality Report*, <https://www.montereypark.ca.gov/622/Water-Quality-Report>. Accessed May 2020.

58 City of Monterey Park, *2015 Urban Water Management Plan*, August 2016.

11. LAND USE AND PLANNING

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐

Impact Analysis

a. Physically divide an established community?

No Impact. Uses immediately surrounding the Project Site include multifamily residential units along West Garvey Avenue to the north, the Serbian Orthodox Church along West Garvey Avenue to the northwest, single-family homes along Sombrero Drive to the southwest, and the Abajo del Sol senior apartment complex across Abajo Drive to the east of the Project Site.

The Project Site was previously approved and improved for residential development and is designated for residential development by City's General Plan. The Project would include the construction of 16 single-family residences on an infill site. Infill sites, as defined by Public Resource Code (PRC) Section 21099(a)(4), are sites within developed urban areas.⁵⁹ No significant alteration of street patterns is proposed and no separation of uses or disruption of access between land use types would occur because of the Project. For these reasons, the Project would not significantly disrupt or divide the physical arrangement of the established community and no impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Potentially Significant Impact. The City's General Plan designates the Project Site as High Density Residential and the zoning designation of the Project Site is also High-Density Residential (R-3). The High-

⁵⁹ Senate Bill (SB) 743, effective January 1, 2014, amended Public Resource Code (PRC) Section 21099 to define an infill site as a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

Density Residential zoning allows a broad range of dwelling unit types which may be attached or detached. The Project Site is not a part of any other Focus Area or Specific Plan.⁶⁰

The Project would include construction of 16 single-family residences at a density of 2.6 units per acre, less than the maximum allowed density. The Project includes a Specific Plan with custom development standards developed in response to the unique physical characteristics of the Project Site. Analysis of the consistency of the Specific Plan is with applicable land use plans, policies, and regulations is required.

Mitigation Measures: Further analysis is required to determine appropriate mitigation.

60 City of Monterey Park, *General Plan: Land Use Element*, <http://www.montereypark.ca.gov/266/Focus-Areas>, accessed March 5, 2020.

12. MINERAL RESOURCES

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Impact Analysis

- a. **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?**

No Impact. No active or abandoned oil or gas wells are located within the Project Site.⁶¹ Also, the Project Site is not located within a Significant Mineral Aggregate Resource Area (SMARA) nor is it located in an area with active mineral extraction activities.⁶² The Project Site is located within Mineral Resource Zone 1 (MRZ-1) which is defined as areas of no mineral resource significance.⁶³ As such, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State, and no impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

- b. **Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?**

No Impact. There are no mineral, oil, or energy extraction and/or generation activities located within the Project Site. Review of the maps provided by the State Department of Conservation indicated that there are no oil wells located within the Project Site and the Site is located within Mineral Resource Zone 1 (MRZ-1) which is defined as areas of no mineral resource significance.⁶⁴ Additionally, the Project's implementation would not include any materials that are considered rare or unique. Thus, the Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan, and no impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

61 California Department of Conservation, *Well Finder*, <https://maps.conservation.ca.gov/doggr/wellfinder/#close>. Accessed March 2020.

62 California Department of Conservation, *Mineral Land Classification*, <https://www.conservation.ca.gov/cgs/minerals/mineral-land-classification-smara>. Accessed March 2020.

63 California Department of Conservation, *Mineral Land Classification*, <https://www.conservation.ca.gov/cgs/minerals/mineral-land-classification-smara>. Accessed March 2020.

64 California Department of Conservation, *Well Finder*, <https://maps.conservation.ca.gov/doggr/wellfinder/#close>. Accessed March 2020.

13. NOISE

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b. Generation of excessive ground-borne vibration or ground-borne noise levels?	☒	☐	☐	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒

Impact Analysis

- a. **Generation of a substantial temporary or permanent increase in ambient noise levels the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Potentially Significant Impact. The City regulates noise through MPMC Chapter 9.53, which establishes noise standards for stationary noise levels at various categories of land uses. Moreover, MPMC Chapter 9.53 establishes exterior noise standards and permitted increases in noise levels for the City. A significant impact could occur if the Project exceeds the applicable noise standards established by MPMC Chapter 9.53.

ConstructionThe City's Noise Ordinance prohibits mobile construction noise that produces a maximum noise level exceeding 75 dB(A) for single-family residential and 80 dB(A) for multifamily residential. In addition, the Noise Ordinance prohibits stationary construction noise that produces a maximum noise level exceeding 60 dB(A) for single-family residential and 50 dB(A) for multifamily residential.

Additionally, MPMC Section 12.08.440 prohibits operation or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7:00 PM and 7:00 AM, or at any time on Sundays or holidays, such that the sound creates a noise disturbance across a residential or commercial real-property line.

Construction of the Project would require the use of heavy equipment for site clearing, grading, excavation and foundation preparation, the installation of utilities, paving, and building construction which would occur over an approximately two-year period. This may result in a temporary increase in ambient noise levels and further analysis is required to determine the significance.

Operation

The primary operational noise source associated with the Project would be traffic. Future development generated by the Project would result in additional traffic on adjacent roadways, thereby increasing vehicular noise in the vicinity of existing and proposed land uses. Further analysis of future traffic is required to determine the significance of any permanent increase in ambient noise levels.

Mitigation Measures: Further analysis is required.

b. Generation of excessive ground borne vibration or ground borne noise levels?

Potentially Significant Impact. Vibration is sound radiated through the ground. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. Construction activities have the potential to generate low levels of groundborne vibration. The operation of construction equipment generates vibrations that propagate through the ground but diminishes in intensity with distance from the source. Vibration impacts can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage of buildings at the highest levels.

The primary and most intensive vibration source associated with the development of the Project would be the use of earth-moving equipment during construction. Construction would occur over a two- year period, which may result in vibration or ground borne noise levels and therefore, further analysis is required.

Mitigation Measures: Further analysis is required.

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

No Impact. A significant impact may occur if a proposed project were located within an airport land use plan and would introduce substantial new sources of noise or substantially add to existing sources of noise

within or near a project site. There are no airports within a two-mile radius of the Project Site. The Project would not expose people to excessive noise levels associated with airport uses. No impact would occur.

Mitigation Measures: No mitigation measures are necessary.

14. POPULATION AND HOUSING

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Analysis

- a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than Significant Impact. SCAG forecasts the regional growth for the area and is used as a key guide for developing regional plans and strategies mandated by federal and state governments. SCAG adopted the 2016-2040 RTP/SCS in 2016. According to SCAG, Monterey Park had a 2018 population of 62,240; the City is within the County of Los Angeles, with a 2018 population of 10,283,729.⁶⁵ Based on the DOF current average household size of 3.05 persons.⁶⁶ The 16 single-family units proposed would add approximately 49 new residents to the City. This increase does not represent a substantial increase in the population of the area. The overall increase in housing units and population would be consistent with the SCAG forecast. SCAG forecasts that the population in the City of Monterey Park will increase to 65,000 persons and 21,500 households by 2040. As shown in **Table 14-1: SCAG's 2016-2040 RTP/SCS Forecast for the City of Monterey Park**, the forecast from 2012 through 2040 projects growth of 3,700 additional persons and 1,300 households, which yields a 5.69 percent population growth rate and 6.05 percent household growth rate, respectively.

The Department of Finance (DOF) estimated the January 2019 population of the City to be 61,828 residents.⁶⁷ The Proposed Project includes development of 16 single-family homes and, resulting in a

65 Southern California Association of Governments, *Local Profiles Report 2019: Profile of the City of Monterey Park (May 2019)*, accessed February 2020, <https://www.scag.ca.gov/Documents/SouthElMonte.pdf>.

66 California Department of Finance, *Report E-5: Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011–2019, with 2010 Benchmark*, accessed February 2020, available at <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

67 Department of Finance, *E-1 Population Estimates for Cities, Counties, and the State – January 1, 2018 and 2019*, <http://dof.ca.gov/Forecasting/Demographics/Estimates/E-1/>.

direct population increase of approximately 49 residents, based on the 2019 estimate for persons per household.

Table 14-1
SCAG's 2016–2040 RTP/SCS Forecast for the City of Monterey Park

Projection Year	Population	Household	Person/Household
2012	61,300	20,200	3.03
2040	65,000	21,500	3.02
<i>Net Change from 2012 to 2040</i>	<i>3,700</i>	<i>1,300</i>	<i>(0.1)</i>
Percent Change	5.69	6.05	(0.33)

Source: SCAG, 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (adopted 2016) Table 11 Jurisdictional Forecast 2040 in the Demographics & Growth Forecast Appendix.

This increase of 49 residents, would yield a 1.5 percent increase from the January 2019 DOF estimates and the 2040 SCAG estimates, and would be within the SCAG forecast of 3,700 additional residents in the City between 2012 and 2040. Additionally, the increase of 16 additional households would be within the SCAG forecast of 1,300 additional household in the City between 2012 and 2040. The Project would be consistent with the growth forecasts for population and housing, and as such, would not induce substantial unplanned population growth. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project would include development of 16 single-family residences on land that is currently vacant and would not displace a substantial number of existing housing. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

15. PUBLIC SERVICES

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☒	☐
iv. Parks?	☐	☐	☒	☐
v. Other public services?	☐	☐	☒	☐

Impact Analysis

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i. Fire Protection

Less than Significant Impact. The City is served by the MPFD, which operates three fire stations including 68:

- **Monterey Park Station 61:** located at 350 West Newmark Avenue, approximately 1.3 miles east of the Project Site; this station houses Quint 61, Engine 61, and Rescue Ambulance 61.
- **Monterey Park Station 62:** located at 2001 South Garfield Avenue, approximately 2.7 miles southeast of the Project Site; this station houses Engine 62, and Rescue Ambulance 62.

68 City of Monterey Park, "Stations and Apparatus," <http://www.montereypark.ca.gov/140/Stations-Apparatus>, accessed February 13, 2020.

- Monterey Park Station 63: located at 704 Monterey Pass Road is the nearest to the Project Site, approximately one mile southwest; this station houses Engine 63.

These stations allow for response to any incident within eight to fourteen minutes, with an average response time of ten minutes. This level of protection has allowed the City over the years to receive a very high rating from the Insurance Services Organization (ISO). Historically, the City's ISO rating has been three (on a one to ten scale, with one representing the highest rating).⁶⁹ The average response time for “fire calls” was 5.01 minutes and 4.37 minutes for emergency service calls in Fiscal Year 2012-2013.⁷⁰

Goal 11, Policy 11.1 of the General Plan states that the City’s acceptable response time is considered five-to six-minute fire response time citywide.⁷¹

The Project includes development of 16 single-family residences, resulting in an increase in population of approximately 49 residents. The current response time is less than what is considered an acceptable average response time. Any additional service calls generated by the Project would be incremental and would not cause a significant increase in MPFD emergency response times and response times would remain at an acceptable level.

All future development would be subject to the requirements of Title 17, the City of Monterey Park Fire Code to ensure that public safety is considered and addressed. With compliance to Title 17 and the existing services provided by the MPFD, implementation of the Project would not require the construction of new or physically altered fire protection facilities. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

ii. Police Protection.

Less than Significant Impact. The City is served by the Monterey Park Police Department (MPPD). The MPPD operates out of City Hall, 320 West Newmark Avenue, approximately 1.3 miles southeast of the Project Site, approximately four minutes from the Project Site. The MPPD is a full-service police agency with 75 sworn police officers and 44 civilian personnel supported by over 80 community volunteers

69 City of Monterey Park, *Safety and Community Services Element, Fire & Police Protection*, <http://www.montereypark.ca.gov/494/Fire-Police-Protection>, accessed on March 5, 2020.

70 City of Monterey Park, *Emergency Operations*, <http://www.montereypark.ca.gov/138/Operations>, accessed on March 5, 2020.

71 City of Monterey Park, *Safety and Community Services Element, Fire & Police Protection*, <http://www.montereypark.ca.gov/494/Fire-Police-Protection>, accessed on May 29, 2020.

through the police reserves, emergency communications, citizen patrol, explorer programs, and other civilian volunteers.⁷²

The Project includes development of 16 single-family residences, resulting in an increase in population of approximately 49 residents. The Project would generate calls typical of the surrounding residential neighborhood. The Monterey Park General Plan does not state any acceptable response times for the police department. However, given the distance from the Project as well as the small increase in number of additional residents, any additional service calls generated by the Project would be incremental and would not cause a significant increase to the current MPPD response times. Implementation of the Project would not require the construction of new or physically altered police facilities. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

iii. Schools

Less than Significant Impact. The Project Site is served by the Alhambra Unified School District and Garvey Elementary School District. For new constructions or additions, a School Development Fee must be paid at the school district's office before a building permit can be issued.⁷³ The payment of these fees would reduce the potential impacts to levels considered less than significant. The Project Applicant would be required to pay applicable school fees pursuant to California Government Code, Section 65995, which are deemed by law to be full and complete mitigation of impacts. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

iv. Parks

Less than Significant Impact. Three parks within the City are located within two miles of the Project Site:

- **Highlands Park:** located at 400 Casuda Canyon Drive, approximately 1.3 miles southwest of the Project Site.
- **Barnes Park:** located at 350 South McPherrin Avenue, approximately 1.3 miles southeast of the Project Site.
- **Sequoia Park:** located at 750 Ridgecrest Street, approximately 1.4 miles south of the Project Site.

⁷² City of Monterey Park, *Police: Our Department*, <http://www.montereypark.ca.gov/393/Police>, accessed on May 2020.

⁷³ City of Monterey Park, *Building Permits, Fees Paid to Other Agencies*, <http://www.montereypark.ca.gov/193/Fees-Paid-to-Other-Agencies>, accessed on March 5, 2020.

The Monterey Park General Plan does not include an acceptable amount of park acreage for the number of residents. However, an acceptable amount of parkland is typically calculated by number of acres of parkland per 1,000 residents. The Project includes development of 16 single-family residences, resulting in an increase in population of approximately 49 residents. The increase of 49 residents would not significantly alter the number of acres per 1,000 residents. Demand on park services would be incremental and would not require the construction of new or physically altered facilities. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

v. Other public services

Less than Significant Impact. Other public services that could potentially be impacted by the Project include public libraries. The City is served by the Monterey Park Bruggmeyer Library, located at 318 South Ramona Avenue, approximately 1.4 miles east of the Project Site.

The Project includes development of 16 single-family residences, resulting in an increase in population of approximately 49 residents. The projected resident population for the Project represents a relatively small change in the population of the City and, for this reason, the Project would not require new or physically altered libraries. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

16. RECREATION

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Impact Analysis

- a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less than Significant Impact. The City's Parks and Recreation Department is responsible for the maintenance and operation of the City's public parks and recreational facilities.⁷⁴ Local parks and recreational services operated by the City include the following:

- **Barnes Park:** located at 350 South McPherrin Avenue and includes approximately 17 acres. Improvements located within this park include a community center, basketball gym, a memorial bowl, a sheltered picnic pavilion, an Olympic-sized pool, a lighted softball field, tennis courts, and a children's play area.
- **Bella Vista Park:** located at 400 Pomona Boulevard. This park has a land area of approximately four acres and includes a softball field, children's play area, outdoor basketball, picnic facilities, lighted tennis court, and restrooms.
- **Edison Trails Park:** located at 1600 South Garfield Avenue and has a land area of approximately 11 acres. Facilities at this park include picnic facilities, a play area, restrooms, and hiking trail.
- **Garvey Ranch Park:** located at 781 South Orange Avenue, on the north side of the Garvey Reservoir. The park's land area is approximately 28 acres and the park's facilities include two lighted baseball fields, picnic facilities, restrooms, lighted tennis courts, children's playground, a community room, a museum, and an observatory.
- **George Elder Park:** located at 1950 Wilcox Avenue, one half block east of the Garfield Avenue and Elmgate Street intersection. The park features a basketball gym, a community center, a swimming

⁷⁴ City of Monterey Park, "Facilities," <http://www.montereypark.ca.gov/Facilities>, accessed February 13, 2020.

pool, picnic facilities, lighted tennis courts, a children's area, and restrooms. This park's land area is approximately 15 acres.

- Highlands Park: located at 400 Casuda Canyon Drive and contains approximately six acres. This park is located adjacent to Monterey Highlands School and features lighted tennis courts, a children's area, passive open space, and restrooms.
- La Loma Park: located at 1950 Fulton Avenue and includes approximately 7.5 acres. This park includes baseball and softball fields, a children's play area, a restroom, and picnic facilities.
- The Langley Senior Center: located on 400 West Emerson Avenue. This center provides activities for the local seniors. Activities at this park include dances, a lunch program, billiards, table tennis, computer classes, flea markets and special events.
- Sequoia Park: located at 750 Ridgecrest Avenue and has a total land area of approximately five acres. This park offers a Japanese garden with Azumaya View Deck, a softball field, a children's play area, lighted tennis courts, outdoor basketball court, restrooms, and picnic facilities.
- Sierra Vista Park: located at 311 Rural Drive and has a land area of approximately three acres. This park includes a softball field, an outdoor basketball and paddle tennis court, a children's play area, picnic area, meeting room, and restrooms.
- Sunnyslopes Park: located at 1601 Sunnyslope Drive and has a land area and has an area of approximately five acres. This park features picnic facilities, a softball field, lighted tennis courts, a children's playground, and restrooms.
- Cascades Park: located at 700 S. Atlantic Blvd. This park has a total area of approximately two acres.
- Pine Tree Park: located at 2167 Arriba Drive and has a total area of approximately 0.5 acre. This is a small neighborhood park with a picnic table and a children's play area.

The nearest park to the Project Site is Sequoia Park, located approximately 0.30 mile to the southeast. The Project is estimated to increase the population by approximately 49 residents, and it is expected that some of these residents would utilize the City's park and recreation facilities. However, given the small population increase, the Project would not substantially increase the use of existing neighborhood and regional parks or other recreational facilities to the extent that substantial physical deterioration of such facilities would result. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

- b. Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

Less than Significant Impact. The Project does not include recreational facilities; however, approximately 55,000 SF of visual open space would be provided with the Project. This area would be above the upper

retaining wall and would remain largely untouched with existing vegetation. The HOA would maintain this area. Residents of the Project Site would have access to existing park facilities, which would not need to be expanded to accommodate the additional residents. With the incremental increase of 49 individuals to the population, the Proposed Project would not require the construction or expansion of recreational facilities. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

17. TRANSPORTATION AND TRAFFIC

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☒	☐	☐	☐
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☒	☐	☐	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐
d. Result in inadequate emergency access?	☒	☐	☐	☐

Impact Analysis

- a. Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities ?

Potentially Significant Impact. A significant impact could occur if the Project were to result in substantial increases in traffic volumes in the vicinity of the Project such that the existing street capacity experiences a decrease in the existing volume-to-capacity (V/C) ratios or experiences increased traffic congestion exceeding *City of Monterey Park's Traffic Impact Study Guidelines*.⁷⁵ According to the *City of Monterey Park Traffic Impact Study Guidelines*, the requirement for a traffic impact analysis would be based upon:

- The project generates a minimum of 50 vehicles per hour (total two-way) during the morning or evening peak hours.
- The project is located within 300 feet of the intersection of two streets designated as arterial or higher on the City's General Plan or the project frontage will be adjacent to two or more streets regardless of the classification.
- The location of the project is environmentally sensitive.
- The project creates traffic safety or operational concerns.

⁷⁵ City of Monterey Park, *Traffic Impact Study Guidelines*, February 2006.

While the Proposed Project does not directly meet any of these thresholds, due to the location of the Project Site, additional analysis is required to assess the Project's consistency with applicable plans, ordinances, and policies.

Mitigation Measures: Further analysis is required.

b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Potentially Significant Impact. While this Checklist Question in Appendix G of the CEQA Guidelines has been modified by the Natural Resources Agency to address consistency with CEQA Guidelines Section 15064.3, subdivision (b), which relates to use of the vehicle miles traveled (VMT) as the methodology for evaluation traffic impacts, neither the City nor the County has adopted a VMT methodology to address this updated Checklist Question, as the effective date for Section 15064.3 was July 1, 2020. Further analysis is required to analysis is required to evaluate the VMT associated with the Project.

Mitigation Measures: Further analysis is required.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Potentially Significant Impact. The Project would include a minimum 50-foot left turn vehicular access lane from West Garvey Avenue. Furthermore, the Project would include landscape and parkway improvements in conjunction with development to the City of Monterey Park standards. However, further analysis of the line of sight from the entrance of the Project for traffic traveling southbound along West Garvey Avenue is required.

Mitigation Measures: Further analysis is required.

d. Result in inadequate emergency access?

Potentially Significant Impact. As discussed above, the Project would include a minimum 50-foot left turn vehicular access lane from West Garvey Avenue. However, the line of sight from the entrance of the Project, for traffic traveling southbound along West Garvey Avenue, needs to be further analyzed for adequate emergency access.

Mitigation Measures: Further analysis is required.

18. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with the cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or	☒	☐	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (d) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☒	☐	☐	☐

Impact Analysis

- i. **Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with the cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)?**

Potentially Significant Impact. As previously discussed in **Section 5: Cultural Resources**, *A Cultural Resource Records Search and Literature Review* conducted by Applied Earthworks, Inc. indicates that there were no cultural resources found on the site. The records search indicated the Mojave Road, which consists of a network of prehistoric trails used by Native Americans to get across the Mojave Desert, is a California Registered Historical Landmark. However, this historical site is not located within the Project Site and Project construction would not include any alterations to this historical site. AB 52 and SB 18, define formal consultation processes to allow for California Native American tribes to identify potential significant impacts to tribal cultural resources, as defined in Public Resources Code Section 21074 as part of CEQA. Consultations with the appropriate California Native America tribes is conducted and based on these

consultations, any measures identified to mitigate any potential impact to Tribal Cultural Resources will be incorporated into the Project.

Mitigation Measures: Further analysis is required.

- ii. **Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with the cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1? In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Potentially Significant Impact. PRC Section 5024.1 (c) states that a resource may be listed as an historical resource in the California Register if it meets any of the following National Register of Historic Places criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistoric history.

A *Cultural Resource Records Search and Literature Review* conducted by Applied Earthworks, Inc. indicates that the Project Site is not designated as being or containing a historic or cultural resource. The City, as lead agency, has not determined that any additional resources are significant pursuant to PRC Section 5024.1.

AB 52 and SB 18, define formal consultation processes to allow for California Native American tribes to identify potential significant impacts to tribal cultural resources, as defined in Public Resources Code Section 21074 as part of CEQA. Consultations with the appropriate California Native America tribes is conducted and based on these consultations, any measures identified to mitigate any potential impact to Tribal Cultural Resources will be incorporated into the Project.

Mitigation Measures: Further analysis is required.

19. UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
Would the Project:				
a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact Analysis

- a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact.

Water

The City's Water System receives its water supply from local groundwater. The water is produced by 12 City-owned wells with a total capacity of 20 million gallons per day (mgd). On average, about 65% of the water used each year is supplied from local rainfall; the other 35% is imported from northern California and then percolated into local groundwater aquifers. The water is imported by the San Gabriel Valley

Municipal Water District, a public agency, and of which the City of Monterey Park is a member. The Monterey Park Water System supplies an average of 10 mgd to its customers.⁷⁶

As discussed in **Section 10: Hydrology and Water Quality**, according to the City of Monterey Park 2015 Urban Water Management Plan (UWMP), the City's actual water use rate during Fiscal Year 2014-15 was 134 gallons per capita per day.⁷⁷ Given that the Project would result in a population increase of 49 residents (see discussion in **Section 14: Population**), the Project would require an average of 4,657 gallons per day (see **Appendix C: CalEEMod Outputs**) of water, or 5.22 acre-feet per year. The UWMP states that during an average year (2010) available supplies were 8,686 acre-feet. The Project would account for approximately 0.06 percent of the total supplies during an average year. The City's existing and projected water supplies are sufficient to serve the uses permitted by the Specific Plan. As such, the Project would not require or result in the relocation or construction of new or expanded water facilities, and impacts would be less than significant.

Wastewater

The City collects the wastewater from the community and transports it to Los Angeles County Sanitation District No. 2 (LACSD) for treatment outside of the city limits.⁷⁸ The City's sanitary sewer system is a gravity-flow system that connects to County trunk lines and sewer treatment plants. These lines collect more than two billion gallons of raw sewage per year channeled 126 miles of main line sewers.⁷⁹

The LA RWQCB is the applicable Regional Water Quality Control Board for the Project area. The City and LACSD No. 2 are responsible for meeting the wastewater treatment and discharge requirements of the Los Angeles LA RWQCB. The Project includes development of 16 single-family residences, and would generate wastewater typical of the surrounding residential neighborhood. Wastewater from the Project Site would be treated according to the wastewater treatment requirements enforced by the LA RWQCB. In addition, the City would charge a sewer connection fee⁸⁰ that would ensure wastewater requirements are met.

According to the City's UWMP, LACSD estimates approximately 80 gallons per person per day of wastewater is generated within their service area. Wastewater produced by the City is processed by either the Los Coyotes Water Reclamation Plant (LCWRP) or the Long Beach Water Reclamation Plant (LBWRP),

76 City of Monterey Park, Water FAQs, <http://www.montereypark.ca.gov/faq.aspx?TID=21>, accessed on March 5, 2020.

77 City of Monterey Park 2015 Urban Water Management Plan, <http://www.montereypark.ca.gov/DocumentCenter/Home/View/5763>, August 2016.

78 Phoenix Civil Engineering, Inc. *City of Monterey Park Wastewater Collection System Master Plan Update*, January 13, 2014.

79 City of Monterey Park, *Storm Drains & Sewers*, <http://www.montereypark.ca.gov/503/Storm-Drains-Sewers>, accessed on March 5, 2020.

80 City of Monterey Park, *Sewer Connection*, <http://www.montereypark.ca.gov/499/Sewer-Connection>, accessed on March 5, 2020.

which together have a design capacity of 62.5 million gallons per day.⁸¹ With a projected increase of 49 residents, the Project would therefore generate approximately 3,920 gallons per day of wastewater, or 0.006 percent of the total capacity of the area wastewater treatment plants.

As such, the Project would not result in a new or expanded wastewater treatment facility, and impacts would be less than significant.

Stormwater

As discussed in **Section 10: Hydrology and Water Quality**, regulatory measures, and agencies such as MPMC 6.30.050 and LA RWQCB would require the implementation of drainage controls to prevent runoff from leaving the Project Site. Additionally, the Project would include installation of a catch basin with a filter insert located toward the bottom of the private access road. The stormwater would feed into a filter, then travel under the sidewalk and discharge onto West Garvey Avenue. These controls may include, without limitation, the following: detention ponds, sediment ponds or infiltration pits; dikes, filter berms or ditches; and downdrains, chutes or flumes.⁸² With regulatory compliance, storm water generated by the Project Site would not increase substantially. As such, the Project would not require or result in the relocation or construction of new or expanded stormwater drainage facilities, and impacts would be less than significant.

Electrical, Natural Gas, Telecommunications

The Project Site is located in a developed, urbanized portion of the City that is served by existing electric power, natural gas, and telecommunications services. The Project would develop 16 new residential units. As discussed in **Section 6: Energy**, threshold a above, the Project would not be a substantial source of new demand for new electrical and natural gas services. New connections would be established for the Project; however, as the electrical, natural gas, and telecommunications usage for the Project would be minimal, no substantial additional infrastructure would need to be installed or relocated to provide electric power facilities, natural gas facilities, or telecommunication services. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

81 City of Monterey Park 2015 Urban Water Management Plan, <http://www.montereypark.ca.gov/DocumentCenter/Home/View/5763>, August 2016.

82 City of Monterey Park Municipal Code, 6.30.050 "Control of pollutants for construction and new development." http://qcode.us/codes/montereypark/?view=desktop&topic=6-6_31-6_31_020, accessed on March 5, 2020.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Less than Significant Impact. As previously discussed, the Project would require an average of 4,657 gallons per day of water, or 5.22 acre-feet per year. The UWMP states that during an average year (2010), available supplies were 8,686 acre-feet (af), during a single dry year (2012) available supplies were 8,791 af, and during multiple dry years (2012, 2013, and 2014) available supplies were 8,791 af, 8,965 af, and 9,094 af, respectively. The Project would account for approximately 0.06 percent of the total supplies during an average year, 0.06 percent of the total supplies during a single dry year, and 0.06 percent for each multiple dry year. As the existing water facilities are able to accommodate the incremental increase in water supply needed to serve the Project, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

c. Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. As discussed previously, the Project would account for a negligible increase in existing LACSD wastewater treatment capacity. Therefore, there is adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments, and impacts to wastewater treatment capacity would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. The City currently contracts with Athens Services for all of its waste removal services. Before taking the City's waste to a landfill for final disposal, the City requires Athens to process Monterey Park waste at a Materials Recovery Facility (MRF) for the removal of recyclables. This program allows the City to meet the 50 percent landfill diversion mandate required by California Integrated Waste Management Act of 1989 (AB 939).⁸³

⁸³ City of Monterey Park, *Trash & Recycling*, <http://www.montereypark.ca.gov/552/Trash-Recycling>, accessed on March 5, 2020.

The closest MRF to the Project Site, located in the City of Industry, was expanded in 2007 and is able to process over 5,000 tons of waste per day.⁸⁴ Using the most conservative waste generation rates available from CalRecycle,⁸⁵ it is estimated that the Project would generate approximately 196 pounds of waste per day, less than four percent of the MRF's daily capacity.⁸⁶

In addition to requiring processing through the MRF, the Source Reduction and Recycling Element within the City's General Plan identifies other programs implemented to meet waste diversion goals. These measures include curbside collection of recyclables, separation of yard and other "green" waste from nonbiodegradable materials, and city purchasing practices that minimize production of excess packaging materials.⁸⁷ As such, the Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, and impacts to solid waste disposal would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

e. Comply with federal, State, and local statutes and regulations related to solid waste?

Less than Significant Impact. The Project would generate solid waste that is typical of residential uses. The Project would comply with all the Federal, State, and local statutes and regulations related to solid waste, including the California Integrated Waste Management Act and City recycling programs. As such, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

84 Athens Services, <https://athensservices.com/>, accessed on March 5, 2020.

85 CalRecycle, *Waste Characterization, Estimated Solid Waste Generation and Disposal Rates*, <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>, accessed March 5, 2020.

86 Calculated using generation rate 12.23 pounds per household per day, sourced originally from the City of Los Angeles CEQA Thresholds Guide (2006).

87 City of Monterey Park, *General Plan: Safety & Community Services Element*, <http://www.montereypark.ca.gov/491/Solid-Hazardous-Waste>, accessed on March 5, 2020.

20. WILDFIRES

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, postfire slope instability, or drainage changes?	☐	☐	☒	☐

Impact Analysis

- a. Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less than Significant Impact. The closest area identified by California Department of Forestry and Fire Protection (CAL FIRE) as a Very High Fire Hazard Severity Zone is within the City of Los Angeles, approximately one-mile northwest of the City. The closest area identified by CAL FIRE as a Very High Fire Hazard Severity Zone within a State Responsibility Area is within unincorporated Los Angeles County, approximately four miles southeast of the City. Additionally, maps prepared by CAL FIRE do not identify

the City as a Very High Fire Hazard Severity Zone.⁸⁸ The largest undeveloped area near the City is associated with the Whittier Narrows Recreation Area southeast of the City; major roadways separate the City from these undeveloped areas. No installation or maintenance of infrastructure. No circulation changes are proposed with the Project and therefore no emergency response plans would be impacted. Additionally, the Project includes a landscape plan and a Homeowner's Association that would help to maintain brush clearance around the properties as required by General Plan Policy 11.2. As such, impacts related to wildfires would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, postfire slope instability, or drainage changes?

Less than Significant Impact. The Project Site is located on a slope within the City. The Project Site was previously approved for residential development and the Project Site was graded before development activities ceased in 1980. Over the years, the slope along West Garvey Avenue failed and a series of retaining walls and tarps were installed in order to prevent further erosion.

The Project would include complete removal of the existing retaining walls on the lower portion of the Project Site and installation of a new retaining wall with tiebacks to retain the slope. Additionally, the Project includes a landscape plan and the proposed Homeowner's Association would help to maintain brush clearance on the Project Site around the proposed homes. Therefore, the Project would be consistent with the following General Plan policies to new development on slopes and would further reduce any potential impact:

- Policy 3.2: Require that hillside developments incorporate measures that mitigate slope failure potential and provide for long-term slope maintenance.
- Policy 3.3: Develop a comprehensive approach to remediating unstable hillslopes in the vicinity of Abajo Drive.
- Policy 11.2: Maintain brush clearance and weed abatement programs to reduce the risk of fires.

With adherence to the City's General Plan Policies, impacts related downslope flooding or landslides as a result of runoff, postfire slope instability, or drainage changes would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

88 CAL FIRE, Fire Hazard Severity Zones Maps, <https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>, accessed March 5, 2020.

21. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☒	☐	☐	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

Impact Analysis

- a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact. As discussed in **Section 4: Biological Resources** previously, the Project would not substantially reduce the habitat of fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or reduce the number or restrict the range of a rare or endangered plant or animal because the Project Site is located in a urbanized area and has been previously graded. Additionally, as discussed in **Section 5: Cultural Resources** above, the Project would also not affect important examples of California history or prehistory. Impacts on the quality of the environment would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

- b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Potentially Significant Impact. For the topics analyzed throughout this Initial Study, development of the Project would not result in impacts that are individually limited but cumulatively considerable. In the preceding topical analyses, cumulative impacts have been considered where appropriate. The Project does not require additional infrastructure beyond what currently exists and would not be an inducement to future growth. However, for topics that require further analysis, including Aesthetics, Air Quality, Geology and Soils, Land Use, Noise, Transportation, and Tribal Cultural Resources, further analysis is needed to evaluate the cumulatively considerable impacts associated with these topics.

Mitigation Measures: Further analysis is required.

- c. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact. This Initial Study reviewed the Proposed Project's potential impacts to Aesthetics, Agriculture and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems and Wildfire. This Initial Study found that several topics require further analysis to determine if impacts would be significant, including, Aesthetics, Air Quality, Geology and Soils, Land Use, Noise, Transportation, and Tribal Cultural Resources. Therefore, further analysis is needed to evaluate if the Project has environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly.

Mitigation Measures: Further analysis is required.

REFERENCES

- Applied Earthworks Inc., May 5, 2017, *Cultural Resources Records Search and Literature Review for the 1600 W Garvey Avenue Project in Monterey Park*, Los Angeles County, California.
- Athens Services, <https://athensservices.com/>, accessed on March 5, 2020.
- Biological Assessment Services, November 18, 2019, *Biological Resources Constraints Analysis for 1600 W. Garvey Ave. in Monterey Park CA*.
- . June 13, 2017, Biological Resources Constraints Analysis for your project at 1600 W. Garvey Ave. in Monterey Park CA.
- CalEPA, *Cortese List: Section 65962.5(a)*, <https://www.calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/>, accessed on March 5, 2020.
- California Department of Conservation, *Division of Land Resource Protection*, “Los Angeles County Important Farmland 2016,” map (January 2016), accessed February 2020, available at <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/los12.pdf>.
- Caltrans, Scenic Highways, “Scenic Highway System Lists,” <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>, accessed March 3, 2020.
- California Air Resources Board (CARB), “Area Designation Maps/State and National,” <http://www.arb.ca.gov/desig/adm/adm.htm>.
- California Department of Conservation, Division of Land Resource Protection, Los Angeles County Important Farmland 2016, map (July 2017), accessed February 2020, available at <https://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx>.
- . *Earthquake Fault Map*, <https://earthquake.usgs.gov/education/geologicmaps/apfaults.php>. Accessed March 2020.
- . *Mineral Land Classification*, <https://www.conservation.ca.gov/cgs/minerals/mineral-land-classification-smara>. Accessed March 2020.
- . *Well Finder*, <https://maps.conservation.ca.gov/doggr/wellfinder/#close>. Accessed March 2020.
- California Department of Finance, *E-1 Population Estimates for Cities, Counties, and the State – January 1, 2018 and 2019*, <http://dof.ca.gov/Forecasting/Demographics/Estimates/E-1/>.
- . *Report E-5: Population and Housing Estimates for Cities, Counties, and the State*, January 1, 2011–2019, with 2010 Benchmark, accessed February 2020, available at <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

California Department of Toxic Substances and Control (DTSC), EnviroStor, <http://www.envirostor.dtsc.ca.gov/public/>, accessed on March 5, 2020.

California Energy Commission, *2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings (December 2018)*, accessed May 2020, <https://ww2.energy.ca.gov/2018publications/CEC-400-2018-020/CEC-400-2018-020-CMF.pdf>.

CalRecycle, *Waste Characterization, Estimated Solid Waste Generation and Disposal Rates*, <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>, accessed March 5, 2020.

City of Monterey Park, "Building Permits, Fees Paid to Other Agencies," <http://www.montereypark.ca.gov/193/Fees-Paid-to-Other-Agencies>, accessed on March 5, 2020.

———. "Emergency Operations," <http://www.montereypark.ca.gov/138/Operations>, accessed on March 5, 2020.

———. "Facilities," <http://www.montereypark.ca.gov/Facilities>, accessed February 13, 2020.

———. "Police: Our Department," <http://www.montereypark.ca.gov/393/Police>, accessed on March 5, 2020.

———. "Sewer Connection," <http://www.montereypark.ca.gov/499/Sewer-Connection>, accessed on March 5, 2020.

———. "Stations and Apparatus," <http://www.montereypark.ca.gov/140/Stations-Apparatus>, accessed February 13, 2020.

———. "Storm Drains & Sewers," <http://www.montereypark.ca.gov/503/Storm-Drains-Sewers>, accessed on March 5, 2020.

———. "Trash & Recycling," <http://www.montereypark.ca.gov/552/Trash-Recycling>, accessed on March 5, 2020.

———. "Zoning Map," https://www.montereypark.ca.gov/DocumentCenter/View/7097/EXZO_2013-082417?bidId=, accessed March 2020.

———. "Water FAQs," <http://www.montereypark.ca.gov/faq.aspx?TID=21>, accessed on March 5, 2020.

City of Monterey Park Climate Action Plan, January 2012.

City of Monterey Park General Plan, Figure C-2, Master Circulation Plan, July 2001.

———. "Land Use Element," <http://www.montereypark.ca.gov/265/Residential-Land-Use>, accessed March 5, 2020.

———. "Resources Element," <http://www.montereypark.ca.gov/514/Parks-Recreation>, accessed on March 3, 2020.

———. “Safety and Community Services Element, Geological & Seismic Hazards,” <http://www.montereypark.ca.gov/470/Geological-Seismic-Hazards>, Accessed March 2020.

City of Monterey Park Municipal Code, “Chapter 9.63 Property Damage,” http://qcode.us/codes/montereypark/?view=desktop&topic=6-6_31-6_31_020, accessed March 5, 2020.

———. Water FAQs, <http://www.montereypark.ca.gov/faq.aspx?TID=21>, accessed March 5, 2020.

———. 6.30.050 “Control of pollutants for construction and new development.” http://qcode.us/codes/montereypark/?view=desktop&topic=6-6_31-6_31_020, accessed March 5, 2020.

City of Monterey Park Traffic Impact Study Guidelines, February 2006.

City of Monterey Park 2015 Urban Water Management Plan, <http://www.montereypark.ca.gov/DocumentCenter/Home/View/5763>, accessed March 5, 2020.

Department of Toxic Substances Control, Hazardous Waste and Substance Site List (CORTESE) http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm, accessed on March 5, 2020.

Federal Emergency Management Agency, *Flood Insurance Rate Map # 06037C1645F*, effective September 26, 2008; <http://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30&extent=-118.15863939709469,34.0>, accessed March 5, 2020.

Ganddini Group Inc., *1688 West Garvey Avenue Project Traffic Analysis*, April 30, 2020.

Los Angeles Regional Water Quality Control Board, *Standard Urban Storm Water Mitigation Plan for Los Angeles County and Cities in Los Angeles County*, http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/susmp/susmp_rbfinal.pdf, accessed March 5, 2020.

Monterey Park Fire Department, *Guidelines for Fire Department Access*, November 7, 2013.

Phoenix Civil Engineering, Inc. *City of Monterey Park Wastewater Collection System Master Plan Update*, January 13, 2014.

SCAG, *Local Profiles Report 2019: Profile of the City of Monterey Park (May 2019)*, accessed February 2020, <https://www.scag.ca.gov/Documents/SouthElMonte.pdf>.

SCAG, 2016 – 2040 RTP/SCS, adopted April 2016.

———. Appendix – Current Context, Demographics & Growth Forecast, adopted April 2016.

Senate Bill (SB) 743, effective January 1, 2014, amended Public Resource Code (PRC) Section 21099 defines an infill site as a lot located within an urban area that has been previously developed, or on a

vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

State of California Department of Conservation, *Regulatory Maps: Los Angeles Quadrangle*, GIS Data.

State Water Resources Control Board (SWRCB), GeoTracker, <http://geotracker.waterboards.ca.gov/>, accessed on March 5, 2020.

———. 2009-0009-DWQ Construction General Permit Fact Sheet, http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_factsheet.pdf, accessed March 5, 2020.

South Coast Air Quality Management District (SCAQMD), “Final 2016 Air Quality Management Plan” (2016), <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf>.

———. White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution, August 2003.

U.S. Department of Agriculture Soil Conservation Service, *Web Soil Survey*, <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed March 2020.

U.S. Energy Information Administration, *Annual Energy Outlook 2020: Table 11. Petroleum and Other Liquids Supply and Disposition*, accessed June 2020, <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=11-AEO2020&cases=ref2020&sourcekey=0>.

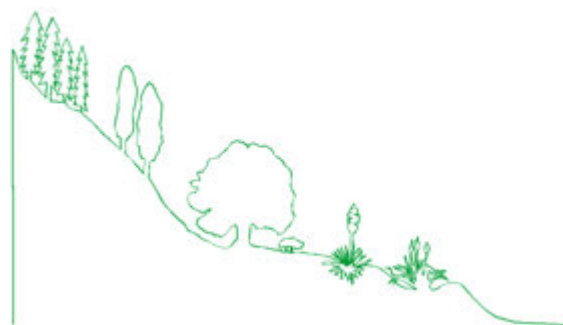
U.S. Fish and Wildlife Service’s HCP/NCCP Planning Areas in Southern California Map, https://www.fws.gov/carlsbad/HCPs/documents/hcp_inrmp_20150127.pdf, accessed March 5, 2020.

APPENDIX A

Biological Constraints Analysis

November 18, 2019

Tony Locacciatto, AICP, Partner
Meridian Consultants
910 Hampshire Road, Suite V
Westlake Village, California 91361
tlocacciatto@meridianconsultantsllc.com
Transmitted Via E-mail



Biological Assessment Services

Subject: **Biological Resources Constraints Analysis** for your project at 1600 W. Garvey Ave. in Monterey Park CA.

Dear Mr. Locacciatto:

Introduction

This letter reports on the biological conditions present on the property at 1600 W. Garvey Ave. in Monterey Park CA. A brief floristic survey of the site was conducted on May 18, 2017 and an update survey was conducted on November 18, 2019. The purpose of the survey was to determine the general biologic character of the site and attempt to determine the potential for any significant biological impact resulting from site development. No attempt was made to thoroughly catalogue all of the native species present on the property. The site was walked on foot utilizing existing trails, no attempt was made to walk controlled transects that would cover 100% of the site. Rather, the path chosen was intended to quickly evaluate the most common species present on the site and then to discover additional species that were located in portions of the site that appeared to support more unique flora. The steep and heavily vegetated slopes between the unnamed cul-de-sac on the site and Sombrero Drive above was not surveyed on foot but was examined with binoculars. The sky was clear and the weather mild, the temperature rose from approximately 80°F to 95°F during the 2017 and was steady at 87°F during the 2019 survey. The California Natural Diversity Database and the California Native Plant Society's lists of sensitive plants were accessed for the nine USGS quadrangle maps surrounding the site. The potential for the occurrence of any species found on these lists was evaluated. The 2019 update of these list contain many more sensitive elements reported in the area, primarily due to the inclusion of many resources of lower sensitivity. When limited to species having sensitivity levels for which impacts would trigger CEQA findings of significance, the list remains as it was in 2017.

The following report is very nearly identical to that produced in 2017 as the conditions on the site are very similar. The few changes are: the presence of homeless person(s) on the site, the observation of the western fence lizard (as predicted in 2017), the observation of the phainopepla and northern mockingbird onsite, and the removal of mostly nonnative the trees and shrubs that were located between the west end of the cul-de-sac and Garvey Avenue.

Site Description

The property is located on the northeastern “corner” of one of a series of hills known as the Repetto Hills. The Repetto Hills run from Elysian Park on the west to the Whittier Narrows on the east and form the southern boundary of the San Gabriel Valley. Because this site is on the north-facing slope it experiences slightly cooler and moister conditions than the south or west facing slopes and surrounding valley bottom. These conditions allow the north-facing slopes to support larger shrubs and trees than the surrounding areas. That is true on the undisturbed portions of the proposed project site. The property is roughly divided lengthwise by an abandoned, paved but in severe disrepair, cul-de-sac. The southwestern portion of the subject property, uphill from the cul-de-sac, is occupied by the previously mentioned relatively undisturbed slope. Downhill and north and east of the cul-de-sac, the land has been previously disturbed and appears to have been occupied by houses. At present, most of this area is covered by plastic tarps placed to reduce erosion of the steep slopes. The lands surrounding the project site are completely developed.

Vegetation

The property can be divided into two biological zones, the relatively undisturbed upper slope and the highly disturbed lower slopes. The one exception is that on the lower slope there is a plot that appears to have been revegetated with native coastal sage scrub species.

Most of the upper slope is dominated by native trees and shrubs including toyon (*Heteromeles arbutifolia*), the most common large shrub or tree, coast live oak (*Quercus agrifolia*), and laurel sumac (*Malosma laurina*). Near the cul-de-sac there are several foundations and other remnant portions of buildings. Around these structures and adjacent to the road there are a number of exotic or nonnative species of trees and shrubs including citrus, bottle brush (*Callistemon* sp.), red-ironbark eucalyptus (*Eucalyptus sideroxylon*), several other eucalyptus (*Eucalyptus* spp.), Peruvian pepper (*Schinus molle*), Brazilian pepper (*Schinus terebinthifolius*), and California fan palm (*Washingtonia filifera*). A number of nonnative weeds and remnant landscape species are also located near the road in this part of the property including sweet fennel (*Foeniculum vulgare*) and Hottentot fig iceplant (*Carpobrotus edulis*). One native understory shrub found in this area is coyote brush (*Baccharis pilularis*).

There is also a small homeless person’s shelter and camp area in this portion of the site.

The areas below, (downslope but north and east of), around the bulb, and above and west of the end of the cul-de-sac have been previously disturbed and are largely covered by plastic sheeting. The exception is the previously mentioned revegetated coastal sage scrub habitat area that will be discussed later. The trees located in the previously disturbed area are nonnative landscape species including Aleppo pine (*Pinus halepensis*), yew-plum pine (*Podocarpus* sp.), ornamental cypress (*Cupressus* sp.) and Washingtonia palms. Though trees are present in this area, the portions of the area not covered by plastic are dominated by nonnative weedy species. Among the

weedy species noted in the area are several nonnative sunflower family species including: sow-thistle (*Sonchus oleraceus*), bristly oxtongue (*Helminthotheca echioides*), milk thistle (*Silybum marianum*), tocalote (*Centaurea melitensis*), beggar-ticks (*Bidens pilosa*), prickly lettuce (*Lactuca serriola*), and Italian thistle (*Carduus pycnocephalus*). Two sweet clovers are also found here; yellow sweet clover (*Melilotus indica*) and white sweet clover (*Melilotus albus*). Tree tobacco (*Nicotiana glauca*), red-stemmed filaree (*Erodium cicutarium*), black mustard (*Brassica nigra*), short-podded mustard (*Hirschfeldia incana*), tumbleweed (*Salsola tragus*), curly dock (*Rumex crispus*), horehound (*Marrubium vulgare*), lamb's quarters (*Chenopodium album*), and cheeseweed (*Malva parviflora*) are other nonnative weedy species found in this area. The most abundant plant type by population and the dominant groundcover in the area consists of nonnative grasses including slender wild oats (*Avena barbata*), red brome (*Bromus madritensis rubens*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), Italian rygrass (*Festuca perennis*) and little mousetail grass (*Festuca myuros*).

Three native weedy species are scattered in low numbers throughout the previously disturbed areas. These are telegraph weed (*Heterotheca grandiflora*), Douglass' nightshade (*Solanum douglassii*), and California everlasting (*Pseudognaphalium californicum*). Blue elderberry (*Sambucus mexicana*) is a native tree-like shrub that is also found scattered around the property.

The coastal sage scrub habitat area appears to be the result of a revegetation effort as evidenced by the presence of brittlebush (*Encelia farinosa*) throughout the coastal sage scrub area. Brittlebush is native to California deserts and beyond but is not naturally found in the local coastal sage scrub habitat. Brittlebush is also frequently used in "native" planting areas as it is native to the state and is an attractive plant with reliable success from seed. Furthermore, the coastal sage scrub area onsite is on a northeast facing slope and in southern California coastal sage scrub naturally occurs on south and west facing slopes. The locally native species noted in the coastal sage scrub habitat area include California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), white sage (*Salvia apiana*), California sagebrush (*Artemisia californica*), and field bindweed (*Convolvulus arvensis*), the latter probably naturally occurring.

Wildlife

The cursory nature of the site survey conducted in support of a constraints analysis resulted in relatively few wildlife observations. No amphibians or reptiles were noted at the time of the survey and the western toad (*Anaxyrus boreas*) is the only amphibian species likely to occur there due to the aridity of the site. The western fence lizard (*Sceloporus occidentalis*) is the only reptile directly observed onsite. It is likely that many of the herpetofauna common in southern California would be found onsite. The including the southern alligator lizard (*Elgaria multicarinatus*), gopher snake (*Pituophis catenifer*), and southern Pacific rattlesnake (*Crotalis oreganus helleri*). Diagnostic sign (tracks, scat, burrows, etc.) of two mammal species were noted on the site; these were the coyote (*Canis latrans*), and pocket gopher (*Thomomys bottae*). Other mammals that might occur there include the brush rabbit (*Sylvilagus bachmani*) and bobcat (*Felis rufus*). Any mammal species found in the suburban areas of southern California may

utilize or traverse the site on occasion including numerous rodent species, raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), Virginia opossum (*Didelphis virginiana*), and eastern fox squirrel (*Sciurus niger*). The most abundant class of wildlife on the site was the birds. The species noted on the site were scrub jay, mourning dove, Allen's hummingbird, California towhee, lesser goldfinch, house finch, phainopepla, northern mockingbird, and white-throated swift. There are undoubtedly many other avian species that utilize the site as residents or transients among the most common of which are likely spotted towhee, American crow, Bewick's wren, black phoebe, and bush tit. None of these species are considered particularly sensitive and none are specifically protected by state or federal law. However, all bird species that occur on the site are protected from nest disturbance by the federal Migratory Bird Treaty Act and the California Fish and Game Code. These regulations prohibit the disturbance of nesting birds in any manner that may cause reproductive failure. In general, this means that land clearing must be accomplished during winter months while the birds are not nesting. If clearing cannot be accomplished during the non-nesting season (Currently considered to be from September 30 through January 1 per CDFW) nesting bird surveys must be conducted and any nests discovered must be avoided during construction. In general, nesting bird surveys are required for any construction that takes place between January 1 and September 30. Because the buffer distances recommended by CDFW (500 feet for raptors and 300 feet for all other species) extend far beyond the property limits in many cases, nest detection and avoidance may be difficult or impossible on adjacent private properties. In these cases, appropriate nest avoidance strategies may be determined by a qualified biological monitor who is onsite if land clearance is scheduled during nesting season.

Sensitive Biological Resources

Of the twenty-four wildlife species listed in the California Natural Diversity Database as sensitive and occurring in the nine-quad area surround the project site, only two birds are likely to occur on the site on rare occasions and would only visit the site as transients during migration. These are the Lawrence's goldfinch and summer tanager. Two other bird species generally considered sensitive and on Los Angeles County's list of sensitive bird species are likely to occur on the site and may nest there. These are the oak titmouse and the Nuttall's woodpecker. Several of the snakes listed as sensitive and occurring in the area probably occupied the site historically. But since the site has been surrounded by development for nearly a century and because people generally kill snakes on sight, it is unlikely that these snakes are present now. The one exception might be the San Bernardino ring-necked snake (*Diadophis punctatus*), this species has a small range and might survive in a habitat patch as small as that remaining on the site.

Of the forty-three plant species listed in the California Natural Diversity Database or California Native Plant Society's Rare Plant Inventory as sensitive and occurring in the nine-quad area surround the project site, only four have even a limited likelihood of occurring on the project site. These are Weed's intermediate mariposa lily (*Calochortus weedii* var. *intermedius*), Lewis' evening primrose (*Camissoniopsis lewisii*), Brand's star phacelia (*Phacelia stellaris*), and white rabbit-tobacco (*Pseudognaphalium leucocephalum*). The project site is within the range of each of these species and

presently supports nominally appropriate habitat, which is coastal sage scrub. However, the coastal sage scrub habitat present on the site is not naturally occurring as it is an artifact of a revegetation effort. The natural habitat of the site would be like that of the relatively undisturbed upper slopes, consisting of oak and toyon dominated woodland and chaparral and thus these residents of coastal sage scrub that require thin and sandy soils are not likely present onsite.

Conclusion

No species listed as Rare, Threatened, or Endangered by the state or federal governments were found on the property or are thought likely to occur there. It should be noted that this was a cursory survey and no directed surveys were conducted for listed species. An analysis was made of the likelihood of listed species occurring there based on known range and habitat preferences of these species. Any birds that nest on the site are protected by the Migratory Bird Treaty Act and the California Fish and Game Code. Two birds that almost certainly occur on the site, the oak titmouse and Nuttall's woodpecker, are considered locally sensitive and would require special consideration under CEQA.

Trees, including oak trees and oak woodlands, are not protected by City of Monterey Park ordinances and policies, but are generally considered sensitive resources under CEQA. One piece of statewide legislation, AB 2162, as introduced, Chu. Oak Woodlands Protection Act. February 2016. is a statewide oak woodlands protection bill that may (the language is unclear), if passed, require Cities and other agencies to evaluate and require mitigation for oak woodland impacts. This would require the evaluation of impacts to, and establishing mitigation for oak woodlands as habitat in addition to identifying and mitigating impacts to individual oak trees.

There are no definable streamcourses with or riparian habitat elements present. Therefore, no permits or interactions with the agencies that regulate impacts to jurisdictional waters of the U.S. or State are required.

If activities within inland streams, wetland and riparian areas were proposed, in California these activities are regulated by three agencies at the federal, state and regional levels. The U.S. Army Corps of Engineers (USACE) Regulatory Program regulates activities within wetlands and "Waters of the U. S." pursuant to Section 404 of the Federal Clean Water Act; the California Department of Fish and Game (CDFG) regulates activities within the bed, bank, and associated habitat of a stream under the Fish and Game Code Section 1600-1616; and the California Regional Water Quality Control Board (CRWQCB) regulates discharge into "Waters of the US" under Section 401 and 402 of the Federal Clean Water Act and "Waters of the State" under the California Porter-Cologne Water Quality Act. As noted above, no regulatory interactions with these agencies are required.

Ultimately, there are no biological resource based challenges that cannot be overcome on this property. There are processes in place by which each of the potential impacts to protected resources can be mitigated and permitted.

Locacciato
November 18, 2019

1600 W. Garvey Ave, Biological Conditions
Page 6

It is a pleasure working with you and I look forward to the opportunity to continue assisting with this project.

Sincerely,
Biological Assessment Services

A handwritten signature in black ink, appearing to read "Ty M. Garrison", written over the printed name.

Ty M. Garrison
Principal

June 13, 2017

Tony Locacciato, AICP, Partner
Meridian Consultants
910 Hampshire Road, Suite V
Westlake Village, California 91361
tlocacciato@meridianconsultantsllc.com
Transmitted Via E-mail



Biological Assessment Services

Subject: **Biological Resources Constraints Analysis** for your project at 1600 W. Garvey Ave. in Monterey Park CA.

Dear Mr. Locacciato:

This letter reports on the biological conditions present on the property at 1600 W. Garvey Ave. in Monterey Park CA. A brief floristic survey of the site was conducted on May 18, 2017. The purpose of the survey was to determine the general biologic character of the site and attempt to determine the potential for any significant biological impact resulting from site development. No attempt was made to thoroughly catalogue all of the native species present on the property. The site was walked on foot utilizing existing trails, no attempt was made to walk controlled transects that would cover 100% of the site. Rather, the path chosen was intended to quickly evaluate the most common species present on the site and then to discover additional species that were located in portions of the site that appeared to support more unique flora. The steep and heavily vegetated slopes between the unnamed cul-de-sac on the site and Sombrero Drive above was not surveyed on foot but was examined with binoculars. The sky was clear and the weather mild, the temperature rose from approximately 80°F to 95°F during the survey. The California Natural Diversity Database and the California Native Plant Society's lists of sensitive plants were accessed for the nine USGS quadrangle maps surrounding the site. The potential for the occurrence of any species found on these lists was evaluated.

Site Description

The property is located on the northeastern "corner" of one of a series of hills known as the Repetto Hills. The Repetto Hills run from Elysian Park on the west to the Whittier Narrows on the east and form the southern boundary of the San Gabriel Valley. Because this site is on the north-facing slope it experiences slightly cooler and moister conditions than the south or west facing slopes and surrounding valley bottom. These conditions allow the north-facing slopes to support larger shrubs and trees than the surrounding areas. That is true on the undisturbed portions of the proposed project site. The property is roughly divided lengthwise by an abandoned, paved but in severe disrepair, cul-de-sac. The southwestern portion of the subject property, uphill from the cul-de-sac, is occupied by the previously mentioned relatively undisturbed slope. Downhill and north and east of the cul-de-sac, the land has been previously disturbed and appears to have been occupied by houses. At present, most of this area is

covered by plastic tarps placed to reduce erosion of the steep slopes. The lands surrounding the project site are completely developed.

Vegetation

The property can be divided into two biological zones, the relatively undisturbed upper slope and the highly disturbed lower slopes. The one exception is that on the lower slope there is a plot that appears to have been revegetated with native coastal sage scrub species.

Most of the upper slope is dominated by native trees and shrubs including toyon (*Heteromeles arbutifolia*), the most common large shrub or tree, coast live oak (*Quercus agrifolia*), and laurel sumac (*Malosma laurina*). Near the cul-de-sac there are several foundations and other remnant portions of buildings. Around these structures and adjacent to the road there are a number of exotic or nonnative species of trees and shrubs including citrus, bottle brush (*Callistemon* sp.), red-ironbark eucalyptus (*Eucalyptus sideroxylon*), several other eucalyptus (*Eucalyptus* spp.), Peruvian pepper (*Schinus molle*), Brazilian pepper (*Schinus terebinthifolius*), and California fan palm (*Washingtonia filifera*). A number of nonnative weeds and remnant landscape species are also located near the road in this part of the property including sweet fennel (*Foeniculum vulgare*) and Hottentot fig iceplant (*Carpobrotus edulis*). One native understory shrub found in this area is coyote brush (*Baccharis pilularis*).

The areas below, (downslope but north and east of), around the bulb, and above and west of the end of the cul-de-sac have been previously disturbed and are largely covered by plastic sheeting. The exception is the previously mentioned revegetated coastal sage scrub habitat area that will be discussed later. The trees located in the previously disturbed area are nonnative landscape species including Aleppo pine (*Pinus halepensis*), yew-plum pine (*Podocarpus* sp.), ornamental cypress (*Cupressus* sp.) and Washingtonia palms. Though trees are present in this area, the portions of the area not covered by plastic are dominated by nonnative weedy species. Among the weedy species noted in the area are several nonnative sunflower family species including: sow-thistle (*Sonchus oleraceus*), bristly oxtongue (*Helminthotheca echioides*), milk thistle (*Silybum marianum*), totalote (*Centaurea melitensis*), beggar-ticks (*Bidens pilosa*), prickly lettuce (*Lactuca serriola*), and Italian thistle (*Carduus pycnocephalus*). Two sweet clovers are also found here; yellow sweet clover (*Melilotus indica*) and white sweet clover (*Melilotus albus*). Tree tobacco (*Nicotiana glauca*), red-stemmed filaree (*Erodium cicutarium*), black mustard (*Brassica nigra*), short-podded mustard (*Hirschfeldia incana*), tumbleweed (*Salsola tragus*), curly dock (*Rumex crispus*), horehound (*Marrubium vulgare*), lamb's quarters (*Chenopodium album*), and cheeseweed (*Malva parviflora*) are other nonnative weedy species found in this area. The most abundant plant type by population and the dominant groundcover in the area consists of nonnative grasses including slender wild oats (*Avena barbata*), red brome (*Bromus madritensis rubeus*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), Italian ryegrass (*Festuca perennis*) and little mousetail grass (*Festuca myuros*).

Three native weedy species are scattered in low numbers throughout the previously disturbed areas. These are telegraph weed (*Heterotheca grandiflora*), Douglass' nightshade (*Solanum douglassii*), and California everlasting (*Pseudognaphalium californicum*). Blue elderberry (*Sambucus mexicana*) is a native tree-like shrub that is also found scattered around the property.

The coastal sage scrub habitat area appears to be the result of a revegetation effort as evidenced by the presence of brittlebush (*Encelia farinosa*) throughout the coastal sage scrub area. Brittlebush is native to California deserts and beyond but is not naturally found in the local coastal sage scrub habitat. Brittlebush is also frequently used in "native" planting areas as it is native to the state and is an attractive plant with reliable success from seed. Furthermore, the coastal sage scrub area onsite is on a northeast facing slope and in southern California coastal sage scrub naturally occurs on south and west facing slopes. The locally native species noted in the coastal sage scrub habitat area include California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), white sage (*Salvia apiana*), California sagebrush (*Artemisia californica*), and field bindweed (*Convolvulus arvensis*), the latter probably naturally occurring.

Wildlife

The cursory nature of the site survey conducted in support of a constraints analysis resulted in relatively few wildlife observations. No amphibians or reptiles were noted at the time of the survey and the western toad (*Anaxyrus boreas*) is the only amphibian species likely to occur there due to the aridity of the site. It is likely that many of the herpetofauna common in southern California would be found onsite. The western fence lizard (*Sceloporus occidentalis*) is the most likely but others might include the southern alligator lizard (*Elgaria multicarinatus*), gopher snake (*Pituophis catenifer*), and southern Pacific rattlesnake (*Crotalis oreganus helleri*). Diagnostic sign (tracks, scat, burrows, etc.) of two mammal species were noted on the site; these were the coyote (*Canis latrans*), and pocket gopher (*Thomomys bottae*). Other mammals that might occur there include the brush rabbit (*Sylvilagus bachmani*) and bobcat (*Felis rufus*). Any mammal species found in the suburban areas of southern California may utilize or traverse the site on occasion including numerous rodent species, raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), Virginia opossum (*Didelphis virginiana*), and eastern fox squirrel (*Sciurus niger*). The most abundant class of wildlife on the site was the birds. The species noted on the site were scrub jay, mourning dove, Allen's hummingbird, California towhee, lesser goldfinch, house finch, and white-throated swift. There are undoubtedly many other avian species that utilize the site as residents or transients among the most common of which are likely northern mockingbird, spotted towhee, American crow, Bewick's wren, black phoebe, and bush tit. None of these species are considered particularly sensitive and none are specifically protected by state or federal law. However, all bird species that occur on the site are protected from nest disturbance by the federal Migratory Bird Treaty Act and the California Fish and Game Code. These regulations prohibit the disturbance of nesting birds in any manner that may cause reproductive failure. In general, this means that land clearing must be accomplished during winter months while the birds are not nesting. If clearing cannot be accomplished during the non-nesting season (Currently considered to be from September 30 through January 1 per CDFW) nesting bird surveys must be conducted

and any nests discovered must be avoided during construction. In general, nesting bird surveys are required for any construction that takes place between January 1 and September 30. Because the buffer distances recommended by CDFW (500 feet for raptors and 300 feet for all other species) extend far beyond the property limits in many cases, nest detection and avoidance may be difficult or impossible on adjacent private properties. In these cases, appropriate nest avoidance strategies may be determined by a qualified biological monitor who is onsite if land clearance is scheduled during nesting season.

Sensitive Biological Resources

Of the twenty-four wildlife species listed in the California Natural Diversity Database as sensitive and occurring in the nine-quad area surround the project site, only two birds are likely to occur on the site on rare occasions and would only visit the site as transients during migration. These are the Lawrence's goldfinch and summer tanager. Two other bird species generally considered sensitive and on Los Angeles County's list of sensitive bird species are likely to occur on the site and may nest there. These are the oak titmouse and the Nuttall's woodpecker. Several of the snakes listed as sensitive and occurring in the area probably occupied the site historically. But since the site has been surrounded by development for nearly a century and because people generally kill snakes on sight, it is unlikely that these snakes are present now. The one exception might be the San Bernardino ring-necked snake (*Diadophis punctatus*), this species has a small range and might survive in a habitat patch as small as that remaining on the site.

Of the forty-three plant species listed in the California Natural Diversity Database or California Native Plant Society's Rare Plant Inventory as sensitive and occurring in the nine-quad area surround the project site, only four have even a limited likelihood of occurring on the project site. These are Weed's intermediate mariposa lily (*Calochortus weedii* var. *intermedius*), Lewis' evening primrose (*Camissoniopsis lewisii*), Brand's star phacelia (*Phacelia stellaris*), and white rabbit-tobacco (*Pseudognaphalium leucocephalum*). The project site is within the range of each of these species and presently supports nominally appropriate habitat, which is coastal sage scrub. However, the coastal sage scrub habitat present on the site is not naturally occurring as it is an artifact of a revegetation effort. The natural habitat of the site would be like that of the relatively undisturbed upper slopes, consisting of oak and toyon dominated woodland and chaparral and thus these residents of coastal sage scrub that require thin and sandy soils are not likely present onsite.

Conclusion

No species listed as Rare, Threatened, or Endangered by the state or federal governments were found on the property or are thought likely to occur there. It should be noted that this was a cursory survey and no directed surveys were conducted for listed species. An analysis was made of the likelihood of listed species occurring there based on known range and habitat preferences of these species. Any birds that nest on the site are protected by the Migratory Bird Treaty Act and the California Fish and Game Code. Two birds that almost certainly occur on the site, the oak titmouse and

Nuttall's woodpecker, are considered locally sensitive and would require special consideration under CEQA.

Trees, including oak trees and oak woodlands, are not protected by City of Monterey Park ordinances and policies, but are generally considered sensitive resources under CEQA. One piece of statewide legislation, AB 2162, as introduced, Chu. Oak Woodlands Protection Act. February 2016. is a statewide oak woodlands protection bill that may (the language is unclear), if passed, require Cities and other agencies to evaluate and require mitigation for oak woodland impacts. This would require the evaluation of impacts to, and establishing mitigation for oak woodlands as habitat in addition to identifying and mitigating impacts to individual oak trees.

There are no definable streamcourses with or riparian habitat elements present. Therefore, no permits or interactions with the agencies that regulate impacts to jurisdictional waters of the U.S. or State are required.

If activities within inland streams, wetland and riparian areas were proposed, in California these activities are regulated by three agencies at the federal, state and regional levels. The U.S. Army Corps of Engineers (USACE) Regulatory Program regulates activities within wetlands and "Waters of the U. S." pursuant to Section 404 of the Federal Clean Water Act; the California Department of Fish and Game (CDFG) regulates activities within the bed, bank, and associated habitat of a stream under the Fish and Game Code Section 1600-1616; and the California Regional Water Quality Control Board (CRWQCB) regulates discharge into "Waters of the US" under Section 401 and 402 of the Federal Clean Water Act and "Waters of the State" under the California Porter-Cologne Water Quality Act. As noted above, no regulatory interactions with these agencies are required.

Ultimately, there are no biological resource based challenges that cannot be overcome on this property. There are processes in place by which each of the potential impacts to protected resources can be mitigated and permitted.

It is a pleasure working with you and I look forward to the opportunity to continue assisting with this project.

Sincerely,
Biological Assessment Services



Ty M. Garrison
Principal

APPENDIX B

Cultural Resources Literature Review and Records Search

May 5, 2017

Mr. Tony Locacciatto, AICP
Partner
Meridian Consultants, LLC
910 Hampshire Road, Suite V
Westlake Village, CA 91361
Transmitted via email to tlocacciatto@meridianconsultantsllc.com

RE: Cultural Resource Records Search and Literature Review for the 1600 W Garvey Avenue Project in Monterey Park, Los Angeles County, California

Dear Mr. Locacciatto:

At the request of Meridian Consultants, LLC, Applied EarthWorks, Inc. (Æ) performed a cultural resource records search and literature review for the 1600 W Garvey Avenue Project (Project) in the city of Monterey Park, Los Angeles County, California. The scope of work was limited to a focused cultural resource literature review and records search at the South Central Coastal Information Center (SCCIC), housed at the California State University, Fullerton. This memorandum summarizes the findings of the SCCIC record search.

Æ staff conducted the cultural resource literature review and records search at the SCCIC on May 3, 2017. This search was limited to resources and report within a 0.25-mile radius of the Project area. The objective of this records search was to determine whether any prehistoric or historical cultural resources have been previously recorded within the Project and surrounding areas. Additional sources consulted during the cultural resource literature review and records search include the Office of Historic Preservation Archaeological Determinations of Eligibility and the Office of Historic Preservation Directory of Properties in the Historic Property Data File.

Results of the cultural resource records search indicate that at least two investigations have been conducted within 0.25-mile of the Project area since 2007 (Table 1). Neither of these studies included the Project area; it appears the Project area has not been previously surveyed for cultural resources. The record search indicates that no cultural resources have been documented within the Project area. However, two cultural resources (one prehistoric archaeological resource and one built-environment resource) have been identified within a 0.25-mile radius of the Project area (Table 2). These resources include the Mojave Road, which consists of a network of prehistoric trails used by Native Americans to get across the Mojave Desert, and the St. Thomas More Catholic Church, located at 2510 South Fremont Street. The Mojave Road (P-19-187085) is a California Registered Historical Landmark. The St. Thomas More Catholic Church (P-19-188264) was evaluated for significance based on the National Register of Historic Places (NRHP) in 2007 and was not recommended as eligible for listing on the NRHP; the resource does not appear to have been evaluated for listing on the California Register of Historical Resources (CRHR).

It has been a pleasure assisting you with the Project. If you have any questions, please do not hesitate to



contact me at rthomas@appliedearthworks.com or Dr. Tiffany Clark at tclark@appliedearthworks.com or at the office by phone at (626) 578-0119.

Sincerely,

Roberta Thomas, M.A., RPA
Associate Archaeologist
Applied EarthWorks, Inc.

Table 1
Previous Cultural Studies within a 0.25-Mile the Project Area

SCCIC Document #	Date	Author(s)	Title
LA-09427	2007	Historic Resource Associates	Cultural Resources Study of the St. Thomas More Catholic Church Project Royal Street Communications Site No. LA 0230B 2510 South Fremont Street, Alhambra, Los Angeles County, California
LA-11951	2012	Wayne Bonner	Cultural Resource Records Search and Site Visit Results for T-Mobile West, LLC Candidate IE05023C (IE023 St. Thomas More Catholic Church), 2510 South Fremont Street, Alhambra, Los Angeles County, California

Table 2
Cultural Resources Documented within 0.25-Mile of the Project Area

Primary	Address	Description	Date Constructed	NRHP/CRHR Status
P-19-187085	various	Prehistoric Mojave Road	N/A	- / -
P-19-188264	2510 S. Fremont Street	St. Thomas More Catholic Church	1949 – 1963	Ineligible for NRHP/ -

APPENDIX C

CalEEMod Outputs

1688 W. Garvey Avenue - Los Angeles-South Coast County, Summer

1688 W. Garvey Avenue
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	31.00	Space	0.00	12,400.00	0
Single Family Housing	16.00	Dwelling Unit	6.22	69,683.00	46

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project area is approximately 6.22 acres.

Construction Phase - Schedule per applicant.

Off-road Equipment - Construction of residential homes

Off-road Equipment - Equipment per applicant.

Off-road Equipment - Equipment per applicant.

Off-road Equipment - Equipment per applicant.

Off-road Equipment - Equipment per applicant.

Trips and VMT - Irwindale Management Waste approximately 15 miles from the Project site (30 mile round trip)

10-15 worker trips per day throughout entire duration of construction
Grading -

Woodstoves - No woodstoves.

Area Coating -

Energy Use -

Construction Off-road Equipment Mitigation - As recommended by SCAQMD, alternative applicable strategies include construction equipment with Tier 4 emissions standards.

Area Mitigation - Compliant with SCAQMD Rule 1113 - Architectural Coating (<50gms/liter).

Energy Mitigation -

Water Mitigation -

Off-road Equipment - Anticipated Construction Equipment Fleet

Off-road Equipment - Anticipated Construction Equipment Fleet

Off-road Equipment - Construction of retaining wall and anchors

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	230.00	847.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	261.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	20.00	305.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	PhaseEndDate	5/6/2022	7/4/2027
tblConstructionPhase	PhaseEndDate	3/11/2022	2/2/2024
tblConstructionPhase	PhaseEndDate	1/29/2021	3/4/2021

tblConstructionPhase	PhaseEndDate	2/26/2021	3/5/2022
tblConstructionPhase	PhaseEndDate	3/26/2021	8/5/2022
tblConstructionPhase	PhaseEndDate	4/23/2021	12/1/2023
tblConstructionPhase	PhaseEndDate	4/8/2022	4/3/2024
tblConstructionPhase	PhaseStartDate	4/9/2022	4/4/2024
tblConstructionPhase	PhaseStartDate	4/24/2021	12/2/2023
tblConstructionPhase	PhaseStartDate	1/30/2021	3/5/2021
tblConstructionPhase	PhaseStartDate	2/27/2021	3/6/2022
tblConstructionPhase	PhaseStartDate	3/27/2021	10/1/2022
tblConstructionPhase	PhaseStartDate	3/12/2022	2/3/2024
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	0.80	0.00
tblGrading	MaterialExported	0.00	112,000.00
tblLandUse	LandUseSquareFeet	28,800.00	69,683.00
tblLandUse	LotAcreage	0.28	0.00
tblLandUse	LotAcreage	5.19	6.22
tblOffRoadEquipment	OffRoadEquipmentType	Excavators	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets	Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Grading & Construction
tblOffRoadEquipment	PhaseName		Utilities
tblOffRoadEquipment	PhaseName		Utilities
tblOffRoadEquipment	PhaseName		Utilities
tblOffRoadEquipment	PhaseName		Site Clearance/Demolition
tblOffRoadEquipment	PhaseName		Utilities
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblOffRoadEquipment	PhaseName		Site Clearance/Demolition

tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblOffRoadEquipment	PhaseName		Grading & Construction
tblOffRoadEquipment	PhaseName		Site Clearance/Demolition
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblOffRoadEquipment	PhaseName		Grading & Construction
tblOffRoadEquipment	PhaseName		Street Improvements
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblOffRoadEquipment	PhaseName		Grading & Construction
tblOffRoadEquipment	PhaseName		Street Improvements
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	38.00
tblTripsAndVMT	VendorTripNumber	0.00	58.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	64.00
tblTripsAndVMT	VendorTripNumber	0.00	17.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	4.00	1.00
tblTripsAndVMT	WorkerTripNumber	18.00	15.00
tblTripsAndVMT	WorkerTripNumber	23.00	15.00
tblTripsAndVMT	WorkerTripNumber	25.00	15.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	8.00	15.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	11.00	15.00
tblWoodstoves	NumberCatalytic	0.80	0.00

tblWoodstoves	NumberNoncatalytic	0.80	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.0283	59.2006	29.5008	0.1281	8.7678	1.5332	10.3010	3.9661	1.4145	5.3805	0.0000	13,237.3316	13,237.3316	2.1154	0.0000	13,290.2171
2022	3.5418	51.5755	28.6572	0.1271	13.6523	1.2634	14.9158	5.1650	1.1659	6.3309	0.0000	13,140.0090	13,140.0090	2.1073	0.0000	13,192.6924
2023	0.9187	11.7559	10.5252	0.0371	0.5774	0.3104	0.8878	0.1625	0.2869	0.4493	0.0000	3,744.5618	3,744.5618	0.6954	0.0000	3,761.9471
2024	1.2369	10.4803	15.1135	0.0237	0.2765	0.4871	0.6611	0.0758	0.4608	0.5071	0.0000	2,246.8779	2,246.8779	0.4627	0.0000	2,258.1614
2025	1.1465	9.7971	15.0302	0.0236	0.1741	0.4110	0.5851	0.0463	0.3891	0.4354	0.0000	2,241.5305	2,241.5305	0.4476	0.0000	2,252.7201
2026	1.1441	9.7941	15.0010	0.0236	0.1741	0.4110	0.5851	0.0463	0.3890	0.4353	0.0000	2,236.2531	2,236.2531	0.4473	0.0000	2,247.4351
2027	1.1418	9.7913	14.9748	0.0235	0.1741	0.4109	0.5850	0.0463	0.3890	0.4353	0.0000	2,231.5801	2,231.5801	0.4470	0.0000	2,242.7552
Maximum	4.0283	59.2006	29.5008	0.1281	13.6523	1.5332	14.9158	5.1650	1.4145	6.3309	0.0000	13,237.3316	13,237.3316	2.1154	0.0000	13,290.2171

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Year	lb/day										lb/day					
2021	1.6367	29.4507	35.0434	0.1281	4.7412	0.2437	4.9849	1.9074	0.2332	2.1406	0.0000	13,237.3316	13,237.3316	2.1154	0.0000	13,290.2171
2022	1.5696	27.3233	34.8562	0.1271	9.6258	0.2194	9.8452	3.1063	0.2106	3.3169	0.0000	13,140.0090	13,140.0090	2.1073	0.0000	13,192.6924
2023	0.5378	6.9622	12.6098	0.0371	0.5774	0.0983	0.6757	0.1625	0.0927	0.2551	0.0000	3,744.5618	3,744.5618	0.6954	0.0000	3,761.9471
2024	0.3214	2.0687	15.6854	0.0237	0.2765	0.0643	0.3013	0.0758	0.0610	0.1110	0.0000	2,246.8779	2,246.8779	0.4627	0.0000	2,258.1614
2025	0.3186	2.0653	15.6508	0.0236	0.1741	0.0338	0.2079	0.0463	0.0337	0.0800	0.0000	2,241.5305	2,241.5305	0.4476	0.0000	2,252.7201
2026	0.3162	2.0622	15.6215	0.0236	0.1741	0.0338	0.2079	0.0463	0.0337	0.0800	0.0000	2,236.2531	2,236.2531	0.4473	0.0000	2,247.4351
2027	0.3139	2.0595	15.5954	0.0235	0.1741	0.0337	0.2078	0.0463	0.0336	0.0799	0.0000	2,231.5801	2,231.5801	0.4470	0.0000	2,242.7552
Maximum	1.6367	29.4507	35.0434	0.1281	9.6258	0.2437	9.8452	3.1063	0.2332	3.3169	0.0000	13,237.3316	13,237.3316	2.1154	0.0000	13,290.2171

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	61.89	55.67	-12.62	0.00	33.84	84.94	42.39	43.30	84.46	56.61	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5708	0.2408	1.4179	1.5100e-003		0.0256	0.0256		0.0256	0.0256	0.0000	290.3836	290.3836	7.8100e-003	5.2800e-003	292.1524
Energy	0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321
Mobile	0.2065	0.9552	2.7463	0.0121	1.1518	8.1400e-003	1.1599	0.3081	7.5600e-003	0.3157		1,234.0099	1,234.0099	0.0520		1,235.3109
Total	1.7903	1.3070	4.2115	0.0143	1.1518	0.0427	1.1945	0.3081	0.0421	0.3502	0.0000	1,666.0836	1,666.0836	0.0626	7.8800e-003	1,669.9954

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5703	0.2408	1.4179	1.5100e-003		0.0256	0.0256		0.0256	0.0256	0.0000	290.3836	290.3836	7.8100e-003	5.2800e-003	292.1524
Energy	0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321
Mobile	0.2065	0.9552	2.7463	0.0121	1.1518	8.1400e-003	1.1599	0.3081	7.5600e-003	0.3157		1,234.0099	1,234.0099	0.0520		1,235.3109
Total	1.7898	1.3070	4.2115	0.0143	1.1518	0.0427	1.1945	0.3081	0.0421	0.3502	0.0000	1,666.0836	1,666.0836	0.0626	7.8800e-003	1,669.9954

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Clearance/Demolition	Demolition	1/4/2021	3/4/2021	5	44	Lower Site Improvement
2	Grading	Grading	3/5/2021	3/5/2022	5	261	Lower Site Improvement
3	Construction/Landscaping	Grading	3/6/2022	8/5/2022	5	110	Lower Site Improvement
4	Grading & Construction	Grading	10/1/2022	12/1/2023	5	305	Upper Site Improvement
5	Utilities	Trenching	12/2/2023	2/2/2024	5	45	Upper Site Improvement
6	Street Improvements	Paving	2/3/2024	4/3/2024	5	43	Upper Site Improvement
7	Building Construction	Building Construction	4/4/2024	7/4/2027	5	847	Construction of Residential Homes

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 130.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Clearance/Demolition	Cranes	1	8.00	231	0.29
Site Clearance/Demolition	Excavators	2	8.00	158	0.38
Site Clearance/Demolition	Other Material Handling Equipment	1	8.00	168	0.40
Site Clearance/Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Clearance/Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Other Construction Equipment	1	8.00	172	0.42
Grading	Rough Terrain Forklifts	1	8.00	100	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Signal Boards	1	8.00	6	0.82
Construction/Landscaping	Bore/Drill Rigs	1	8.00	221	0.50
Construction/Landscaping	Other Construction Equipment	2	8.00	172	0.42
Construction/Landscaping	Rough Terrain Forklifts	2	8.00	100	0.40
Construction/Landscaping	Signal Boards	1	8.00	6	0.82
Grading & Construction	Bore/Drill Rigs	1	8.00	221	0.50
Grading & Construction	Other Construction Equipment	1	8.00	172	0.42
Grading & Construction	Rough Terrain Forklifts	1	8.00	100	0.40
Grading & Construction	Signal Boards	1	8.00	6	0.82
Street Improvements	Pavers	1	8.00	130	0.42
Street Improvements	Rough Terrain Forklifts	1	8.00	100	0.40
Street Improvements	Signal Boards	1	8.00	6	0.82

Utilities	Excavators	1	8.00	158	0.38
Utilities	Other Construction Equipment	1	8.00	172	0.42
Utilities	Rough Terrain Forklifts	1	7.00	100	0.40
Utilities	Signal Boards	1	8.00	6	0.82
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Construction/Landscaping	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Construction/Landscaping	Skid Steer Loaders	2	8.00	65	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site	7	15.00	38.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Clearance/Demolition	9	15.00	58.00	14,000.00	14.70	6.90	30.00	LD_Mix	HDT_Mix	HHDT
Grading	10	15.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Construction/Landscaping	4	15.00	64.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading & Construction	3	15.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Improvements	4	15.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	8	15.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction										

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Clearance/Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5871	26.5814	20.8731	0.0366		1.2966	1.2966		1.1929	1.1929		3,547.9518	3,547.9518	1.1475		3,576.6388
Total	2.5871	26.5814	20.8731	0.0366		1.2966	1.2966		1.1929	1.1929		3,547.9518	3,547.9518	1.1475		3,576.6388

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1155	3.6894	0.9645	9.7700e-003	0.2433	7.5400e-003	0.2508	0.0701	7.2100e-003	0.0773		1,044.5464	1,044.5464	0.0615		1,046.0848
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.1798	3.7336	1.5687	0.0115	0.4109	8.8900e-003	0.4199	0.1145	8.4600e-003	0.1230		1,215.3619	1,215.3619	0.0666		1,217.0261

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.4496	1.9482	23.3383	0.0366		0.0599	0.0599		0.0599	0.0599	0.0000	3,547.9518	3,547.9518	1.1475		3,576.6388
Total	0.4496	1.9482	23.3383	0.0366		0.0599	0.0599		0.0599	0.0599	0.0000	3,547.9518	3,547.9518	1.1475		3,576.6388

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1155	3.6894	0.9645	9.7700e-003	0.2433	7.5400e-003	0.2508	0.0701	7.2100e-003	0.0773		1,044.5464	1,044.5464	0.0615		1,046.0848
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.1798	3.7336	1.5687	0.0115	0.4109	8.8900e-003	0.4199	0.1145	8.4600e-003	0.1230		1,215.3619	1,215.3619	0.0666		1,217.0261

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6009	0.0000	6.6009	3.3748	0.0000	3.3748			0.0000			0.0000
Off-Road	3.1593	34.4418	22.6715	0.0515		1.4550	1.4550		1.3398	1.3398		4,968.3162	4,968.3162	1.5960		5,008.2168
Total	3.1593	34.4418	22.6715	0.0515	6.6009	1.4550	8.0559	3.3748	1.3398	4.7146		4,968.3162	4,968.3162	1.5960		5,008.2168

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6284	19.0834	4.7529	0.0599	1.6279	0.0653	1.6932	0.4398	0.0625	0.5023		6,503.8923	6,503.8923	0.4204		6,514.4032
Vendor	0.1763	5.6312	1.4721	0.0149	0.3713	0.0115	0.3828	0.1069	0.0110	0.1179		1,594.3077	1,594.3077	0.0939		1,596.6558
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.8690	24.7588	6.8292	0.0766	2.1669	0.0782	2.2451	0.5912	0.0747	0.6659		8,269.0154	8,269.0154	0.5194		8,282.0003

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5743	0.0000	2.5743	1.3162	0.0000	1.3162			0.0000			0.0000
Off-Road	0.7677	4.6920	28.2141	0.0515		0.1655	0.1655		0.1585	0.1585	0.0000	4,968.3162	4,968.3162	1.5960		5,008.2168
Total	0.7677	4.6920	28.2141	0.0515	2.5743	0.1655	2.7399	1.3162	0.1585	1.4747	0.0000	4,968.3162	4,968.3162	1.5960		5,008.2168

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6284	19.0834	4.7529	0.0599	1.6279	0.0653	1.6932	0.4398	0.0625	0.5023		6,503.8923	6,503.8923	0.4204		6,514.4032
Vendor	0.1763	5.6312	1.4721	0.0149	0.3713	0.0115	0.3828	0.1069	0.0110	0.1179		1,594.3077	1,594.3077	0.0939		1,596.6558
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.8690	24.7588	6.8292	0.0766	2.1669	0.0782	2.2451	0.5912	0.0747	0.6659		8,269.0154	8,269.0154	0.5194		8,282.0003

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6009	0.0000	6.6009	3.3748	0.0000	3.3748			0.0000			0.0000
Off-Road	2.7176	28.5514	21.9961	0.0515		1.1953	1.1953		1.1008	1.1008		4,968.9693	4,968.9693	1.5962		5,008.8752
Total	2.7176	28.5514	21.9961	0.0515	6.6009	1.1953	7.7962	3.3748	1.1008	4.4756		4,968.9693	4,968.9693	1.5962		5,008.8752

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5985	17.6290	4.7109	0.0591	6.5125	0.0568	6.5692	1.6388	0.0543	1.6931		6,425.8146	6,425.8146	0.4159		6,436.2111

Vendor	0.1655	5.3552	1.3929	0.0148	0.3713	0.0101	0.3814	0.1069	9.6300e-003	0.1165		1,580.4182	1,580.4182	0.0907		1,582.6855
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	0.8242	23.0241	6.6611	0.0756	7.0514	0.0682	7.1196	1.7902	0.0652	1.8553		8,171.0396	8,171.0396	0.5111		8,183.8171

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5743	0.0000	2.5743	1.3162	0.0000	1.3162			0.0000			0.0000
Off-Road	0.7454	4.2992	28.1950	0.0515		0.1513	0.1513		0.1454	0.1454	0.0000	4,968.9693	4,968.9693	1.5962		5,008.8752
Total	0.7454	4.2992	28.1950	0.0515	2.5743	0.1513	2.7256	1.3162	0.1454	1.4616	0.0000	4,968.9693	4,968.9693	1.5962		5,008.8752

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5985	17.6290	4.7109	0.0591	6.5125	0.0568	6.5692	1.6388	0.0543	1.6931		6,425.8146	6,425.8146	0.4159		6,436.2111
Vendor	0.1655	5.3552	1.3929	0.0148	0.3713	0.0101	0.3814	0.1069	9.6300e-003	0.1165		1,580.4182	1,580.4182	0.0907		1,582.6855
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	0.8242	23.0241	6.6611	0.0756	7.0514	0.0682	7.1196	1.7902	0.0652	1.8553		8,171.0396	8,171.0396	0.5111		8,183.8171

3.4 Construction/Landscaping - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7258	18.4252	22.2098	0.0398		0.8374	0.8374		0.7715	0.7715		3,830.3063	3,830.3063	1.2280		3,861.0056
Total	1.7258	18.4252	22.2098	0.0398		0.8374	0.8374		0.7715	0.7715		3,830.3063	3,830.3063	1.2280		3,861.0056

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0171	0.5540	0.1441	1.5300e-003	0.0384	1.0400e-003	0.0395	0.0111	1.0000e-003	0.0121		163.4915	163.4915	9.3800e-003		163.7261
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	0.0774	0.5939	0.7015	3.1800e-003	0.2061	2.3500e-003	0.2084	0.0555	2.2100e-003	0.0577		328.2984	328.2984	0.0139		328.6467

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7236	6.6944	25.6688	0.0398		0.1776	0.1776		0.1678	0.1678	0.0000	3,830.3063	3,830.3063	1.2280		3,861.0056
Total	0.7236	6.6944	25.6688	0.0398		0.1776	0.1776		0.1678	0.1678	0.0000	3,830.3063	3,830.3063	1.2280		3,861.0056

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0171	0.5540	0.1441	1.5300e-003	0.0384	1.0400e-003	0.0395	0.0111	1.0000e-003	0.0121		163.4915	163.4915	9.3800e-003		163.7261
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	0.0774	0.5939	0.7015	3.1800e-003	0.2061	2.3500e-003	0.2084	0.0555	2.2100e-003	0.0577		328.2984	328.2984	0.0139		328.6467

3.5 Grading & Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7693	7.9213	8.6508	0.0198		0.3374	0.3374		0.3115	0.3115		1,894.9602	1,894.9602	0.6020		1,910.0112

Total	0.7693	7.9213	8.6508	0.0198		0.3374	0.3374		0.3115	0.3115		1,894.9602	1,894.9602	0.6020		1,910.0112
-------	--------	--------	--------	--------	--	--------	--------	--	--------	--------	--	------------	------------	--------	--	------------

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1826	5.9091	1.5370	0.0163	0.4098	0.0111	0.4209	0.1180	0.0106	0.1286		1,743.9097	1,743.9097	0.1001		1,746.4116
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	0.2428	5.9491	2.0944	0.0180	0.5774	0.0124	0.5898	0.1624	0.0118	0.1743		1,908.7165	1,908.7165	0.1046		1,911.3322

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3554	2.6088	10.7149	0.0198		0.0993	0.0993		0.0934	0.0934	0.0000	1,894.9602	1,894.9602	0.6020		1,910.0112
Total	0.3554	2.6088	10.7149	0.0198		0.0993	0.0993		0.0934	0.0934	0.0000	1,894.9602	1,894.9602	0.6020		1,910.0112

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1826	5.9091	1.5370	0.0163	0.4098	0.0111	0.4209	0.1180	0.0106	0.1286		1,743.9097	1,743.9097	0.1001		1,746.4116
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	0.2428	5.9491	2.0944	0.0180	0.5774	0.0124	0.5898	0.1624	0.0118	0.1743		1,908.7165	1,908.7165	0.1046		1,911.3322

3.5 Grading & Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7267	7.2362	8.6238	0.0198		0.3039	0.3039		0.2807	0.2807		1,896.7819	1,896.7819	0.6026		1,911.8476
Total	0.7267	7.2362	8.6238	0.0198		0.3039	0.3039		0.2807	0.2807		1,896.7819	1,896.7819	0.6026		1,911.8476

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1355	4.4836	1.3881	0.0158	0.4098	5.1800e-003	0.4149	0.1180	4.9500e-003	0.1229		1,689.0075	1,689.0075	0.0887		1,691.2246
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.1920	4.5198	1.9014	0.0174	0.5774	6.4600e-003	0.5839	0.1625	6.1200e-003	0.1686		1,847.7798	1,847.7798	0.0928		1,850.0995

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3458	2.4425	10.7084	0.0198		0.0918	0.0918		0.0865	0.0865	0.0000	1,896.7819	1,896.7819	0.6026		1,911.8476
Total	0.3458	2.4425	10.7084	0.0198		0.0918	0.0918		0.0865	0.0865	0.0000	1,896.7819	1,896.7819	0.6026		1,911.8476

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1355	4.4836	1.3881	0.0158	0.4098	5.1800e-003	0.4149	0.1180	4.9500e-003	0.1229		1,689.0075	1,689.0075	0.0887		1,691.2246

Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.1920	4.5198	1.9014	0.0174	0.5774	6.4600e-003	0.5839	0.1625	6.1200e-003	0.1686		1,847.7798	1,847.7798	0.0928		1,850.0995

3.6 Utilities - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6870	6.5703	9.5628	0.0151		0.3081	0.3081		0.2845	0.2845		1,439.7589	1,439.7589	0.4548		1,451.1293
Total	0.6870	6.5703	9.5628	0.0151		0.3081	0.3081		0.2845	0.2845		1,439.7589	1,439.7589	0.4548		1,451.1293

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.3500e-003	0.2102	0.0651	7.4000e-004	0.0192	2.4000e-004	0.0195	5.5300e-003	2.3000e-004	5.7600e-003		79.1722	79.1722	4.1600e-003		79.2762
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.0629	0.2463	0.5784	2.3300e-003	0.1869	1.5200e-003	0.1884	0.0500	1.4000e-003	0.0514		237.9445	237.9445	8.2600e-003		238.1510

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2523	1.6411	10.7860	0.0151		0.0660	0.0660		0.0626	0.0626	0.0000	1,439.7589	1,439.7589	0.4548		1,451.1293
Total	0.2523	1.6411	10.7860	0.0151		0.0660	0.0660		0.0626	0.0626	0.0000	1,439.7589	1,439.7589	0.4548		1,451.1293

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.3500e-003	0.2102	0.0651	7.4000e-004	0.0192	2.4000e-004	0.0195	5.5300e-003	2.3000e-004	5.7600e-003		79.1722	79.1722	4.1600e-003		79.2762
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.0629	0.2463	0.5784	2.3300e-003	0.1869	1.5200e-003	0.1884	0.0500	1.4000e-003	0.0514		237.9445	237.9445	8.2600e-003		238.1510

3.6 Utilities - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Category	lb/day										lb/day					
Off-Road	0.6591	6.1547	9.5818	0.0151		0.2847	0.2847		0.2631	0.2631		1,439.8427	1,439.8427	0.4548		1,451.2138
Total	0.6591	6.1547	9.5818	0.0151		0.2847	0.2847		0.2631	0.2631		1,439.8427	1,439.8427	0.4548		1,451.2138

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.2000e-003	0.2094	0.0631	7.4000e-004	0.0192	2.4000e-004	0.0195	5.5300e-003	2.3000e-004	5.7600e-003		78.8509	78.8509	4.1000e-003		78.9534
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0597	0.2423	0.5416	2.2800e-003	0.1869	1.5000e-003	0.1884	0.0500	1.3900e-003	0.0514		232.7027	232.7027	7.8600e-003		232.8992

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2485	1.5885	10.7883	0.0151		0.0628	0.0628		0.0596	0.0596	0.0000	1,439.8427	1,439.8427	0.4548		1,451.2138
Total	0.2485	1.5885	10.7883	0.0151		0.0628	0.0628		0.0596	0.0596	0.0000	1,439.8427	1,439.8427	0.4548		1,451.2138

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.2000e-003	0.2094	0.0631	7.4000e-004	0.0192	2.4000e-004	0.0195	5.5300e-003	2.3000e-004	5.7600e-003		78.8509	78.8509	4.1000e-003		78.9534
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0597	0.2423	0.5416	2.2800e-003	0.1869	1.5000e-003	0.1884	0.0500	1.3900e-003	0.0514		232.7027	232.7027	7.8600e-003		232.8992

3.7 Street Improvements - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3434	3.4515	5.4831	8.8500e-003		0.1364	0.1364		0.1266	0.1266		838.2119	838.2119	0.2603		844.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3434	3.4515	5.4831	8.8500e-003		0.1364	0.1364		0.1266	0.1266		838.2119	838.2119	0.2603		844.7186

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0351	1.1864	0.3575	4.1700e-003	0.1088	1.3600e-003	0.1102	0.0313	1.3000e-003	0.0326		446.8219	446.8219	0.0232		447.4025
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0886	1.2194	0.8360	5.7100e-003	0.2765	2.6200e-003	0.2791	0.0758	2.4600e-003	0.0783		600.6737	600.6737	0.0270		601.3483

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1218	0.7040	6.1789	8.8500e-003		0.0222	0.0222		0.0216	0.0216	0.0000	838.2119	838.2119	0.2603		844.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1218	0.7040	6.1789	8.8500e-003		0.0222	0.0222		0.0216	0.0216	0.0000	838.2119	838.2119	0.2603		844.7186

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0351	1.1864	0.3575	4.1700e-003	0.1088	1.3600e-003	0.1102	0.0313	1.3000e-003	0.0326		446.8219	446.8219	0.0232		447.4025
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0886	1.2194	0.8360	5.7100e-003	0.2765	2.6200e-003	0.2791	0.0758	2.4600e-003	0.0783		600.6737	600.6737	0.0270		601.3483

3.8 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1813	10.3775	14.6139	0.0219		0.4857	0.4857		0.4595	0.4595		2,066.7425	2,066.7425	0.4462		2,077.8978
Total	1.1813	10.3775	14.6139	0.0219		0.4857	0.4857		0.4595	0.4595		2,066.7425	2,066.7425	0.4462		2,077.8978

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.0700e-003	0.0698	0.0210	2.5000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	8.0000e-005	1.9200e-003		26.2836	26.2836	1.3700e-003		26.3178
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458

Total	0.0556	0.1027	0.4996	1.7900e-003	0.1741	1.3400e-003	0.1754	0.0463	1.2400e-003	0.0475		180.1354	180.1354	5.1300e-003		180.2636
-------	--------	--------	--------	-------------	--------	-------------	--------	--------	-------------	--------	--	----------	----------	-------------	--	----------

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,066.7425	2,066.7425	0.4462		2,077.8978
Total	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,066.7425	2,066.7425	0.4462		2,077.8978

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.0700e-003	0.0698	0.0210	2.5000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	8.0000e-005	1.9200e-003		26.2836	26.2836	1.3700e-003		26.3178
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0556	0.1027	0.4996	1.7900e-003	0.1741	1.3400e-003	0.1754	0.0463	1.2400e-003	0.0475		180.1354	180.1354	5.1300e-003		180.2636

3.8 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0937	9.6977	14.5653	0.0219		0.4097	0.4097		0.3879	0.3879		2,067.5014	2,067.5014	0.4428		2,078.5715
Total	1.0937	9.6977	14.5653	0.0219		0.4097	0.4097		0.3879	0.3879		2,067.5014	2,067.5014	0.4428		2,078.5715

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.0100e-003	0.0692	0.0205	2.4000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	8.0000e-005	1.9200e-003		26.1388	26.1388	1.3500e-003		26.1725
Worker	0.0508	0.0301	0.4445	1.4800e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1300e-003	0.0456		147.8903	147.8903	3.4300e-003		147.9761
Total	0.0528	0.0993	0.4649	1.7200e-003	0.1741	1.3100e-003	0.1754	0.0463	1.2100e-003	0.0475		174.0291	174.0291	4.7800e-003		174.1485

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,067.5014	2,067.5014	0.4428		2,078.5715
Total	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,067.5014	2,067.5014	0.4428		2,078.5715

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.0100e-003	0.0692	0.0205	2.4000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	8.0000e-005	1.9200e-003		26.1388	26.1388	1.3500e-003		26.1725
Worker	0.0508	0.0301	0.4445	1.4800e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1300e-003	0.0456		147.8903	147.8903	3.4300e-003		147.9761
Total	0.0528	0.0993	0.4649	1.7200e-003	0.1741	1.3100e-003	0.1754	0.0463	1.2100e-003	0.0475		174.0291	174.0291	4.7800e-003		174.1485

3.8 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0937	9.6977	14.5653	0.0219		0.4097	0.4097		0.3879	0.3879		2,067.5014	2,067.5014	0.4428		2,078.5715
Total	1.0937	9.6977	14.5653	0.0219		0.4097	0.4097		0.3879	0.3879		2,067.5014	2,067.5014	0.4428		2,078.5715

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.9700e-003	0.0686	0.0201	2.4000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	7.0000e-005	1.9200e-003		25.9998	25.9998	1.3300e-003		26.0329
Worker	0.0485	0.0278	0.4156	1.4300e-003	0.1677	1.1900e-003	0.1689	0.0445	1.0900e-003	0.0456		142.7520	142.7520	3.1500e-003		142.8306
Total	0.0505	0.0963	0.4357	1.6700e-003	0.1741	1.2700e-003	0.1753	0.0463	1.1600e-003	0.0475		168.7517	168.7517	4.4800e-003		168.8636

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,067.5014	2,067.5014	0.4428		2,078.5715
Total	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,067.5014	2,067.5014	0.4428		2,078.5715

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.9700e-003	0.0686	0.0201	2.4000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	7.0000e-005	1.9200e-003		25.9998	25.9998	1.3300e-003		26.0329
Worker	0.0485	0.0278	0.4156	1.4300e-003	0.1677	1.1900e-003	0.1689	0.0445	1.0900e-003	0.0456		142.7520	142.7520	3.1500e-003		142.8306
Total	0.0505	0.0963	0.4357	1.6700e-003	0.1741	1.2700e-003	0.1753	0.0463	1.1600e-003	0.0475		168.7517	168.7517	4.4800e-003		168.8636

3.8 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0937	9.6977	14.5653	0.0219		0.4097	0.4097		0.3879	0.3879		2,067.5014	2,067.5014	0.4428		2,078.5715
Total	1.0937	9.6977	14.5653	0.0219		0.4097	0.4097		0.3879	0.3879		2,067.5014	2,067.5014	0.4428		2,078.5715

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	1.9300e-003	0.0679	0.0197	2.4000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	7.0000e-005	1.9200e-003		25.8753	25.8753	1.3100e-003		25.9080
Worker	0.0462	0.0256	0.3898	1.3900e-003	0.1677	1.1200e-003	0.1688	0.0445	1.0300e-003	0.0455		138.2034	138.2034	2.8900e-003		138.2756
Total	0.0481	0.0936	0.4095	1.6300e-003	0.1741	1.2000e-003	0.1753	0.0463	1.1000e-003	0.0474		164.0787	164.0787	4.2000e-003		164.1837

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,067.5014	2,067.5014	0.4428		2,078.5715
Total	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,067.5014	2,067.5014	0.4428		2,078.5715

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.9300e-003	0.0679	0.0197	2.4000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	7.0000e-005	1.9200e-003		25.8753	25.8753	1.3100e-003		25.9080
Worker	0.0462	0.0256	0.3898	1.3900e-003	0.1677	1.1200e-003	0.1688	0.0445	1.0300e-003	0.0455		138.2034	138.2034	2.8900e-003		138.2756
Total	0.0481	0.0936	0.4095	1.6300e-003	0.1741	1.2000e-003	0.1753	0.0463	1.1000e-003	0.0474		164.0787	164.0787	4.2000e-003		164.1837

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2065	0.9552	2.7463	0.0121	1.1518	8.1400e-003	1.1599	0.3081	7.5600e-003	0.3157		1,234.0099	1,234.0099	0.0520		1,235.3109
Unmitigated	0.2065	0.9552	2.7463	0.0121	1.1518	8.1400e-003	1.1599	0.3081	7.5600e-003	0.3157		1,234.0099	1,234.0099	0.0520		1,235.3109

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	152.32	158.56	137.92	516,517	516,517
Total	152.32	158.56	137.92	516,517	516,517

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
----------	-----	------	------	-----	------	------	-----	-----	------	------	-----	------	----

Parking Lot	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Single Family Housing	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

--

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321
NaturalGas Unmitigated	0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1204.37	0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321

Total		0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321
-------	--	--------	--------	--------	-------------	--	-------------	-------------	--	-------------	-------------	--	----------	----------	-------------	-------------	----------

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.20437	0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321
Total		0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	1.5703	0.2408	1.4179	1.5100e-003		0.0256	0.0256		0.0256	0.0256	0.0000	290.3836	290.3836	7.8100e-003	5.2800e-003	292.1524
Unmitigated	1.5708	0.2408	1.4179	1.5100e-003		0.0256	0.0256		0.0256	0.0256	0.0000	290.3836	290.3836	7.8100e-003	5.2800e-003	292.1524

6.2 Area by SubCategory
Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1204					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3841					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0264	0.2256	0.0960	1.4400e-003		0.0182	0.0182		0.0182	0.0182	0.0000	288.0000	288.0000	5.5200e-003	5.2800e-003	289.7114
Landscaping	0.0399	0.0152	1.3219	7.0000e-005		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003		2.3836	2.3836	2.2900e-003		2.4410
Total	1.5708	0.2408	1.4179	1.5100e-003		0.0256	0.0256		0.0256	0.0256	0.0000	290.3836	290.3836	7.8100e-003	5.2800e-003	292.1524

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1199					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3841					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0264	0.2256	0.0960	1.4400e-003		0.0182	0.0182		0.0182	0.0182	0.0000	288.0000	288.0000	5.5200e-003	5.2800e-003	289.7114

Landscaping	0.0399	0.0152	1.3219	7.0000e-005		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003		2.3836	2.3836	2.2900e-003		2.4410
Total	1.5703	0.2408	1.4179	1.5100e-003		0.0256	0.0256		0.0256	0.0256	0.0000	290.3836	290.3836	7.8100e-003	5.2800e-003	292.1524

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

1688 W. Garvey Avenue - Los Angeles-South Coast County, Winter

1688 W. Garvey Avenue
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	31.00	Space	0.00	12,400.00	0
Single Family Housing	16.00	Dwelling Unit	6.22	69,683.00	46

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project area is approximately 6.22 acres.

Construction Phase - Schedule per applicant.

Off-road Equipment - Construction of residential homes

Off-road Equipment - Equipment per applicant.

Off-road Equipment - Equipment per applicant.

Off-road Equipment - Equipment per applicant.

Off-road Equipment - Equipment per applicant.

Trips and VMT - Irwindale Management Waste approximately 15 miles from the Project site (30 mile round trip)

10-15 worker trips per day throughout entire duration of construction
Grading -

Woodstoves - No woodstoves.

Area Coating -

Energy Use -

Construction Off-road Equipment Mitigation - As recommended by SCAQMD, alternative applicable strategies include construction equipment with Tier 4 emissions standards.

Area Mitigation - Compliant with SCAQMD Rule 1113 - Architectural Coating (<50gms/liter).

Energy Mitigation -

Water Mitigation -

Off-road Equipment - Anticipated Construction Equipment Fleet

Off-road Equipment - Anticipated Construction Equipment Fleet

Off-road Equipment - Construction of retaining wall and anchors

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	230.00	847.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	261.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	20.00	305.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	PhaseEndDate	5/6/2022	7/4/2027
tblConstructionPhase	PhaseEndDate	3/11/2022	2/2/2024
tblConstructionPhase	PhaseEndDate	1/29/2021	3/4/2021

tblConstructionPhase	PhaseEndDate	2/26/2021	3/5/2022
tblConstructionPhase	PhaseEndDate	3/26/2021	8/5/2022
tblConstructionPhase	PhaseEndDate	4/23/2021	12/1/2023
tblConstructionPhase	PhaseEndDate	4/8/2022	4/3/2024
tblConstructionPhase	PhaseStartDate	4/9/2022	4/4/2024
tblConstructionPhase	PhaseStartDate	4/24/2021	12/2/2023
tblConstructionPhase	PhaseStartDate	1/30/2021	3/5/2021
tblConstructionPhase	PhaseStartDate	2/27/2021	3/6/2022
tblConstructionPhase	PhaseStartDate	3/27/2021	10/1/2022
tblConstructionPhase	PhaseStartDate	3/12/2022	2/3/2024
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	0.80	0.00
tblGrading	MaterialExported	0.00	112,000.00
tblLandUse	LandUseSquareFeet	28,800.00	69,683.00
tblLandUse	LotAcreage	0.28	0.00
tblLandUse	LotAcreage	5.19	6.22
tblOffRoadEquipment	OffRoadEquipmentType	Excavators	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets	Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Grading & Construction
tblOffRoadEquipment	PhaseName		Utilities
tblOffRoadEquipment	PhaseName		Utilities
tblOffRoadEquipment	PhaseName		Utilities
tblOffRoadEquipment	PhaseName		Site Clearance/Demolition
tblOffRoadEquipment	PhaseName		Utilities
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblOffRoadEquipment	PhaseName		Site Clearance/Demolition

tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblOffRoadEquipment	PhaseName		Grading & Construction
tblOffRoadEquipment	PhaseName		Site Clearance/Demolition
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblOffRoadEquipment	PhaseName		Grading & Construction
tblOffRoadEquipment	PhaseName		Street Improvements
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblOffRoadEquipment	PhaseName		Grading & Construction
tblOffRoadEquipment	PhaseName		Street Improvements
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	38.00
tblTripsAndVMT	VendorTripNumber	0.00	58.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	64.00
tblTripsAndVMT	VendorTripNumber	0.00	17.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	4.00	1.00
tblTripsAndVMT	WorkerTripNumber	18.00	15.00
tblTripsAndVMT	WorkerTripNumber	23.00	15.00
tblTripsAndVMT	WorkerTripNumber	25.00	15.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	8.00	15.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	11.00	15.00
tblWoodstoves	NumberCatalytic	0.80	0.00

tblWoodstoves	NumberNoncatalytic	0.80	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.0550	59.5535	29.7992	0.1268	8.7678	1.5342	10.3020	3.9661	1.4155	5.3815	0.0000	13,104.9971	13,104.9971	2.1321	0.0000	13,158.2997
2022	3.5672	51.8848	28.9418	0.1259	13.6523	1.2644	14.9167	5.1650	1.1668	6.3318	0.0000	13,008.3851	13,008.3851	2.1233	0.0000	13,061.4664
2023	0.9324	11.7394	10.6029	0.0366	0.5774	0.3106	0.8881	0.1625	0.2871	0.4495	0.0000	3,689.4344	3,689.4344	0.7003	0.0000	3,706.9419
2024	1.2435	10.4834	15.0722	0.0236	0.2765	0.4871	0.6611	0.0758	0.4608	0.5071	0.0000	2,237.1876	2,237.1876	0.4627	0.0000	2,248.4671
2025	1.1530	9.8000	14.9916	0.0236	0.1741	0.4110	0.5851	0.0463	0.3891	0.4354	0.0000	2,232.2014	2,232.2014	0.4474	0.0000	2,243.3874
2026	1.1505	9.7967	14.9645	0.0235	0.1741	0.4110	0.5851	0.0463	0.3890	0.4353	0.0000	2,227.2332	2,227.2332	0.4471	0.0000	2,238.4120
2027	1.1481	9.7937	14.9404	0.0234	0.1741	0.4109	0.5850	0.0463	0.3890	0.4353	0.0000	2,222.8296	2,222.8296	0.4469	0.0000	2,234.0018
Maximum	4.0550	59.5535	29.7992	0.1268	13.6523	1.5342	14.9167	5.1650	1.4155	6.3318	0.0000	13,104.9971	13,104.9971	2.1321	0.0000	13,158.2997

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Year	lb/day										lb/day					
2021	1.6634	29.8037	35.3418	0.1268	4.7412	0.2447	4.9860	1.9074	0.2342	2.1416	0.0000	13,104.9971	13,104.9971	2.1321	0.0000	13,158.2997
2022	1.5950	27.6326	35.1407	0.1259	9.6258	0.2203	9.8461	3.1063	0.2114	3.3178	0.0000	13,008.3851	13,008.3851	2.1233	0.0000	13,061.4664
2023	0.5515	6.9457	12.6875	0.0366	0.5774	0.0985	0.6760	0.1625	0.0929	0.2554	0.0000	3,689.4344	3,689.4344	0.7003	0.0000	3,706.9419
2024	0.3280	2.0718	15.6441	0.0236	0.2765	0.0643	0.3014	0.0758	0.0610	0.1110	0.0000	2,237.1876	2,237.1876	0.4627	0.0000	2,248.4671
2025	0.3251	2.0682	15.6121	0.0236	0.1741	0.0338	0.2079	0.0463	0.0337	0.0800	0.0000	2,232.2014	2,232.2014	0.4474	0.0000	2,243.3874
2026	0.3226	2.0649	15.5851	0.0235	0.1741	0.0338	0.2079	0.0463	0.0337	0.0800	0.0000	2,227.2332	2,227.2332	0.4471	0.0000	2,238.4120
2027	0.3202	2.0619	15.5609	0.0234	0.1741	0.0337	0.2078	0.0463	0.0336	0.0799	0.0000	2,222.8296	2,222.8296	0.4469	0.0000	2,234.0018
Maximum	1.6634	29.8037	35.3418	0.1268	9.6258	0.2447	9.8461	3.1063	0.2342	3.3178	0.0000	13,104.9971	13,104.9971	2.1321	0.0000	13,158.2997

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	61.46	55.44	-12.57	0.00	33.84	84.90	42.39	43.30	84.42	56.60	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5708	0.2408	1.4179	1.5100e-003		0.0256	0.0256		0.0256	0.0256	0.0000	290.3836	290.3836	7.8100e-003	5.2800e-003	292.1524
Energy	0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321
Mobile	0.2001	0.9728	2.6004	0.0115	1.1518	8.1700e-003	1.1600	0.3081	7.5800e-003	0.3157		1,176.7914	1,176.7914	0.0521		1,178.0932
Total	1.7838	1.3246	4.0655	0.0137	1.1518	0.0427	1.1945	0.3081	0.0421	0.3503	0.0000	1,608.8651	1,608.8651	0.0626	7.8800e-003	1,612.7777

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5703	0.2408	1.4179	1.5100e-003		0.0256	0.0256		0.0256	0.0256	0.0000	290.3836	290.3836	7.8100e-003	5.2800e-003	292.1524
Energy	0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321
Mobile	0.2001	0.9728	2.6004	0.0115	1.1518	8.1700e-003	1.1600	0.3081	7.5800e-003	0.3157		1,176.7914	1,176.7914	0.0521		1,178.0932
Total	1.7834	1.3246	4.0655	0.0137	1.1518	0.0427	1.1945	0.3081	0.0421	0.3503	0.0000	1,608.8651	1,608.8651	0.0626	7.8800e-003	1,612.7777

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Clearance/Demolition	Demolition	1/4/2021	3/4/2021	5	44	Lower Site Improvement
2	Grading	Grading	3/5/2021	3/5/2022	5	261	Lower Site Improvement
3	Construction/Landscaping	Grading	3/6/2022	8/5/2022	5	110	Lower Site Improvement
4	Grading & Construction	Grading	10/1/2022	12/1/2023	5	305	Upper Site Improvement
5	Utilities	Trenching	12/2/2023	2/2/2024	5	45	Upper Site Improvement
6	Street Improvements	Paving	2/3/2024	4/3/2024	5	43	Upper Site Improvement
7	Building Construction	Building Construction	4/4/2024	7/4/2027	5	847	Construction of Residential Homes

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 130.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Clearance/Demolition	Cranes	1	8.00	231	0.29
Site Clearance/Demolition	Excavators	2	8.00	158	0.38
Site Clearance/Demolition	Other Material Handling Equipment	1	8.00	168	0.40
Site Clearance/Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Clearance/Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Other Construction Equipment	1	8.00	172	0.42
Grading	Rough Terrain Forklifts	1	8.00	100	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Signal Boards	1	8.00	6	0.82
Construction/Landscaping	Bore/Drill Rigs	1	8.00	221	0.50
Construction/Landscaping	Other Construction Equipment	2	8.00	172	0.42
Construction/Landscaping	Rough Terrain Forklifts	2	8.00	100	0.40
Construction/Landscaping	Signal Boards	1	8.00	6	0.82
Grading & Construction	Bore/Drill Rigs	1	8.00	221	0.50
Grading & Construction	Other Construction Equipment	1	8.00	172	0.42
Grading & Construction	Rough Terrain Forklifts	1	8.00	100	0.40
Grading & Construction	Signal Boards	1	8.00	6	0.82
Street Improvements	Pavers	1	8.00	130	0.42
Street Improvements	Rough Terrain Forklifts	1	8.00	100	0.40
Street Improvements	Signal Boards	1	8.00	6	0.82

Utilities	Excavators	1	8.00	158	0.38
Utilities	Other Construction Equipment	1	8.00	172	0.42
Utilities	Rough Terrain Forklifts	1	7.00	100	0.40
Utilities	Signal Boards	1	8.00	6	0.82
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Construction/Landscaping	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Construction/Landscaping	Skid Steer Loaders	2	8.00	65	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site	7	15.00	38.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Clearance/Demolition	9	15.00	58.00	14,000.00	14.70	6.90	30.00	LD_Mix	HDT_Mix	HHDT
Grading	10	15.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Construction/Landscaping	4	15.00	64.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading & Construction	3	15.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Improvements	4	15.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	8	15.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction										

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Clearance/Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5871	26.5814	20.8731	0.0366		1.2966	1.2966		1.1929	1.1929		3,547.9518	3,547.9518	1.1475		3,576.6388
Total	2.5871	26.5814	20.8731	0.0366		1.2966	1.2966		1.1929	1.1929		3,547.9518	3,547.9518	1.1475		3,576.6388

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1213	3.6818	1.0669	9.5100e-003	0.2433	7.7900e-003	0.2511	0.0701	7.4500e-003	0.0775		1,015.9130	1,015.9130	0.0656		1,017.5526
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.1928	3.7307	1.6193	0.0111	0.4109	9.1400e-003	0.4201	0.1145	8.7000e-003	0.1232		1,176.7507	1,176.7507	0.0703		1,178.5086

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.4496	1.9482	23.3383	0.0366		0.0599	0.0599		0.0599	0.0599	0.0000	3,547.9518	3,547.9518	1.1475		3,576.6388
Total	0.4496	1.9482	23.3383	0.0366		0.0599	0.0599		0.0599	0.0599	0.0000	3,547.9518	3,547.9518	1.1475		3,576.6388

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1213	3.6818	1.0669	9.5100e-003	0.2433	7.7900e-003	0.2511	0.0701	7.4500e-003	0.0775		1,015.9130	1,015.9130	0.0656		1,017.5526
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.1928	3.7307	1.6193	0.0111	0.4109	9.1400e-003	0.4201	0.1145	8.7000e-003	0.1232		1,176.7507	1,176.7507	0.0703		1,178.5086

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6009	0.0000	6.6009	3.3748	0.0000	3.3748			0.0000			0.0000
Off-Road	3.1593	34.4418	22.6715	0.0515		1.4550	1.4550		1.3398	1.3398		4,968.3162	4,968.3162	1.5960		5,008.2168
Total	3.1593	34.4418	22.6715	0.0515	6.6009	1.4550	8.0559	3.3748	1.3398	4.7146		4,968.3162	4,968.3162	1.5960		5,008.2168

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6391	19.4433	4.9468	0.0592	1.6279	0.0660	1.6939	0.4398	0.0631	0.5029		6,425.2392	6,425.2392	0.4313		6,436.0204
Vendor	0.1851	5.6196	1.6285	0.0145	0.3713	0.0119	0.3832	0.1069	0.0114	0.1183		1,550.6041	1,550.6041	0.1001		1,553.1066
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.8957	25.1117	7.1277	0.0753	2.1669	0.0792	2.2461	0.5912	0.0757	0.6669		8,136.6809	8,136.6809	0.5361		8,150.0829

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5743	0.0000	2.5743	1.3162	0.0000	1.3162			0.0000			0.0000
Off-Road	0.7677	4.6920	28.2141	0.0515		0.1655	0.1655		0.1585	0.1585	0.0000	4,968.3162	4,968.3162	1.5960		5,008.2168
Total	0.7677	4.6920	28.2141	0.0515	2.5743	0.1655	2.7399	1.3162	0.1585	1.4747	0.0000	4,968.3162	4,968.3162	1.5960		5,008.2168

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6391	19.4433	4.9468	0.0592	1.6279	0.0660	1.6939	0.4398	0.0631	0.5029		6,425.2392	6,425.2392	0.4313		6,436.0204
Vendor	0.1851	5.6196	1.6285	0.0145	0.3713	0.0119	0.3832	0.1069	0.0114	0.1183		1,550.6041	1,550.6041	0.1001		1,553.1066
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.8957	25.1117	7.1277	0.0753	2.1669	0.0792	2.2461	0.5912	0.0757	0.6669		8,136.6809	8,136.6809	0.5361		8,150.0829

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6009	0.0000	6.6009	3.3748	0.0000	3.3748			0.0000			0.0000
Off-Road	2.7176	28.5514	21.9961	0.0515		1.1953	1.1953		1.1008	1.1008		4,968.9693	4,968.9693	1.5962		5,008.8752
Total	2.7176	28.5514	21.9961	0.0515	6.6009	1.1953	7.7962	3.3748	1.1008	4.4756		4,968.9693	4,968.9693	1.5962		5,008.8752

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6087	17.9486	4.8955	0.0584	6.5125	0.0574	6.5698	1.6388	0.0549	1.6937		6,347.4027	6,347.4027	0.4262		6,358.0567

Vendor	0.1737	5.3406	1.5415	0.0144	0.3713	0.0104	0.3817	0.1069	9.9400e-003	0.1169		1,536.8276	1,536.8276	0.0966		1,539.2423
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	0.8496	23.3334	6.9457	0.0744	7.0514	0.0691	7.1205	1.7902	0.0660	1.8562		8,039.4157	8,039.4157	0.5270		8,052.5911

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5743	0.0000	2.5743	1.3162	0.0000	1.3162			0.0000			0.0000
Off-Road	0.7454	4.2992	28.1950	0.0515		0.1513	0.1513		0.1454	0.1454	0.0000	4,968.9693	4,968.9693	1.5962		5,008.8752
Total	0.7454	4.2992	28.1950	0.0515	2.5743	0.1513	2.7256	1.3162	0.1454	1.4616	0.0000	4,968.9693	4,968.9693	1.5962		5,008.8752

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6087	17.9486	4.8955	0.0584	6.5125	0.0574	6.5698	1.6388	0.0549	1.6937		6,347.4027	6,347.4027	0.4262		6,358.0567
Vendor	0.1737	5.3406	1.5415	0.0144	0.3713	0.0104	0.3817	0.1069	9.9400e-003	0.1169		1,536.8276	1,536.8276	0.0966		1,539.2423
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	0.8496	23.3334	6.9457	0.0744	7.0514	0.0691	7.1205	1.7902	0.0660	1.8562		8,039.4157	8,039.4157	0.5270		8,052.5911

3.4 Construction/Landscaping - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7258	18.4252	22.2098	0.0398		0.8374	0.8374		0.7715	0.7715		3,830.3063	3,830.3063	1.2280		3,861.0056
Total	1.7258	18.4252	22.2098	0.0398		0.8374	0.8374		0.7715	0.7715		3,830.3063	3,830.3063	1.2280		3,861.0056

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0180	0.5525	0.1595	1.4900e-003	0.0384	1.0800e-003	0.0395	0.0111	1.0300e-003	0.0121		158.9822	158.9822	9.9900e-003		159.2320
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	0.0852	0.5967	0.6682	3.0500e-003	0.2061	2.3900e-003	0.2085	0.0555	2.2400e-003	0.0578		314.1676	314.1676	0.0143		314.5242

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7236	6.6944	25.6688	0.0398		0.1776	0.1776		0.1678	0.1678	0.0000	3,830.3063	3,830.3063	1.2280		3,861.0056
Total	0.7236	6.6944	25.6688	0.0398		0.1776	0.1776		0.1678	0.1678	0.0000	3,830.3063	3,830.3063	1.2280		3,861.0056

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0180	0.5525	0.1595	1.4900e-003	0.0384	1.0800e-003	0.0395	0.0111	1.0300e-003	0.0121		158.9822	158.9822	9.9900e-003		159.2320
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	0.0852	0.5967	0.6682	3.0500e-003	0.2061	2.3900e-003	0.2085	0.0555	2.2400e-003	0.0578		314.1676	314.1676	0.0143		314.5242

3.5 Grading & Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7693	7.9213	8.6508	0.0198		0.3374	0.3374		0.3115	0.3115		1,894.9602	1,894.9602	0.6020		1,910.0112

Total	0.7693	7.9213	8.6508	0.0198		0.3374	0.3374		0.3115	0.3115		1,894.9602	1,894.9602	0.6020		1,910.0112
-------	--------	--------	--------	--------	--	--------	--------	--	--------	--------	--	------------	------------	--------	--	------------

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1917	5.8931	1.7009	0.0159	0.4098	0.0115	0.4212	0.1180	0.0110	0.1289		1,695.8098	1,695.8098	0.1066		1,698.4742
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	0.2589	5.9373	2.2097	0.0174	0.5774	0.0128	0.5902	0.1624	0.0122	0.1746		1,850.9952	1,850.9952	0.1109		1,853.7665

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3554	2.6088	10.7149	0.0198		0.0993	0.0993		0.0934	0.0934	0.0000	1,894.9602	1,894.9602	0.6020		1,910.0112
Total	0.3554	2.6088	10.7149	0.0198		0.0993	0.0993		0.0934	0.0934	0.0000	1,894.9602	1,894.9602	0.6020		1,910.0112

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1917	5.8931	1.7009	0.0159	0.4098	0.0115	0.4212	0.1180	0.0110	0.1289		1,695.8098	1,695.8098	0.1066		1,698.4742
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	0.2589	5.9373	2.2097	0.0174	0.5774	0.0128	0.5902	0.1624	0.0122	0.1746		1,850.9952	1,850.9952	0.1109		1,853.7665

3.5 Grading & Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7267	7.2362	8.6238	0.0198		0.3039	0.3039		0.2807	0.2807		1,896.7819	1,896.7819	0.6026		1,911.8476
Total	0.7267	7.2362	8.6238	0.0198		0.3039	0.3039		0.2807	0.2807		1,896.7819	1,896.7819	0.6026		1,911.8476

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1424	4.4633	1.5114	0.0153	0.4098	5.4500e-003	0.4152	0.1180	5.2100e-003	0.1232		1,643.1444	1,643.1444	0.0938		1,645.4900
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.2057	4.5032	1.9791	0.0168	0.5774	6.7300e-003	0.5841	0.1625	6.3800e-003	0.1688		1,792.6525	1,792.6525	0.0977		1,795.0942

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3458	2.4425	10.7084	0.0198		0.0918	0.0918		0.0865	0.0865	0.0000	1,896.7819	1,896.7819	0.6026		1,911.8476
Total	0.3458	2.4425	10.7084	0.0198		0.0918	0.0918		0.0865	0.0865	0.0000	1,896.7819	1,896.7819	0.6026		1,911.8476

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1424	4.4633	1.5114	0.0153	0.4098	5.4500e-003	0.4152	0.1180	5.2100e-003	0.1232		1,643.1444	1,643.1444	0.0938		1,645.4900

Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.2057	4.5032	1.9791	0.0168	0.5774	6.7300e-003	0.5841	0.1625	6.3800e-003	0.1688		1,792.6525	1,792.6525	0.0977		1,795.0942

3.6 Utilities - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6870	6.5703	9.5628	0.0151		0.3081	0.3081		0.2845	0.2845		1,439.7589	1,439.7589	0.4548		1,451.1293
Total	0.6870	6.5703	9.5628	0.0151		0.3081	0.3081		0.2845	0.2845		1,439.7589	1,439.7589	0.4548		1,451.1293

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.6800e-003	0.2092	0.0709	7.2000e-004	0.0192	2.6000e-004	0.0195	5.5300e-003	2.4000e-004	5.7700e-003		77.0224	77.0224	4.4000e-003		77.1323
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.0700	0.2492	0.5385	2.2200e-003	0.1869	1.5400e-003	0.1884	0.0500	1.4100e-003	0.0514		226.5305	226.5305	8.2500e-003		226.7366

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2523	1.6411	10.7860	0.0151		0.0660	0.0660		0.0626	0.0626	0.0000	1,439.7589	1,439.7589	0.4548		1,451.1293
Total	0.2523	1.6411	10.7860	0.0151		0.0660	0.0660		0.0626	0.0626	0.0000	1,439.7589	1,439.7589	0.4548		1,451.1293

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.6800e-003	0.2092	0.0709	7.2000e-004	0.0192	2.6000e-004	0.0195	5.5300e-003	2.4000e-004	5.7700e-003		77.0224	77.0224	4.4000e-003		77.1323
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.0700	0.2492	0.5385	2.2200e-003	0.1869	1.5400e-003	0.1884	0.0500	1.4100e-003	0.0514		226.5305	226.5305	8.2500e-003		226.7366

3.6 Utilities - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Category	lb/day										lb/day					
Off-Road	0.6591	6.1547	9.5818	0.0151		0.2847	0.2847		0.2631	0.2631		1,439.8427	1,439.8427	0.4548		1,451.2138
Total	0.6591	6.1547	9.5818	0.0151		0.2847	0.2847		0.2631	0.2631		1,439.8427	1,439.8427	0.4548		1,451.2138

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.5100e-003	0.2085	0.0687	7.2000e-004	0.0192	2.5000e-004	0.0195	5.5300e-003	2.4000e-004	5.7700e-003		76.7237	76.7237	4.3300e-003		76.8320
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0666	0.2449	0.5041	2.1700e-003	0.1869	1.5100e-003	0.1884	0.0500	1.4000e-003	0.0514		221.5942	221.5942	7.8600e-003		221.7907

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2485	1.5885	10.7883	0.0151		0.0628	0.0628		0.0596	0.0596	0.0000	1,439.8427	1,439.8427	0.4548		1,451.2138
Total	0.2485	1.5885	10.7883	0.0151		0.0628	0.0628		0.0596	0.0596	0.0000	1,439.8427	1,439.8427	0.4548		1,451.2138

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.5100e-003	0.2085	0.0687	7.2000e-004	0.0192	2.5000e-004	0.0195	5.5300e-003	2.4000e-004	5.7700e-003		76.7237	76.7237	4.3300e-003		76.8320
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0666	0.2449	0.5041	2.1700e-003	0.1869	1.5100e-003	0.1884	0.0500	1.4000e-003	0.0514		221.5942	221.5942	7.8600e-003		221.7907

3.7 Street Improvements - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3434	3.4515	5.4831	8.8500e-003		0.1364	0.1364		0.1266	0.1266		838.2119	838.2119	0.2603		844.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3434	3.4515	5.4831	8.8500e-003		0.1364	0.1364		0.1266	0.1266		838.2119	838.2119	0.2603		844.7186

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0369	1.1813	0.3893	4.0600e-003	0.1088	1.4200e-003	0.1103	0.0313	1.3600e-003	0.0327		434.7675	434.7675	0.0245		435.3811
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0970	1.2177	0.8247	5.5100e-003	0.2765	2.6800e-003	0.2792	0.0758	2.5200e-003	0.0783		579.6380	579.6380	0.0281		580.3398

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1218	0.7040	6.1789	8.8500e-003		0.0222	0.0222		0.0216	0.0216	0.0000	838.2119	838.2119	0.2603		844.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1218	0.7040	6.1789	8.8500e-003		0.0222	0.0222		0.0216	0.0216	0.0000	838.2119	838.2119	0.2603		844.7186

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0369	1.1813	0.3893	4.0600e-003	0.1088	1.4200e-003	0.1103	0.0313	1.3600e-003	0.0327		434.7675	434.7675	0.0245		435.3811
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0970	1.2177	0.8247	5.5100e-003	0.2765	2.6800e-003	0.2792	0.0758	2.5200e-003	0.0783		579.6380	579.6380	0.0281		580.3398

3.8 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1813	10.3775	14.6139	0.0219		0.4857	0.4857		0.4595	0.4595		2,066.7425	2,066.7425	0.4462		2,077.8978
Total	1.1813	10.3775	14.6139	0.0219		0.4857	0.4857		0.4595	0.4595		2,066.7425	2,066.7425	0.4462		2,077.8978

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.1700e-003	0.0695	0.0229	2.4000e-004	6.4000e-003	8.0000e-005	6.4900e-003	1.8400e-003	8.0000e-005	1.9200e-003		25.5746	25.5746	1.4400e-003		25.6107
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587

Total	0.0622	0.1059	0.4583	1.6900e-003	0.1741	1.3400e-003	0.1754	0.0463	1.2400e-003	0.0475		170.4451	170.4451	4.9700e-003		170.5694
-------	--------	--------	--------	-------------	--------	-------------	--------	--------	-------------	--------	--	----------	----------	-------------	--	----------

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,066.7425	2,066.7425	0.4462		2,077.8978
Total	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,066.7425	2,066.7425	0.4462		2,077.8978

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.1700e-003	0.0695	0.0229	2.4000e-004	6.4000e-003	8.0000e-005	6.4900e-003	1.8400e-003	8.0000e-005	1.9200e-003		25.5746	25.5746	1.4400e-003		25.6107
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0622	0.1059	0.4583	1.6900e-003	0.1741	1.3400e-003	0.1754	0.0463	1.2400e-003	0.0475		170.4451	170.4451	4.9700e-003		170.5694

3.8 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0937	9.6977	14.5653	0.0219		0.4097	0.4097		0.3879	0.3879		2,067.5014	2,067.5014	0.4428		2,078.5715
Total	1.0937	9.6977	14.5653	0.0219		0.4097	0.4097		0.3879	0.3879		2,067.5014	2,067.5014	0.4428		2,078.5715

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.1200e-003	0.0689	0.0223	2.4000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	8.0000e-005	1.9200e-003		25.4374	25.4374	1.4200e-003		25.4730
Worker	0.0572	0.0333	0.4040	1.4000e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1300e-003	0.0456		139.2625	139.2625	3.2100e-003		139.3429
Total	0.0593	0.1022	0.4263	1.6400e-003	0.1741	1.3100e-003	0.1754	0.0463	1.2100e-003	0.0475		164.7000	164.7000	4.6300e-003		164.8158

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,067.5014	2,067.5014	0.4428		2,078.5715
Total	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,067.5014	2,067.5014	0.4428		2,078.5715

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.1200e-003	0.0689	0.0223	2.4000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	8.0000e-005	1.9200e-003		25.4374	25.4374	1.4200e-003		25.4730
Worker	0.0572	0.0333	0.4040	1.4000e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1300e-003	0.0456		139.2625	139.2625	3.2100e-003		139.3429
Total	0.0593	0.1022	0.4263	1.6400e-003	0.1741	1.3100e-003	0.1754	0.0463	1.2100e-003	0.0475		164.7000	164.7000	4.6300e-003		164.8158

3.8 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0937	9.6977	14.5653	0.0219		0.4097	0.4097		0.3879	0.3879		2,067.5014	2,067.5014	0.4428		2,078.5715
Total	1.0937	9.6977	14.5653	0.0219		0.4097	0.4097		0.3879	0.3879		2,067.5014	2,067.5014	0.4428		2,078.5715

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.0700e-003	0.0683	0.0219	2.4000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	8.0000e-005	1.9200e-003		25.3059	25.3059	1.4000e-003		25.3409
Worker	0.0548	0.0307	0.3774	1.3500e-003	0.1677	1.1900e-003	0.1689	0.0445	1.0900e-003	0.0456		134.4260	134.4260	2.9400e-003		134.4996
Total	0.0568	0.0990	0.3993	1.5900e-003	0.1741	1.2700e-003	0.1753	0.0463	1.1700e-003	0.0475		159.7318	159.7318	4.3400e-003		159.8405

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,067.5014	2,067.5014	0.4428		2,078.5715
Total	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,067.5014	2,067.5014	0.4428		2,078.5715

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.0700e-003	0.0683	0.0219	2.4000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	8.0000e-005	1.9200e-003		25.3059	25.3059	1.4000e-003		25.3409
Worker	0.0548	0.0307	0.3774	1.3500e-003	0.1677	1.1900e-003	0.1689	0.0445	1.0900e-003	0.0456		134.4260	134.4260	2.9400e-003		134.4996
Total	0.0568	0.0990	0.3993	1.5900e-003	0.1741	1.2700e-003	0.1753	0.0463	1.1700e-003	0.0475		159.7318	159.7318	4.3400e-003		159.8405

3.8 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0937	9.6977	14.5653	0.0219		0.4097	0.4097		0.3879	0.3879		2,067.5014	2,067.5014	0.4428		2,078.5715
Total	1.0937	9.6977	14.5653	0.0219		0.4097	0.4097		0.3879	0.3879		2,067.5014	2,067.5014	0.4428		2,078.5715

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	2.0300e-003	0.0676	0.0215	2.3000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	7.0000e-005	1.9200e-003		25.1875	25.1875	1.3800e-003		25.2220
Worker	0.0524	0.0283	0.3536	1.3000e-003	0.1677	1.1200e-003	0.1688	0.0445	1.0300e-003	0.0455		130.1407	130.1407	2.7000e-003		130.2083
Total	0.0544	0.0960	0.3751	1.5300e-003	0.1741	1.2000e-003	0.1753	0.0463	1.1000e-003	0.0474		155.3282	155.3282	4.0800e-003		155.4303

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,067.5014	2,067.5014	0.4428		2,078.5715
Total	0.2658	1.9659	15.1859	0.0219		0.0325	0.0325		0.0325	0.0325	0.0000	2,067.5014	2,067.5014	0.4428		2,078.5715

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.0300e-003	0.0676	0.0215	2.3000e-004	6.4000e-003	8.0000e-005	6.4800e-003	1.8400e-003	7.0000e-005	1.9200e-003		25.1875	25.1875	1.3800e-003		25.2220
Worker	0.0524	0.0283	0.3536	1.3000e-003	0.1677	1.1200e-003	0.1688	0.0445	1.0300e-003	0.0455		130.1407	130.1407	2.7000e-003		130.2083
Total	0.0544	0.0960	0.3751	1.5300e-003	0.1741	1.2000e-003	0.1753	0.0463	1.1000e-003	0.0474		155.3282	155.3282	4.0800e-003		155.4303

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2001	0.9728	2.6004	0.0115	1.1518	8.1700e-003	1.1600	0.3081	7.5800e-003	0.3157		1,176.7914	1,176.7914	0.0521		1,178.0932
Unmitigated	0.2001	0.9728	2.6004	0.0115	1.1518	8.1700e-003	1.1600	0.3081	7.5800e-003	0.3157		1,176.7914	1,176.7914	0.0521		1,178.0932

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	152.32	158.56	137.92	516,517	516,517
Total	152.32	158.56	137.92	516,517	516,517

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
----------	-----	------	------	-----	------	------	-----	-----	------	------	-----	------	----

Parking Lot	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Single Family Housing	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321
NaturalGas Unmitigated	0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1204.37	0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321

Total		0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321
-------	--	--------	--------	--------	-------------	--	-------------	-------------	--	-------------	-------------	--	----------	----------	-------------	-------------	----------

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.20437	0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321
Total		0.0130	0.1110	0.0472	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003		141.6901	141.6901	2.7200e-003	2.6000e-003	142.5321

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	1.5703	0.2408	1.4179	1.5100e-003		0.0256	0.0256		0.0256	0.0256	0.0000	290.3836	290.3836	7.8100e-003	5.2800e-003	292.1524
Unmitigated	1.5708	0.2408	1.4179	1.5100e-003		0.0256	0.0256		0.0256	0.0256	0.0000	290.3836	290.3836	7.8100e-003	5.2800e-003	292.1524

6.2 Area by SubCategory
Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1204					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3841					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0264	0.2256	0.0960	1.4400e-003		0.0182	0.0182		0.0182	0.0182	0.0000	288.0000	288.0000	5.5200e-003	5.2800e-003	289.7114
Landscaping	0.0399	0.0152	1.3219	7.0000e-005		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003		2.3836	2.3836	2.2900e-003		2.4410
Total	1.5708	0.2408	1.4179	1.5100e-003		0.0256	0.0256		0.0256	0.0256	0.0000	290.3836	290.3836	7.8100e-003	5.2800e-003	292.1524

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1199					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3841					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0264	0.2256	0.0960	1.4400e-003		0.0182	0.0182		0.0182	0.0182	0.0000	288.0000	288.0000	5.5200e-003	5.2800e-003	289.7114

Landscaping	0.0399	0.0152	1.3219	7.0000e-005		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003		2.3836	2.3836	2.2900e-003		2.4410
Total	1.5703	0.2408	1.4179	1.5100e-003		0.0256	0.0256		0.0256	0.0256	0.0000	290.3836	290.3836	7.8100e-003	5.2800e-003	292.1524

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

1688 W. Garvey Avenue - Los Angeles-South Coast County, Annual

1688 W. Garvey Avenue
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	31.00	Space	0.00	12,400.00	0
Single Family Housing	16.00	Dwelling Unit	6.22	69,683.00	46

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project area is approximately 6.22 acres.

Construction Phase - Schedule per applicant.

Off-road Equipment - Construction of residential homes

Off-road Equipment - Equipment per applicant.

Off-road Equipment - Equipment per applicant.

Off-road Equipment - Equipment per applicant.

Off-road Equipment - Equipment per applicant.

Trips and VMT - Irwindale Management Waste approximately 15 miles from the Project site (30 mile round trip)

10-15 worker trips per day throughout entire duration of construction
Grading -

Woodstoves - No woodstoves.

Area Coating -

Energy Use -

Construction Off-road Equipment Mitigation - As recommended by SCAQMD, alternative applicable strategies include construction equipment with Tier 4 emissions standards.

Area Mitigation - Compliant with SCAQMD Rule 1113 - Architectural Coating (<50gms/liter).

Energy Mitigation -

Water Mitigation -

Off-road Equipment - Anticipated Construction Equipment Fleet

Off-road Equipment - Anticipated Construction Equipment Fleet

Off-road Equipment - Construction of retaining wall and anchors

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	230.00	847.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	261.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	20.00	305.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	PhaseEndDate	5/6/2022	7/4/2027
tblConstructionPhase	PhaseEndDate	3/11/2022	2/2/2024
tblConstructionPhase	PhaseEndDate	1/29/2021	3/4/2021

tblConstructionPhase	PhaseEndDate	2/26/2021	3/5/2022
tblConstructionPhase	PhaseEndDate	3/26/2021	8/5/2022
tblConstructionPhase	PhaseEndDate	4/23/2021	12/1/2023
tblConstructionPhase	PhaseEndDate	4/8/2022	4/3/2024
tblConstructionPhase	PhaseStartDate	4/9/2022	4/4/2024
tblConstructionPhase	PhaseStartDate	4/24/2021	12/2/2023
tblConstructionPhase	PhaseStartDate	1/30/2021	3/5/2021
tblConstructionPhase	PhaseStartDate	2/27/2021	3/6/2022
tblConstructionPhase	PhaseStartDate	3/27/2021	10/1/2022
tblConstructionPhase	PhaseStartDate	3/12/2022	2/3/2024
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	0.80	0.00
tblGrading	MaterialExported	0.00	112,000.00
tblLandUse	LandUseSquareFeet	28,800.00	69,683.00
tblLandUse	LotAcreage	0.28	0.00
tblLandUse	LotAcreage	5.19	6.22
tblOffRoadEquipment	OffRoadEquipmentType	Excavators	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets	Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Grading & Construction
tblOffRoadEquipment	PhaseName		Utilities
tblOffRoadEquipment	PhaseName		Utilities
tblOffRoadEquipment	PhaseName		Utilities
tblOffRoadEquipment	PhaseName		Site Clearance/Demolition
tblOffRoadEquipment	PhaseName		Utilities
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblOffRoadEquipment	PhaseName		Site Clearance/Demolition

tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblOffRoadEquipment	PhaseName		Grading & Construction
tblOffRoadEquipment	PhaseName		Site Clearance/Demolition
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblOffRoadEquipment	PhaseName		Grading & Construction
tblOffRoadEquipment	PhaseName		Street Improvements
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblOffRoadEquipment	PhaseName		Grading & Construction
tblOffRoadEquipment	PhaseName		Street Improvements
tblOffRoadEquipment	PhaseName		Construction/Landscaping
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	38.00
tblTripsAndVMT	VendorTripNumber	0.00	58.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	64.00
tblTripsAndVMT	VendorTripNumber	0.00	17.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	4.00	1.00
tblTripsAndVMT	WorkerTripNumber	18.00	15.00
tblTripsAndVMT	WorkerTripNumber	23.00	15.00
tblTripsAndVMT	WorkerTripNumber	25.00	15.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	8.00	15.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	11.00	15.00
tblWoodstoves	NumberCatalytic	0.80	0.00

tbiWoodstoves	NumberNoncatalytic	0.80	0.00
tbiWoodstoves	WoodstoveDayYear	25.00	0.00
tbiWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.4969	7.1515	3.6935	0.0148	0.9647	0.1944	1.1590	0.4313	0.1792	0.6105	0.0000	1,385.8707	1,385.8707	0.2322	0.0000	1,391.6764
2022	0.2121	2.6781	2.2569	6.4200e-003	0.3959	0.0860	0.4819	0.1306	0.0793	0.2099	0.0000	585.4107	585.4107	0.1260	0.0000	588.5616
2023	0.1182	1.4856	1.3681	4.6000e-003	0.0699	0.0404	0.1103	0.0197	0.0373	0.0570	0.0000	419.9564	419.9564	0.0801	0.0000	421.9598
2024	0.1383	1.1980	1.7249	2.8200e-003	0.0247	0.0538	0.0785	6.6300e-003	0.0508	0.0574	0.0000	243.8334	243.8334	0.0506	0.0000	245.0974
2025	0.1497	1.2792	1.9578	3.0800e-003	0.0223	0.0536	0.0759	5.9300e-003	0.0508	0.0567	0.0000	264.5872	264.5872	0.0530	0.0000	265.9116
2026	0.1494	1.2787	1.9542	3.0700e-003	0.0223	0.0536	0.0759	5.9300e-003	0.0508	0.0567	0.0000	263.9890	263.9890	0.0529	0.0000	265.3124
2027	0.0748	0.6416	0.9792	1.5400e-003	0.0112	0.0269	0.0381	2.9800e-003	0.0255	0.0285	0.0000	132.2341	132.2341	0.0266	0.0000	132.8980
Maximum	0.4969	7.1515	3.6935	0.0148	0.9647	0.1944	1.1590	0.4313	0.1792	0.6105	0.0000	1,385.8707	1,385.8707	0.2322	0.0000	1,391.6764

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Year	tons/yr										MT/yr					
2021	0.1916	3.3966	4.3463	0.0148	0.5219	0.0279	0.5498	0.2080	0.0267	0.2348	0.0000	1,385.8700	1,385.8700	0.2322	0.0000	1,391.6757
2022	0.0992	1.3145	2.6537	6.4200e-003	0.2672	0.0185	0.2857	0.0800	0.0175	0.0975	0.0000	585.4103	585.4103	0.1260	0.0000	588.5612
2023	0.0681	0.8610	1.6305	4.6000e-003	0.0699	0.0125	0.0824	0.0197	0.0118	0.0315	0.0000	419.9561	419.9561	0.0801	0.0000	421.9595
2024	0.0396	0.2659	1.8104	2.8200e-003	0.0247	4.6200e-003	0.0293	6.6300e-003	4.5500e-003	0.0112	0.0000	243.8331	243.8331	0.0506	0.0000	245.0971
2025	0.0416	0.2702	2.0388	3.0800e-003	0.0223	4.4100e-003	0.0267	5.9300e-003	4.4000e-003	0.0103	0.0000	264.5869	264.5869	0.0530	0.0000	265.9113
2026	0.0413	0.2697	2.0352	3.0700e-003	0.0223	4.4100e-003	0.0267	5.9300e-003	4.4000e-003	0.0103	0.0000	263.9887	263.9887	0.0529	0.0000	265.3121
2027	0.0206	0.1352	1.0199	1.5400e-003	0.0112	2.2100e-003	0.0134	2.9800e-003	2.2000e-003	5.1800e-003	0.0000	132.2340	132.2340	0.0266	0.0000	132.8979
Maximum	0.1916	3.3966	4.3463	0.0148	0.5219	0.0279	0.5498	0.2080	0.0267	0.2348	0.0000	1,385.8700	1,385.8700	0.2322	0.0000	1,391.6757

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	62.51	58.55	-11.48	0.00	37.83	85.36	49.80	45.41	84.89	62.77	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-4-2021	4-3-2021	1.3902	0.4722
2	4-4-2021	7-3-2021	2.0549	1.0103
3	7-4-2021	10-3-2021	2.0779	1.0219
4	10-4-2021	1-3-2022	2.0972	1.0413
5	1-4-2022	4-3-2022	1.7481	0.9202
6	4-4-2022	7-3-2022	0.6767	0.2629
7	7-4-2022	10-3-2022	0.2614	0.1052
8	10-4-2022	1-3-2023	0.4868	0.2992
9	1-4-2023	4-3-2023	0.4073	0.2410
10	4-4-2023	7-3-2023	0.4119	0.2437
11	7-4-2023	10-3-2023	0.4164	0.2464
12	10-4-2023	1-3-2024	0.3558	0.1840
13	1-4-2024	4-3-2024	0.1877	0.0696

14	4-4-2024	7-3-2024	0.3808	0.0777
15	7-4-2024	10-3-2024	0.3850	0.0785
16	10-4-2024	1-3-2025	0.3845	0.0788
17	1-4-2025	4-3-2025	0.3520	0.0769
18	4-4-2025	7-3-2025	0.3557	0.0775
19	7-4-2025	10-3-2025	0.3596	0.0783
20	10-4-2025	1-3-2026	0.3599	0.0786
21	1-4-2026	4-3-2026	0.3519	0.0767
22	4-4-2026	7-3-2026	0.3555	0.0773
23	7-4-2026	10-3-2026	0.3594	0.0782
24	10-4-2026	1-3-2027	0.3597	0.0784
25	1-4-2027	4-3-2027	0.3517	0.0766
26	4-4-2027	7-3-2027	0.3553	0.0771
27	7-4-2027	9-30-2027	0.0039	0.0008
		Highest	2.0972	1.0413

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2799	4.7200e-003	0.1664	3.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	3.5362	3.5362	3.2000e-004	6.0000e-005	3.5621
Energy	2.3700e-003	0.0203	8.6200e-003	1.3000e-004		1.6400e-003	1.6400e-003		1.6400e-003	1.6400e-003	0.0000	66.6866	66.6866	2.2300e-003	8.0000e-004	66.9806
Mobile	0.0339	0.1716	0.4578	2.0200e-003	0.1960	1.4100e-003	0.1974	0.0525	1.3100e-003	0.0538	0.0000	187.7689	187.7689	8.1600e-003	0.0000	187.9728
Waste						0.0000	0.0000		0.0000	0.0000	3.8284	0.0000	3.8284	0.2263	0.0000	9.4847
Water						0.0000	0.0000		0.0000	0.0000	0.3307	6.6514	6.9821	0.0342	8.6000e-004	8.0941

Total	0.3162	0.1966	0.6328	2.1800e-003	0.1960	4.1900e-003	0.2002	0.0525	4.0900e-003	0.0566	4.1591	264.6431	268.8022	0.2712	1.7200e-003	276.0944
-------	--------	--------	--------	-------------	--------	-------------	--------	--------	-------------	--------	--------	----------	----------	--------	-------------	----------

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2798	4.7200e-003	0.1664	3.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	3.5362	3.5362	3.2000e-004	6.0000e-005	3.5621
Energy	2.3700e-003	0.0203	8.6200e-003	1.3000e-004		1.6400e-003	1.6400e-003		1.6400e-003	1.6400e-003	0.0000	65.8296	65.8296	2.2000e-003	7.9000e-004	66.1206
Mobile	0.0339	0.1716	0.4578	2.0200e-003	0.1960	1.4100e-003	0.1974	0.0525	1.3100e-003	0.0538	0.0000	187.7689	187.7689	8.1600e-003	0.0000	187.9728
Waste						0.0000	0.0000		0.0000	0.0000	3.8284	0.0000	3.8284	0.2263	0.0000	9.4847
Water						0.0000	0.0000		0.0000	0.0000	0.2646	5.6445	5.9091	0.0274	6.9000e-004	6.7998
Total	0.3161	0.1966	0.6328	2.1800e-003	0.1960	4.1900e-003	0.2002	0.0525	4.0900e-003	0.0566	4.0930	262.7792	266.8721	0.2643	1.5400e-003	273.9400

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59	0.70	0.72	2.53	10.47	0.78

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Clearance/Demolition	Demolition	1/4/2021	3/4/2021	5	44	Lower Site Improvement
2	Grading	Grading	3/5/2021	3/5/2022	5	261	Lower Site Improvement
3	Construction/Landscaping	Grading	3/6/2022	8/5/2022	5	110	Lower Site Improvement
4	Grading & Construction	Grading	10/1/2022	12/1/2023	5	305	Upper Site Improvement

5	Utilities	Trenching	12/2/2023	2/2/2024	5	45	Upper Site Improvement
6	Street Improvements	Paving	2/3/2024	4/3/2024	5	43	Upper Site Improvement
7	Building Construction	Building Construction	4/4/2024	7/4/2027	5	847	Construction of Residential Homes

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 130.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Clearance/Demolition	Cranes	1	8.00	231	0.29
Site Clearance/Demolition	Excavators	2	8.00	158	0.38
Site Clearance/Demolition	Other Material Handling Equipment	1	8.00	168	0.40
Site Clearance/Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Clearance/Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Other Construction Equipment	1	8.00	172	0.42
Grading	Rough Terrain Forklifts	1	8.00	100	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Signal Boards	1	8.00	6	0.82
Construction/Landscaping	Bore/Drill Rigs	1	8.00	221	0.50
Construction/Landscaping	Other Construction Equipment	2	8.00	172	0.42
Construction/Landscaping	Rough Terrain Forklifts	2	8.00	100	0.40
Construction/Landscaping	Signal Boards	1	8.00	6	0.82
Grading & Construction	Bore/Drill Rigs	1	8.00	221	0.50
Grading & Construction	Other Construction Equipment	1	8.00	172	0.42

Grading & Construction	Rough Terrain Forklifts	1	8.00	100	0.40
Grading & Construction	Signal Boards	1	8.00	6	0.82
Street Improvements	Pavers	1	8.00	130	0.42
Street Improvements	Rough Terrain Forklifts	1	8.00	100	0.40
Street Improvements	Signal Boards	1	8.00	6	0.82
Utilities	Excavators	1	8.00	158	0.38
Utilities	Other Construction Equipment	1	8.00	172	0.42
Utilities	Rough Terrain Forklifts	1	7.00	100	0.40
Utilities	Signal Boards	1	8.00	6	0.82
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Construction/Landscaping	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Construction/Landscaping	Skid Steer Loaders	2	8.00	65	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site	7	15.00	38.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Clearance/Demolition										
Grading	9	15.00	58.00	14,000.00	14.70	6.90	30.00	LD_Mix	HDT_Mix	HHDT
Construction/Landscaping	10	15.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading & Construction	4	15.00	64.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Improvements	3	15.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	4	15.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	15.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Clearance/Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0569	0.5848	0.4592	8.1000e-004		0.0285	0.0285		0.0262	0.0262	0.0000	70.8103	70.8103	0.0229	0.0000	71.3828
Total	0.0569	0.5848	0.4592	8.1000e-004		0.0285	0.0285		0.0262	0.0262	0.0000	70.8103	70.8103	0.0229	0.0000	71.3828

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-003	0.0825	0.0224	2.1000e-004	5.2700e-003	1.7000e-004	5.4300e-003	1.5200e-003	1.6000e-004	1.6800e-003	0.0000	20.6071	20.6071	1.2600e-003	0.0000	20.6387
Worker	1.4200e-003	1.1100e-003	0.0125	4.0000e-005	3.6200e-003	3.0000e-005	3.6500e-003	9.6000e-004	3.0000e-005	9.9000e-004	0.0000	3.2634	3.2634	1.0000e-004	0.0000	3.2658
Total	4.0200e-003	0.0836	0.0349	2.5000e-004	8.8900e-003	2.0000e-004	9.0800e-003	2.4800e-003	1.9000e-004	2.6700e-003	0.0000	23.8705	23.8705	1.3600e-003	0.0000	23.9045

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8900e-003	0.0429	0.5134	8.1000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003	0.0000	70.8102	70.8102	0.0229	0.0000	71.3827
Total	9.8900e-003	0.0429	0.5134	8.1000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003	0.0000	70.8102	70.8102	0.0229	0.0000	71.3827

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-003	0.0825	0.0224	2.1000e-004	5.2700e-003	1.7000e-004	5.4300e-003	1.5200e-003	1.6000e-004	1.6800e-003	0.0000	20.6071	20.6071	1.2600e-003	0.0000	20.6387
Worker	1.4200e-003	1.1100e-003	0.0125	4.0000e-005	3.6200e-003	3.0000e-005	3.6500e-003	9.6000e-004	3.0000e-005	9.9000e-004	0.0000	3.2634	3.2634	1.0000e-004	0.0000	3.2658
Total	4.0200e-003	0.0836	0.0349	2.5000e-004	8.8900e-003	2.0000e-004	9.0800e-003	2.4800e-003	1.9000e-004	2.6700e-003	0.0000	23.8705	23.8705	1.3600e-003	0.0000	23.9045

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.7259	0.0000	0.7259	0.3659	0.0000	0.3659	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3412	3.7197	2.4485	5.5600e-003		0.1571	0.1571		0.1447	0.1447	0.0000	486.7755	486.7755	0.1564	0.0000	490.6848
Total	0.3412	3.7197	2.4485	5.5600e-003	0.7259	0.1571	0.8831	0.3659	0.1447	0.5106	0.0000	486.7755	486.7755	0.1564	0.0000	490.6848

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0684	2.1398	0.5220	6.4400e-003	0.1727	7.0800e-003	0.1798	0.0467	6.7700e-003	0.0535	0.0000	633.9885	633.9885	0.0417	0.0000	635.0298
Vendor	0.0195	0.6182	0.1676	1.5900e-003	0.0395	1.2600e-003	0.0407	0.0114	1.2100e-003	0.0126	0.0000	154.4055	154.4055	9.4700e-003	0.0000	154.6422
Worker	6.9700e-003	5.4300e-003	0.0613	1.8000e-004	0.0178	1.5000e-004	0.0179	4.7100e-003	1.3000e-004	4.8500e-003	0.0000	16.0205	16.0205	4.7000e-004	0.0000	16.0322
Total	0.0948	2.7634	0.7509	8.2100e-003	0.2299	8.4900e-003	0.2384	0.0628	8.1100e-003	0.0710	0.0000	804.4144	804.4144	0.0516	0.0000	805.7042

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2831	0.0000	0.2831	0.1427	0.0000	0.1427	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0829	0.5067	3.0471	5.5600e-003		0.0179	0.0179		0.0171	0.0171	0.0000	486.7749	486.7749	0.1564	0.0000	490.6842
Total	0.0829	0.5067	3.0471	5.5600e-003	0.2831	0.0179	0.3010	0.1427	0.0171	0.1598	0.0000	486.7749	486.7749	0.1564	0.0000	490.6842

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0684	2.1398	0.5220	6.4400e-003	0.1727	7.0800e-003	0.1798	0.0467	6.7700e-003	0.0535	0.0000	633.9885	633.9885	0.0417	0.0000	635.0298
Vendor	0.0195	0.6182	0.1676	1.5900e-003	0.0395	1.2600e-003	0.0407	0.0114	1.2100e-003	0.0126	0.0000	154.4055	154.4055	9.4700e-003	0.0000	154.6422
Worker	6.9700e-003	5.4300e-003	0.0613	1.8000e-004	0.0178	1.5000e-004	0.0179	4.7100e-003	1.3000e-004	4.8500e-003	0.0000	16.0205	16.0205	4.7000e-004	0.0000	16.0322
Total	0.0948	2.7634	0.7509	8.2100e-003	0.2299	8.4900e-003	0.2384	0.0628	8.1100e-003	0.0710	0.0000	804.4144	804.4144	0.0516	0.0000	805.7042

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2110	0.0000	0.2110	0.0829	0.0000	0.0829	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0612	0.6424	0.4949	1.1600e-003		0.0269	0.0269		0.0248	0.0248	0.0000	101.4249	101.4249	0.0326	0.0000	102.2394
Total	0.0612	0.6424	0.4949	1.1600e-003	0.2110	0.0269	0.2379	0.0829	0.0248	0.1077	0.0000	101.4249	101.4249	0.0326	0.0000	102.2394

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0136	0.4115	0.1077	1.3200e-003	0.1434	1.2800e-003	0.1447	0.0361	1.2300e-003	0.0373	0.0000	130.4893	130.4893	8.5800e-003	0.0000	130.7038
Vendor	3.8000e-003	0.1224	0.0330	3.3000e-004	8.2200e-003	2.3000e-004	8.4500e-003	2.3700e-003	2.2000e-004	2.5900e-003	0.0000	31.8853	31.8853	1.9000e-003	0.0000	31.9329
Worker	1.3600e-003	1.0200e-003	0.0118	4.0000e-005	3.7000e-003	3.0000e-005	3.7300e-003	9.8000e-004	3.0000e-005	1.0100e-003	0.0000	3.2203	3.2203	9.0000e-005	0.0000	3.2225
Total	0.0187	0.5349	0.1525	1.6900e-003	0.1553	1.5400e-003	0.1569	0.0395	1.4800e-003	0.0409	0.0000	165.5948	165.5948	0.0106	0.0000	165.8592

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0823	0.0000	0.0823	0.0323	0.0000	0.0323	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0168	0.0967	0.6344	1.1600e-003		3.4000e-003	3.4000e-003		3.2700e-003	3.2700e-003	0.0000	101.4248	101.4248	0.0326	0.0000	102.2393
Total	0.0168	0.0967	0.6344	1.1600e-003	0.0823	3.4000e-003	0.0857	0.0323	3.2700e-003	0.0356	0.0000	101.4248	101.4248	0.0326	0.0000	102.2393

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0136	0.4115	0.1077	1.3200e-003	0.1434	1.2800e-003	0.1447	0.0361	1.2300e-003	0.0373	0.0000	130.4893	130.4893	8.5800e-003	0.0000	130.7038

Vendor	3.8000e-003	0.1224	0.0330	3.3000e-004	8.2200e-003	2.3000e-004	8.4500e-003	2.3700e-003	2.2000e-004	2.5900e-003	0.0000	31.8853	31.8853	1.9000e-003	0.0000	31.9329
Worker	1.3600e-003	1.0200e-003	0.0118	4.0000e-005	3.7000e-003	3.0000e-005	3.7300e-003	9.8000e-004	3.0000e-005	1.0100e-003	0.0000	3.2203	3.2203	9.0000e-005	0.0000	3.2225
Total	0.0187	0.5349	0.1525	1.6900e-003	0.1553	1.5400e-003	0.1569	0.0395	1.4800e-003	0.0409	0.0000	165.5948	165.5948	0.0106	0.0000	165.8592

3.4 Construction/Landscaping - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0949	1.0134	1.2215	2.1900e-003		0.0461	0.0461		0.0424	0.0424	0.0000	191.1138	191.1138	0.0613	0.0000	192.6455
Total	0.0949	1.0134	1.2215	2.1900e-003		0.0461	0.0461		0.0424	0.0424	0.0000	191.1138	191.1138	0.0613	0.0000	192.6455

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.6000e-004	0.0309	8.3500e-003	8.0000e-005	2.0800e-003	6.0000e-005	2.1400e-003	6.0000e-004	6.0000e-005	6.6000e-004	0.0000	8.0629	8.0629	4.8000e-004	0.0000	8.0750
Worker	3.3300e-003	2.5000e-003	0.0288	9.0000e-005	9.0400e-003	7.0000e-005	9.1100e-003	2.4000e-003	7.0000e-005	2.4700e-003	0.0000	7.8718	7.8718	2.2000e-004	0.0000	7.8772
Total	4.2900e-003	0.0334	0.0371	1.7000e-004	0.0111	1.3000e-004	0.0113	3.0000e-003	1.3000e-004	3.1300e-003	0.0000	15.9347	15.9347	7.0000e-004	0.0000	15.9522

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0398	0.3682	1.4118	2.1900e-003		9.7700e-003	9.7700e-003		9.2300e-003	9.2300e-003	0.0000	191.1135	191.1135	0.0613	0.0000	192.6453
Total	0.0398	0.3682	1.4118	2.1900e-003		9.7700e-003	9.7700e-003		9.2300e-003	9.2300e-003	0.0000	191.1135	191.1135	0.0613	0.0000	192.6453

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.6000e-004	0.0309	8.3500e-003	8.0000e-005	2.0800e-003	6.0000e-005	2.1400e-003	6.0000e-004	6.0000e-005	6.6000e-004	0.0000	8.0629	8.0629	4.8000e-004	0.0000	8.0750
Worker	3.3300e-003	2.5000e-003	0.0288	9.0000e-005	9.0400e-003	7.0000e-005	9.1100e-003	2.4000e-003	7.0000e-005	2.4700e-003	0.0000	7.8718	7.8718	2.2000e-004	0.0000	7.8772
Total	4.2900e-003	0.0334	0.0371	1.7000e-004	0.0111	1.3000e-004	0.0113	3.0000e-003	1.3000e-004	3.1300e-003	0.0000	15.9347	15.9347	7.0000e-004	0.0000	15.9522

3.5 Grading & Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0250	0.2574	0.2812	6.4000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	55.8701	55.8701	0.0178	0.0000	56.3138
Total	0.0250	0.2574	0.2812	6.4000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	55.8701	55.8701	0.0178	0.0000	56.3138

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0600e-003	0.1950	0.0527	5.2000e-004	0.0131	3.7000e-004	0.0135	3.7800e-003	3.5000e-004	4.1300e-003	0.0000	50.8210	50.8210	3.0400e-003	0.0000	50.8969
Worker	1.9700e-003	1.4700e-003	0.0170	5.0000e-005	5.3400e-003	4.0000e-005	5.3800e-003	1.4200e-003	4.0000e-005	1.4600e-003	0.0000	4.6515	4.6515	1.3000e-004	0.0000	4.6547
Total	8.0300e-003	0.1965	0.0697	5.7000e-004	0.0184	4.1000e-004	0.0189	5.2000e-003	3.9000e-004	5.5900e-003	0.0000	55.4725	55.4725	3.1700e-003	0.0000	55.5516

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0116	0.0848	0.3482	6.4000e-004		3.2300e-003	3.2300e-003		3.0300e-003	3.0300e-003	0.0000	55.8700	55.8700	0.0178	0.0000	56.3138

Total	0.0116	0.0848	0.3482	6.4000e-004		3.2300e-003	3.2300e-003		3.0300e-003	3.0300e-003	0.0000	55.8700	55.8700	0.0178	0.0000	56.3138
-------	--------	--------	--------	-------------	--	-------------	-------------	--	-------------	-------------	--------	---------	---------	--------	--------	---------

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0600e-003	0.1950	0.0527	5.2000e-004	0.0131	3.7000e-004	0.0135	3.7800e-003	3.5000e-004	4.1300e-003	0.0000	50.8210	50.8210	3.0400e-003	0.0000	50.8969
Worker	1.9700e-003	1.4700e-003	0.0170	5.0000e-005	5.3400e-003	4.0000e-005	5.3800e-003	1.4200e-003	4.0000e-005	1.4600e-003	0.0000	4.6515	4.6515	1.3000e-004	0.0000	4.6547
Total	8.0300e-003	0.1965	0.0697	5.7000e-004	0.0184	4.1000e-004	0.0189	5.2000e-003	3.9000e-004	5.5900e-003	0.0000	55.4725	55.4725	3.1700e-003	0.0000	55.5516

3.5 Grading & Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0872	0.8683	1.0349	2.3700e-003		0.0365	0.0365		0.0337	0.0337	0.0000	206.4878	206.4878	0.0656	0.0000	208.1279
Total	0.0872	0.8683	1.0349	2.3700e-003		0.0365	0.0365		0.0337	0.0337	0.0000	206.4878	206.4878	0.0656	0.0000	208.1279

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0166	0.5440	0.1744	1.8700e-003	0.0484	6.4000e-004	0.0490	0.0140	6.1000e-004	0.0146	0.0000	181.7721	181.7721	9.9000e-003	0.0000	182.0197
Worker	6.8300e-003	4.9300e-003	0.0577	1.8000e-004	0.0197	1.5000e-004	0.0199	5.2400e-003	1.4000e-004	5.3800e-003	0.0000	16.5463	16.5463	4.3000e-004	0.0000	16.5570
Total	0.0235	0.5490	0.2321	2.0500e-003	0.0681	7.9000e-004	0.0689	0.0192	7.5000e-004	0.0200	0.0000	198.3184	198.3184	0.0103	0.0000	198.5767

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0415	0.2931	1.2850	2.3700e-003		0.0110	0.0110		0.0104	0.0104	0.0000	206.4876	206.4876	0.0656	0.0000	208.1276
Total	0.0415	0.2931	1.2850	2.3700e-003		0.0110	0.0110		0.0104	0.0104	0.0000	206.4876	206.4876	0.0656	0.0000	208.1276

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0166	0.5440	0.1744	1.8700e-003	0.0484	6.4000e-004	0.0490	0.0140	6.1000e-004	0.0146	0.0000	181.7721	181.7721	9.9000e-003	0.0000	182.0197
Worker	6.8300e-003	4.9300e-003	0.0577	1.8000e-004	0.0197	1.5000e-004	0.0199	5.2400e-003	1.4000e-004	5.3800e-003	0.0000	16.5463	16.5463	4.3000e-004	0.0000	16.5570
Total	0.0235	0.5490	0.2321	2.0500e-003	0.0681	7.9000e-004	0.0689	0.0192	7.5000e-004	0.0200	0.0000	198.3184	198.3184	0.0103	0.0000	198.5767

3.6 Utilities - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8700e-003	0.0657	0.0956	1.5000e-004		3.0800e-003	3.0800e-003		2.8500e-003	2.8500e-003	0.0000	13.0613	13.0613	4.1300e-003	0.0000	13.1644
Total	6.8700e-003	0.0657	0.0956	1.5000e-004		3.0800e-003	3.0800e-003		2.8500e-003	2.8500e-003	0.0000	13.0613	13.0613	4.1300e-003	0.0000	13.1644

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.1300e-003	6.8000e-004	1.0000e-005	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.7101	0.7101	4.0000e-005	0.0000	0.7110

Worker	5.7000e-004	4.1000e-004	4.8100e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3789	1.3789	4.0000e-005	0.0000	1.3798
Total	6.3000e-004	2.5400e-003	5.4900e-003	3.0000e-005	1.8300e-003	1.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.1000e-004	0.0000	2.0889	2.0889	8.0000e-005	0.0000	2.0908

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5200e-003	0.0164	0.1079	1.5000e-004		6.6000e-004	6.6000e-004		6.3000e-004	6.3000e-004	0.0000	13.0613	13.0613	4.1300e-003	0.0000	13.1644
Total	2.5200e-003	0.0164	0.1079	1.5000e-004		6.6000e-004	6.6000e-004		6.3000e-004	6.3000e-004	0.0000	13.0613	13.0613	4.1300e-003	0.0000	13.1644

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.1300e-003	6.8000e-004	1.0000e-005	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.7101	0.7101	4.0000e-005	0.0000	0.7110
Worker	5.7000e-004	4.1000e-004	4.8100e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3789	1.3789	4.0000e-005	0.0000	1.3798
Total	6.3000e-004	2.5400e-003	5.4900e-003	3.0000e-005	1.8300e-003	1.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.1000e-004	0.0000	2.0889	2.0889	8.0000e-005	0.0000	2.0908

3.6 Utilities - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2400e-003	0.0769	0.1198	1.9000e-004		3.5600e-003	3.5600e-003		3.2900e-003	3.2900e-003	0.0000	16.3275	16.3275	5.1600e-003	0.0000	16.4565
Total	8.2400e-003	0.0769	0.1198	1.9000e-004		3.5600e-003	3.5600e-003		3.2900e-003	3.2900e-003	0.0000	16.3275	16.3275	5.1600e-003	0.0000	16.4565

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-005	2.6500e-003	8.3000e-004	1.0000e-005	2.4000e-004	0.0000	2.4000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.8840	0.8840	5.0000e-005	0.0000	0.8852
Worker	6.7000e-004	4.7000e-004	5.5900e-003	2.0000e-005	2.0500e-003	2.0000e-005	2.0700e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6701	1.6701	4.0000e-005	0.0000	1.6712
Total	7.5000e-004	3.1200e-003	6.4200e-003	3.0000e-005	2.2900e-003	2.0000e-005	2.3100e-003	6.2000e-004	1.0000e-005	6.3000e-004	0.0000	2.5542	2.5542	9.0000e-005	0.0000	2.5564

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Total	7.3800e-003	0.0742	0.1179	1.9000e-004		2.9300e-003	2.9300e-003		2.7200e-003	2.7200e-003	0.0000	16.3489	16.3489	5.0800e-003	0.0000	16.4758
-------	-------------	--------	--------	-------------	--	-------------	-------------	--	-------------	-------------	--------	---------	---------	-------------	--------	---------

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7000e-004	0.0258	8.0500e-003	9.0000e-005	2.3000e-003	3.0000e-005	2.3300e-003	6.6000e-004	3.0000e-005	6.9000e-004	0.0000	8.6163	8.6163	4.6000e-004	0.0000	8.6279
Worker	1.1600e-003	8.0000e-004	9.6200e-003	3.0000e-005	3.5300e-003	3.0000e-005	3.5600e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	2.8726	2.8726	7.0000e-005	0.0000	2.8744
Total	1.9300e-003	0.0266	0.0177	1.2000e-004	5.8300e-003	6.0000e-005	5.8900e-003	1.6000e-003	5.0000e-005	1.6500e-003	0.0000	11.4889	11.4889	5.3000e-004	0.0000	11.5023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.6200e-003	0.0151	0.1329	1.9000e-004		4.8000e-004	4.8000e-004		4.6000e-004	4.6000e-004	0.0000	16.3489	16.3489	5.0800e-003	0.0000	16.4758
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.6200e-003	0.0151	0.1329	1.9000e-004		4.8000e-004	4.8000e-004		4.6000e-004	4.6000e-004	0.0000	16.3489	16.3489	5.0800e-003	0.0000	16.4758

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7000e-004	0.0258	8.0500e-003	9.0000e-005	2.3000e-003	3.0000e-005	2.3300e-003	6.6000e-004	3.0000e-005	6.9000e-004	0.0000	8.6163	8.6163	4.6000e-004	0.0000	8.6279
Worker	1.1600e-003	8.0000e-004	9.6200e-003	3.0000e-005	3.5300e-003	3.0000e-005	3.5600e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	2.8726	2.8726	7.0000e-005	0.0000	2.8744
Total	1.9300e-003	0.0266	0.0177	1.2000e-004	5.8300e-003	6.0000e-005	5.8900e-003	1.6000e-003	5.0000e-005	1.6500e-003	0.0000	11.4889	11.4889	5.3000e-004	0.0000	11.5023

3.8 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1146	1.0066	1.4176	2.1200e-003		0.0471	0.0471		0.0446	0.0446	0.0000	181.8670	181.8670	0.0393	0.0000	182.8486
Total	0.1146	1.0066	1.4176	2.1200e-003		0.0471	0.0471		0.0446	0.0446	0.0000	181.8670	181.8670	0.0393	0.0000	182.8486

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-004	6.8500e-003	2.1400e-003	2.0000e-005	6.1000e-004	1.0000e-005	6.2000e-004	1.8000e-004	1.0000e-005	1.8000e-004	0.0000	2.2867	2.2867	1.2000e-004	0.0000	2.2898
Worker	5.2300e-003	3.6300e-003	0.0434	1.4000e-004	0.0159	1.2000e-004	0.0161	4.2300e-003	1.1000e-004	4.3500e-003	0.0000	12.9602	12.9602	3.2000e-004	0.0000	12.9681
Total	5.4300e-003	0.0105	0.0456	1.6000e-004	0.0166	1.3000e-004	0.0167	4.4100e-003	1.2000e-004	4.5300e-003	0.0000	15.2469	15.2469	4.4000e-004	0.0000	15.2579

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0258	0.1907	1.4730	2.1200e-003		3.1500e-003	3.1500e-003		3.1500e-003	3.1500e-003	0.0000	181.8668	181.8668	0.0393	0.0000	182.8484
Total	0.0258	0.1907	1.4730	2.1200e-003		3.1500e-003	3.1500e-003		3.1500e-003	3.1500e-003	0.0000	181.8668	181.8668	0.0393	0.0000	182.8484

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-004	6.8500e-003	2.1400e-003	2.0000e-005	6.1000e-004	1.0000e-005	6.2000e-004	1.8000e-004	1.0000e-005	1.8000e-004	0.0000	2.2867	2.2867	1.2000e-004	0.0000	2.2898
Worker	5.2300e-003	3.6300e-003	0.0434	1.4000e-004	0.0159	1.2000e-004	0.0161	4.2300e-003	1.1000e-004	4.3500e-003	0.0000	12.9602	12.9602	3.2000e-004	0.0000	12.9681

Total	5.4300e-003	0.0105	0.0456	1.6000e-004	0.0166	1.3000e-004	0.0167	4.4100e-003	1.2000e-004	4.5300e-003	0.0000	15.2469	15.2469	4.4000e-004	0.0000	15.2579
-------	-------------	--------	--------	-------------	--------	-------------	--------	-------------	-------------	-------------	--------	---------	---------	-------------	--------	---------

3.8 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1427	1.2656	1.9008	2.8600e-003		0.0535	0.0535		0.0506	0.0506	0.0000	244.7666	244.7666	0.0524	0.0000	246.0771
Total	0.1427	1.2656	1.9008	2.8600e-003		0.0535	0.0535		0.0506	0.0506	0.0000	244.7666	244.7666	0.0524	0.0000	246.0771

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7000e-004	9.1300e-003	2.8000e-003	3.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	3.0596	3.0596	1.6000e-004	0.0000	3.0637
Worker	6.6900e-003	4.4700e-003	0.0542	1.9000e-004	0.0215	1.6000e-004	0.0216	5.7000e-003	1.5000e-004	5.8500e-003	0.0000	16.7610	16.7610	3.9000e-004	0.0000	16.7707
Total	6.9600e-003	0.0136	0.0570	2.2000e-004	0.0223	1.7000e-004	0.0224	5.9400e-003	1.6000e-004	6.1000e-003	0.0000	19.8207	19.8207	5.5000e-004	0.0000	19.8344

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0347	0.2566	1.9818	2.8600e-003		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003	0.0000	244.7663	244.7663	0.0524	0.0000	246.0768
Total	0.0347	0.2566	1.9818	2.8600e-003		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003	0.0000	244.7663	244.7663	0.0524	0.0000	246.0768

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7000e-004	9.1300e-003	2.8000e-003	3.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	3.0596	3.0596	1.6000e-004	0.0000	3.0637
Worker	6.6900e-003	4.4700e-003	0.0542	1.9000e-004	0.0215	1.6000e-004	0.0216	5.7000e-003	1.5000e-004	5.8500e-003	0.0000	16.7610	16.7610	3.9000e-004	0.0000	16.7707
Total	6.9600e-003	0.0136	0.0570	2.2000e-004	0.0223	1.7000e-004	0.0224	5.9400e-003	1.6000e-004	6.1000e-003	0.0000	19.8207	19.8207	5.5000e-004	0.0000	19.8344

3.8 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.1427	1.2656	1.9008	2.8600e-003		0.0535	0.0535		0.0506	0.0506	0.0000	244.7666	244.7666	0.0524	0.0000	246.0771
Total	0.1427	1.2656	1.9008	2.8600e-003		0.0535	0.0535		0.0506	0.0506	0.0000	244.7666	244.7666	0.0524	0.0000	246.0771

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	9.0400e-003	2.7400e-003	3.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	3.0436	3.0436	1.6000e-004	0.0000	3.0476
Worker	6.3900e-003	4.1200e-003	0.0507	1.8000e-004	0.0215	1.6000e-004	0.0216	5.7000e-003	1.4000e-004	5.8400e-003	0.0000	16.1789	16.1789	3.5000e-004	0.0000	16.1877
Total	6.6500e-003	0.0132	0.0534	2.1000e-004	0.0223	1.7000e-004	0.0224	5.9400e-003	1.5000e-004	6.0900e-003	0.0000	19.2224	19.2224	5.1000e-004	0.0000	19.2353

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0347	0.2566	1.9818	2.8600e-003		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003	0.0000	244.7663	244.7663	0.0524	0.0000	246.0768
Total	0.0347	0.2566	1.9818	2.8600e-003		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003	0.0000	244.7663	244.7663	0.0524	0.0000	246.0768

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	9.0400e-003	2.7400e-003	3.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	3.0436	3.0436	1.6000e-004	0.0000	3.0476
Worker	6.3900e-003	4.1200e-003	0.0507	1.8000e-004	0.0215	1.6000e-004	0.0216	5.7000e-003	1.4000e-004	5.8400e-003	0.0000	16.1789	16.1789	3.5000e-004	0.0000	16.1877
Total	6.6500e-003	0.0132	0.0534	2.1000e-004	0.0223	1.7000e-004	0.0224	5.9400e-003	1.5000e-004	6.0900e-003	0.0000	19.2224	19.2224	5.1000e-004	0.0000	19.2353

3.8 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0716	0.6352	0.9540	1.4400e-003		0.0268	0.0268		0.0254	0.0254	0.0000	122.8522	122.8522	0.0263	0.0000	123.5100
Total	0.0716	0.6352	0.9540	1.4400e-003		0.0268	0.0268		0.0254	0.0254	0.0000	122.8522	122.8522	0.0263	0.0000	123.5100

Unmitigated Construction Off-Site

Vendor	1.3000e-004	4.5000e-003	1.3500e-003	2.0000e-005	4.1000e-004	1.0000e-005	4.2000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	1.5204	1.5204	8.0000e-005	0.0000	1.5224
Worker	3.0600e-003	1.9100e-003	0.0238	9.0000e-005	0.0108	7.0000e-005	0.0108	2.8600e-003	7.0000e-005	2.9300e-003	0.0000	7.8616	7.8616	1.6000e-004	0.0000	7.8657
Total	3.1900e-003	6.4100e-003	0.0252	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9800e-003	7.0000e-005	3.0500e-003	0.0000	9.3820	9.3820	2.4000e-004	0.0000	9.3880

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0339	0.1716	0.4578	2.0200e-003	0.1960	1.4100e-003	0.1974	0.0525	1.3100e-003	0.0538	0.0000	187.7689	187.7689	8.1600e-003	0.0000	187.9728
Unmitigated	0.0339	0.1716	0.4578	2.0200e-003	0.1960	1.4100e-003	0.1974	0.0525	1.3100e-003	0.0538	0.0000	187.7689	187.7689	8.1600e-003	0.0000	187.9728

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	152.32	158.56	137.92	516,517	516,517
Total	152.32	158.56	137.92	516,517	516,517

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Single Family Housing	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	42.3712	42.3712	1.7500e-003	3.6000e-004	42.5228
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	43.2282	43.2282	1.7800e-003	3.7000e-004	43.3829
NaturalGas Mitigated	2.3700e-003	0.0203	8.6200e-003	1.3000e-004		1.6400e-003	1.6400e-003		1.6400e-003	1.6400e-003	0.0000	23.4584	23.4584	4.5000e-004	4.3000e-004	23.5978
NaturalGas Unmitigated	2.3700e-003	0.0203	8.6200e-003	1.3000e-004		1.6400e-003	1.6400e-003		1.6400e-003	1.6400e-003	0.0000	23.4584	23.4584	4.5000e-004	4.3000e-004	23.5978

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	439593	2.3700e-003	0.0203	8.6200e-003	1.3000e-004		1.6400e-003	1.6400e-003		1.6400e-003	1.6400e-003	0.0000	23.4584	23.4584	4.5000e-004	4.3000e-004	23.5978
Total		2.3700e-003	0.0203	8.6200e-003	1.3000e-004		1.6400e-003	1.6400e-003		1.6400e-003	1.6400e-003	0.0000	23.4584	23.4584	4.5000e-004	4.3000e-004	23.5978

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	439593	2.3700e-003	0.0203	8.6200e-003	1.3000e-004		1.6400e-003	1.6400e-003		1.6400e-003	1.6400e-003	0.0000	23.4584	23.4584	4.5000e-004	4.3000e-004	23.5978
Total		2.3700e-003	0.0203	8.6200e-003	1.3000e-004		1.6400e-003	1.6400e-003		1.6400e-003	1.6400e-003	0.0000	23.4584	23.4584	4.5000e-004	4.3000e-004	23.5978

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	4340	1.3828	6.0000e-005	1.0000e-005	1.3878
Single Family Housing	131333	41.8454	1.7300e-003	3.6000e-004	41.9951

Total		43.2282	1.7900e-003	3.7000e-004	43.3829
-------	--	---------	-------------	-------------	---------

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	4340	1.3828	6.0000e-005	1.0000e-005	1.3878
Single Family Housing	128643	40.9884	1.6900e-003	3.5000e-004	41.1350
Total		42.3712	1.7500e-003	3.6000e-004	42.5228

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Mitigated	0.2798	4.7200e-003	0.1664	3.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	3.5362	3.5362	3.2000e-004	6.0000e-005	3.5621
Unmitigated	0.2799	4.7200e-003	0.1664	3.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	3.5362	3.5362	3.2000e-004	6.0000e-005	3.5621

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2526					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.3000e-004	2.8200e-003	1.2000e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	3.2659	3.2659	6.0000e-005	6.0000e-005	3.2853
Landscaping	4.9900e-003	1.9000e-003	0.1652	1.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004	0.0000	0.2703	0.2703	2.6000e-004	0.0000	0.2768
Total	0.2799	4.7200e-003	0.1664	3.0000e-005		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	3.5362	3.5362	3.2000e-004	6.0000e-005	3.5621

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0219					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2526					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.3000e-004	2.8200e-003	1.2000e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	3.2659	3.2659	6.0000e-005	6.0000e-005	3.2853

Landscaping	4.9900e-003	1.9000e-003	0.1652	1.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004	0.0000	0.2703	0.2703	2.6000e-004	0.0000	0.2768
Total	0.2798	4.7200e-003	0.1664	3.0000e-005		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	3.5362	3.5362	3.2000e-004	6.0000e-005	3.5621

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.9091	0.0274	6.9000e-004	6.7998
Unmitigated	6.9821	0.0342	8.6000e-004	8.0941

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.04246 / 0.657206	6.9821	0.0342	8.6000e-004	8.0941
Total		6.9821	0.0342	8.6000e-004	8.0941

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.833972 / 0.617116	5.9091	0.0274	6.9000e-004	6.7998
Total		5.9091	0.0274	6.9000e-004	6.7998

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.8284	0.2263	0.0000	9.4847
Unmitigated	3.8284	0.2263	0.0000	9.4847

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	18.86	3.8284	0.2263	0.0000	9.4847
Total		3.8284	0.2263	0.0000	9.4847

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	18.86	3.8284	0.2263	0.0000	9.4847
Total		3.8284	0.2263	0.0000	9.4847

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation
